A CONSERVATION PLAN

For the Edward L. Rose Conservancy

John Barney & David Gross

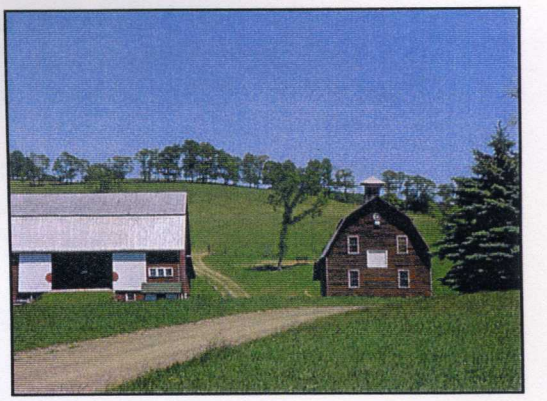
Department of Natural Resources
College of Agriculture and Life Sciences
Cornell University
Ithaca, NY

I. WHY CONSERVATION PLANNING?

Every land trust struggles to focus organizational resources and volunteer energies on priority conservation targets. Unfortunately, the temptation is to respond to as many as possible of the needs and opportunities that present themselves over time. For example, moving from one land protection opportunity to the next as individual landowners consider entering into conservation easements or some other protection arrangement. Or as often the case, organizational resources shifting from one threat situation to the next as board members and staff learn about challenging project opportunities.

As logical and even productive as this operating approach may be, the end result is a patchwork of conservation. Bits and pieces of effort that fall short of the conservation goals envisioned for the organization. An alternative to an opportunistic and reactive approach is to work from a Conservation Plan that strategically guides how best to deploy limited land trust resources. A plan designed to help guide the work for the next few years. Not a static document but one that is added too and changed as the organization moves forward. Yet serving as a document that helps guide future decision-making on conservation project selection and other organizational initiatives like community involvement and public outreach. Serving as a document that also lays the foundation for continued collaboration with various partners. Finally, the Plan discusses developing a portfolio of specific project opportunities including the community context and impacts on organizational resources.

II. THE ELRC CONSERVATION PLANNING PROCESS



Over the past two years, E.L. Rose Conservancy (ELRC) staff and leadership have invested considerable effort laying the groundwork for development of their Conservation Plan including planning retreats, training workshops, and specific committee activities. In addition, the Conservancy has recently completed the E.L. Rose Conservancy Comprehensive Plan - 2001-2002 that outlines the current mission and goals of the organization that informed the planning process. Several of the specific planning steps are summarized below:

November 1999: Program Planning Retreat

Board members participated in a full day retreat to discuss the Conservancy's geographic area of focus, conservation threats of concern in that area, and possible conservation goals as well as action strategies. The retreat confirmed that the primary conservation goals for the ELRC were: 1) To retain the key attributes of the rural character of the area including scenic quality; 2) To preserve the cultural heritage of the area; and 3) To enhance and protect surface and groundwater resources. Each conservation goal was discussed in detail including outlining specific action strategies and stakeholder involvement.

September 1999 - December 2000: A Series of Workshops

Board members participated in several workshops as a constructive and interactive way to help build capacity within the Conservancy to identify conservation issues and strategies, and facilitate critical decision making in the conservation planning process. The Cornell team shared their perspectives and knowledge and the Conservancy board members then contextualized this knowledge in terms of what became known as the "conservation-shed." Together we brainstormed applications and solutions about landscape conservation scales, priorities, and strategies.

An initial workshop in April 2000 examined the role of the E.L. Rose Conservancy and helped define future organizational direction:

- Re-think and expand the role of the Conservancy.
- Define the "Conservation-shed" -- the principal area of interest.
- Define the relationship to Cornell's resource team.
- Explore scaling-up: new roles for the ELRC, extend conventional boundaries, integrate conservation with education and research, partner with other community organizations.

An important workshop in September 2000 introduced board members to the conceptual foundations of conservation planning:

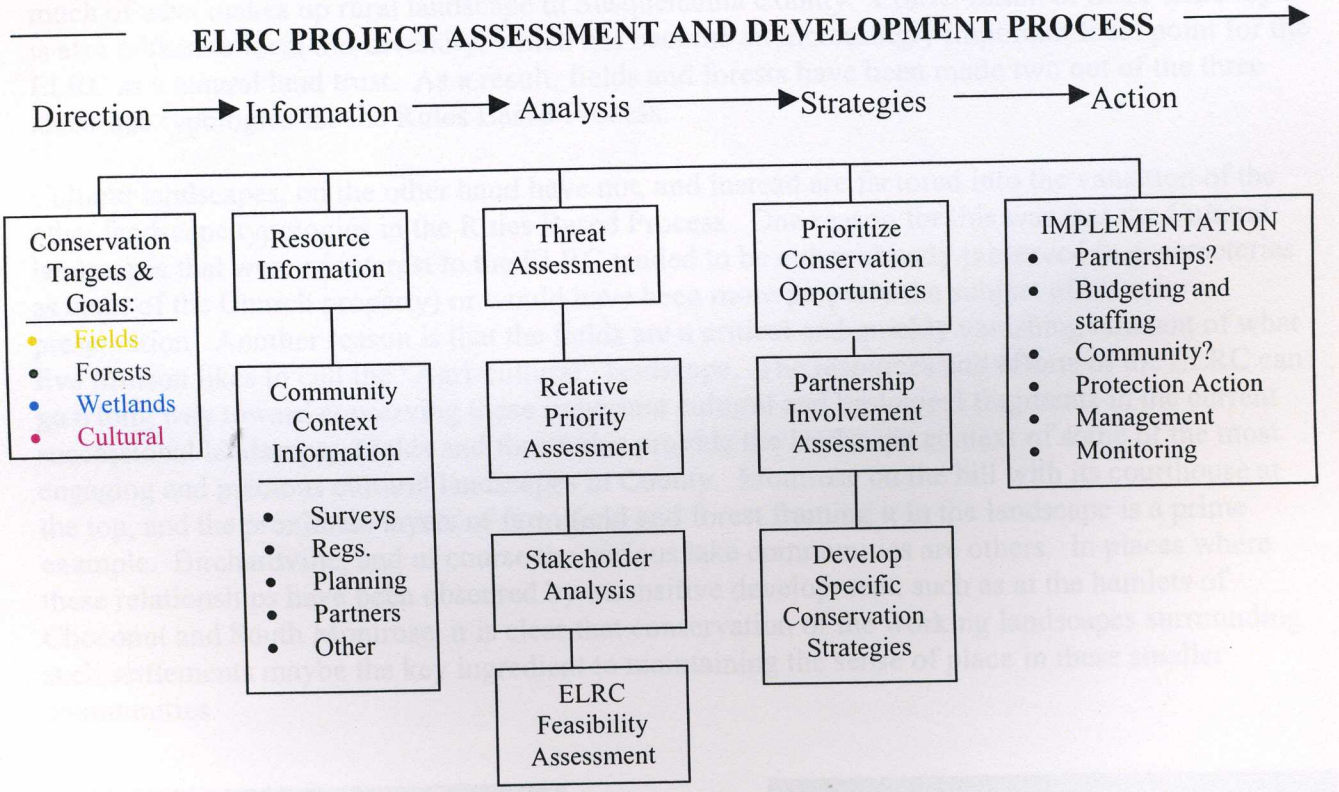
- The Experience of Landscape: Understanding our sense of place.
- The Layered Landscape: Putting the visual experience of landscape in context.
- Landscape Ecology: The study of the patterns of structure, function, and flux within the landscape.
- Integrating Landscape Ecology in Conservation Practice: Applying the analytical tools of landscape ecology to conserve the function of the rural landscape.
- Landscape Inventory: Identifying, mapping, and quantifying areas of conservation significance.
- Conservation Planning and Action: Developing a strategic plan with goals over different timeframes and scales.

Subsequent workshops focused on development of a "Resource Guide and Inventory" as the key resource needed to complete the conservation planning effort. As information was collected, the Cornell team introduced board members to GIS maps and other landscape and cultural resource information generated.

Finally, the Conservation Plan is the product of a series of meetings by a special "Conservation Planning" committee appointed by the President of the ELRC. The membership including the president, executive director and a number of key board members. The goal of the Committee was to work with members of the Cornell team to develop an ELRC Conservation Plan as a companion document to the "Natural Resource Guide and Inventory."

Drawing on a site conservation planning methodology developed by The Nature Conservancy [see reference], the ELRC Conservation Plan integrates more traditional land acquisition and preserve management activities with new conservation concepts emanating from landscape ecology. The Plan also incorporates conservation goals and action strategies developed at the "Planning Retreat" in November 1999.

As part of the planning process, the committee first developed a framework for defining priorities, assessing opportunities, and designing an implementation strategy. Addressing such questions as: What are priority conservation targets of interest? How would we recognize a good opportunity when we saw it? What are the organizational constraints? And how do we act on situations we decide are appropriate opportunities to pursue? This process is outlined in Figure 1 below. The framework suggests that each conservation opportunity is analyzed in terms of the resource information available, the threats posed, the community context, partnerships suggested, and appropriate fit with organizational capacity.



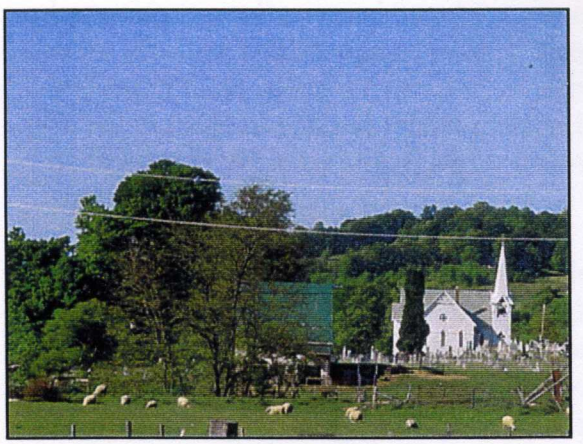
Adapted From: Poiani et al "A scale-independent, site conservation planning framework in The Nature Conservancy" in Landscape and Urban Planning 43 (1998) pp. 143-156

III. DEVELOPMENT OF A RULES BASED PROCESS

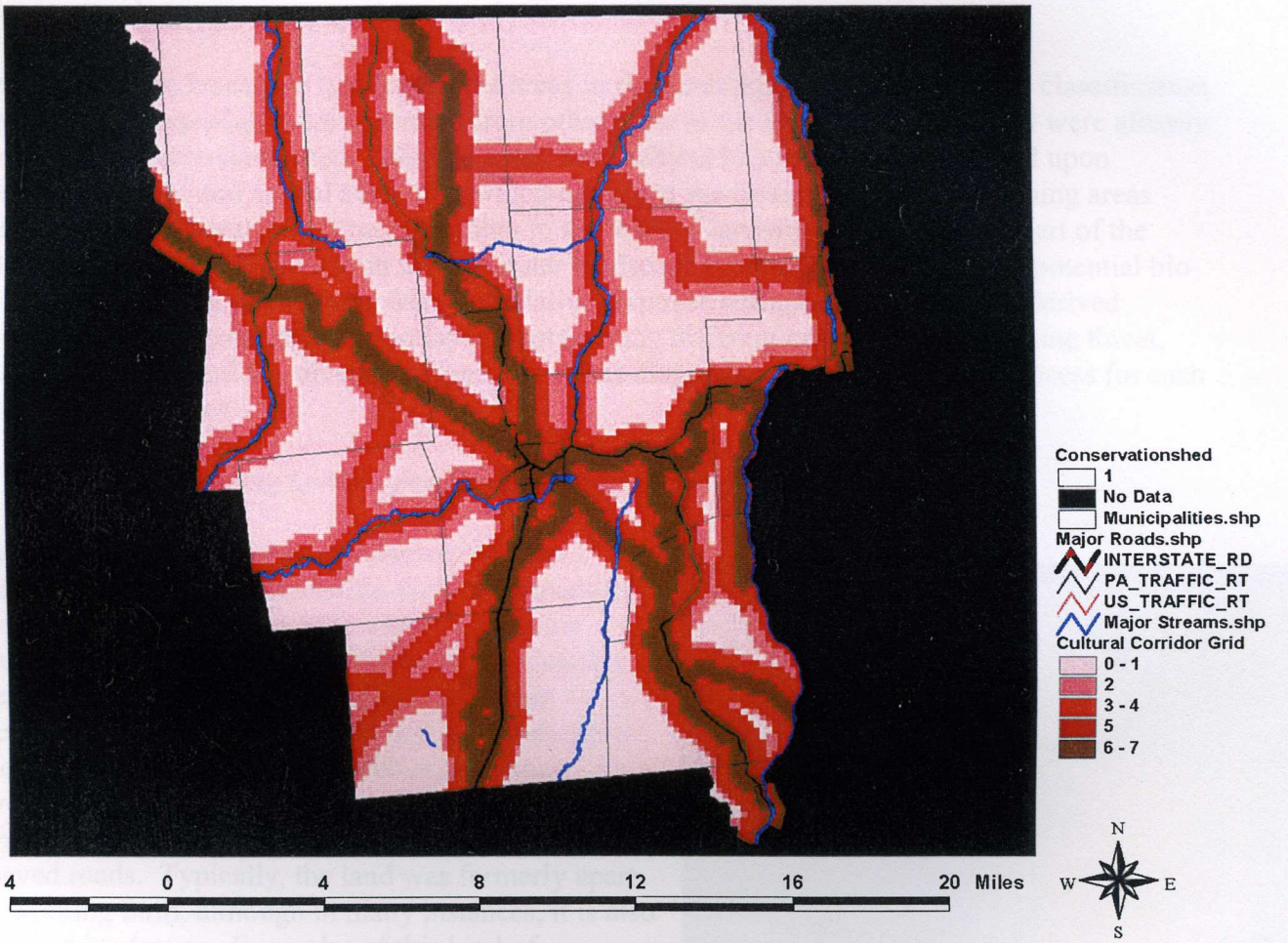
A Rules Based Process is the product of working in the GIS environment and the desire to select target areas for conservation that reflect the ELRC's values. In a series of conversations starting back in 1999 with the first Planning Retreat, members of the Cornell Team and the board of the ELRC have explored concerns and values regarding conserving the rural landscape in Northeastern Susquehanna County. Based on those values, we selected four landscape typologies that would be important to focus on in the rules based process: cultural landscapes, open or agricultural landscapes, forested landscapes and "wetlandscapes."

The first three items were an attempt to "unpack" the notion of scenic quality in rural Susquehanna County. Time and again, ELRC board and community members described in various ways, the tightly knit, almost Anglo landscape, of field and forest, punctuated by Montrose and a series of charming hamlets and historic four corners. Conserving open fields and forests, would conserve much of what makes up rural landscape in Susquehanna County. Conservation of these landscapes is also critical to local bio-diversity, which has become an increasingly important focal point for the ELRC as a natural land trust. As a result, fields and forests have been made two out of the three landscape typologies for the Rules Based Process.

Cultural landscapes, on the other hand have not, and instead are factored into the valuation of the other landscape typologies in the Rules Based Process. One reason for this was that the Cultural landscapes that were of interest to the ELRC tended to be either already preserved (e.g. cemeteries as apart of the Church property) or would have been more properly the subject of historic preservation. Another reason is that the fields are a critical and quickly vanishing remnant of what Eve Minson likes to call the "Agri-cultural" landscape. The resources and efforts of the ELRC can go a long way toward conserving these important cultural and biological fragments in the current successional landscape. Fields and forest also provide the landscape context of some of the most engaging and precious cultural landscapes in County. Montrose on the hill with its courthouse at the top, and the proximate layers of farm field and forest framing it in the landscape is a prime example. Birchardville, and of course the various lake communities are others. In places where these relationships have been obscured by insensitive development, such as at the hamlets of Choconut and South Montrose, it is clear that conservation of the working landscapes surrounding such settlements maybe the key ingredient to maintaining the sense of place in these smaller communities.



Response Surface of Cultural Nodes & Corridors:



The third typology is the wetlandscape which comes from the ELRC's concern for surface water resources. There are several components to the wetlandscape: riparian areas, flood plains, lakes, ponds and wetlands of several types (peat bog, forested, shrubby and herbaceous wetlands). Most of the lakes and major ponds in the area have been developed, at least along the edge and the lake bottom is typically owned by a lake association or one or more lake frontage owners. Undeveloped areas tend to be either agricultural or forested. Again, much like significant cultural landscapes, instead of lakes being the focus of conservation, proximity to lakes and ponds, is used as a valuation factor in the Rules Based Process. Riparian areas and flood plains can be handled via other conservation planning strategies (see below), but are also factored into the valuation of forested landscapes.

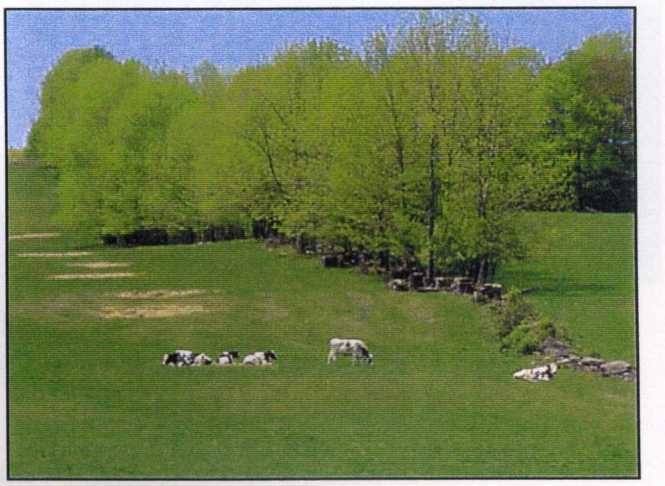
That leaves wetlands. Wetlands are regulated at the state level in Pennsylvania, but their protection through federal regulation recently received a set back from the Supreme Court. As with the Corps of Engineer's recent loss of regulatory authority for wetlands, even state regulation could change. And yet, there is probably no other

wetlandscape type that plays a more important role in water quality than wetlands. They filter and trap sediment and many pollutants, and are important aquifer recharge areas. In the past, many wetlands have been converted into the artificial lakes we find in the area. Wetlands are the third landscape typology.

After selecting the landscape typologies, the areas in the landscape that fit the land use classification of the landscape typology were separated from other parts of the landscape. Areas that were already in conservation were eliminated. Then the areas were subject to a series of filters based upon different functional and spatial attributes, which narrowed the field further. The remaining areas were then evaluated and prioritized according to the relative landscape threat for that part of the landscape, the relative value within the particular landscape typology, and the relative potential bio-diversity for that area. All of these were cumulative response surfaces or grids in GIS derived through a series of operations on grid layers representing different criteria for determining threat, conservation value and bio-diversity. Appendix A has diagrams of the Rules Based Process for each of the three typologies.

- *Characterizing Landscapes Threatened by Development or Change*

After selecting the landscape typologies, we then needed to incorporate conservation threats. Insensitive development and damaging land uses are the most common threats. In meetings with the ELRC board, a series of threats were identified. The most often described threat was sprawl of the type experienced in the exurban rural setting of Susquehanna County. Development of this form is typically new and second homes being built on undeveloped land along or close to paved roads. Typically, the land was formerly apart of a working farm, although in many instances, it is also a forested landscape. Examples of this kind of development are many, and can be experienced driving along any of the major paved roads (Routes 11, 267, 167 & 26) coming south from the New York State line.



Quarries and stone processing plants, land fills and dumps, industrial farms, toxic industry, and strip development were also identified as threats. In the latter case, new strip development were considered a threat along the Route 81 corridor, east of Montrose along 706 and south of Montrose in Pleasant Valley (the Coleman Farm) and along 167 going toward South Montrose. A smaller version of this kind of development are the large signed and over-scaled gas stations typical of current construction practices being built in places like Elk Lake, Choconut and even downtown Montrose. All of these activities lead to degradation of the environment functionally and aesthetically. On the functional end of the spectrum, insensitive development leads to fragmentation and loss of habitat and loss of water quality. In the aesthetic realm, it leads to banal, place-less landscapes and further alienation of people from the land.

Conservation threat in the Rules Based Process incorporates both residential sprawl and strip development, but not the other types of damaging land uses, largely because there was no way to adequately identify existing examples given the scope of the work, nor to predict where future

development of this sort would happen. The threat of development is then subdivided into three categories: development pressure, likelihood of development and the natural-humanistic landscape influence.

Development pressure ("DP") measures existing development processes and is calculated at the municipality level by taking into account:

1) The number of subdivisions ("S") from 1998-2000 (4 high to 1 low);
2) Population change ("PC1") from 1980-2000 (4 high to 1 low); and
3) Population change ("PC2") from 1990-2000 (4 high to 1 low).

Likelihood of development (DL) takes into account where development is more likely to occur, and is calculated spatially as follows:

1) Proximity to Major Roads ("RD") (6 close to 2 far)
2) Proximity to Route 81Corridor ("R81") (1 close to 0 far)
3) Proximity to Targeted Commercial Development Area ("CD") (1 close to 0 far)
4) Proximity to Tri-cities ("TC") (4 close to 1 far)
5) Proximity to Greenspace Amenity ("G") (2 close to 0 far)
6) Proximity to Water Amenity ("W") (2 close to 0 far)

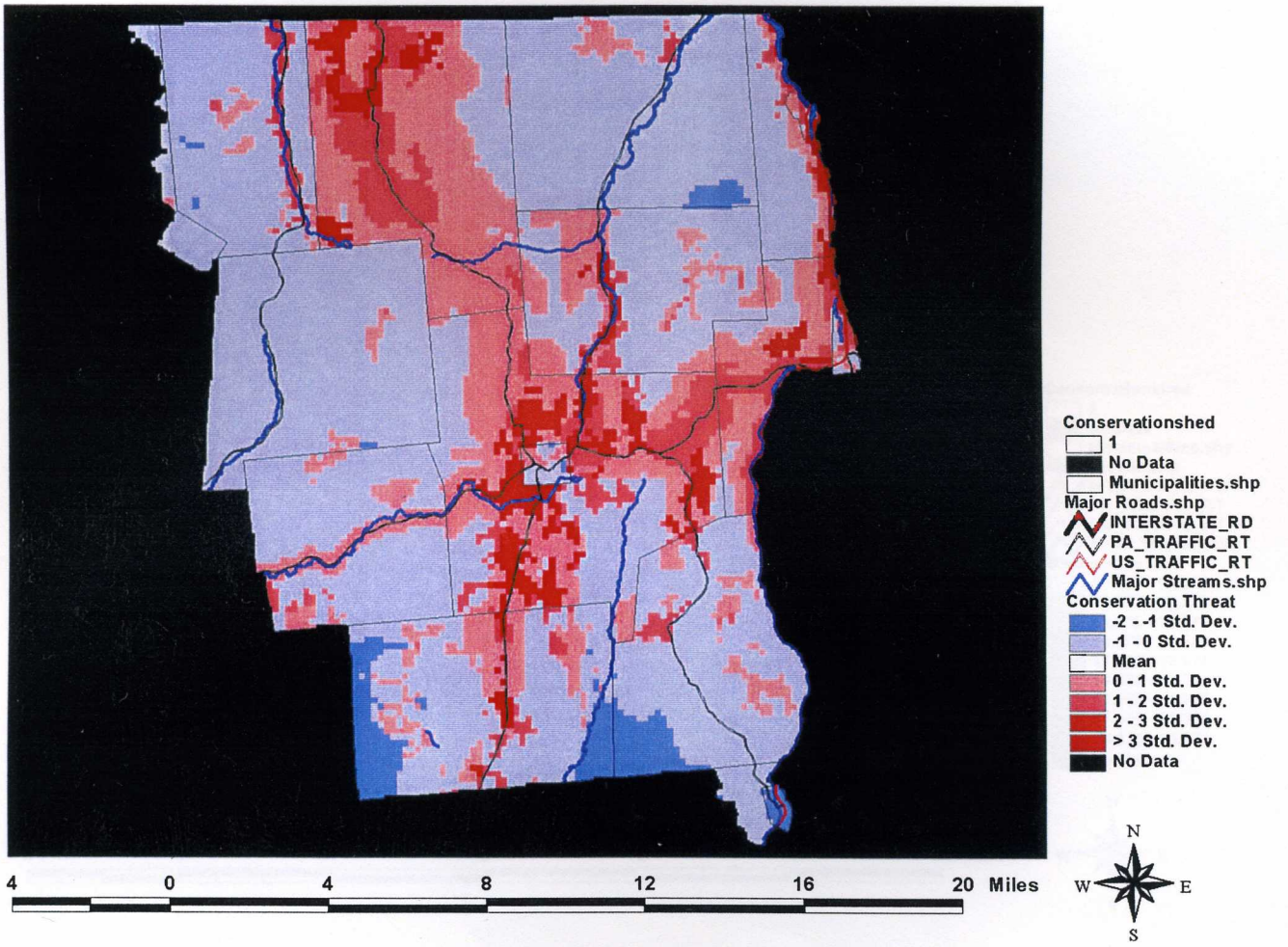
Natural-humanistic influence ("NH") is derived from the Pennsylvania GAP analysis, which sorts the landscape into areas dominated by human systems (high, or 2) vs. those dominated by natural systems (low, or 1).

Values for the DL and DP are calculated by by summing the weighting factors for each of the criteria in the category. The final Conservation Threat value is calculated by multiplying LD, DP and NH. The equation for calculating Conservation Threat can be summarized as follows:

Conservation Threat (CT) = DP x DL x NH
= (S + PC1 + PC2) x (RD + R81 + CD + TC + G + W) x NH

The response surface in the map below is the result of this process.. In the map, the grid cell values are sorted by standard deviation from the mean, with the deepest red representing maximum values and dark blue, the minimum values. Red represents areas of greater development threat, whereas blue represents areas of lesser development threat.

Response Surface of Conservation Threat:

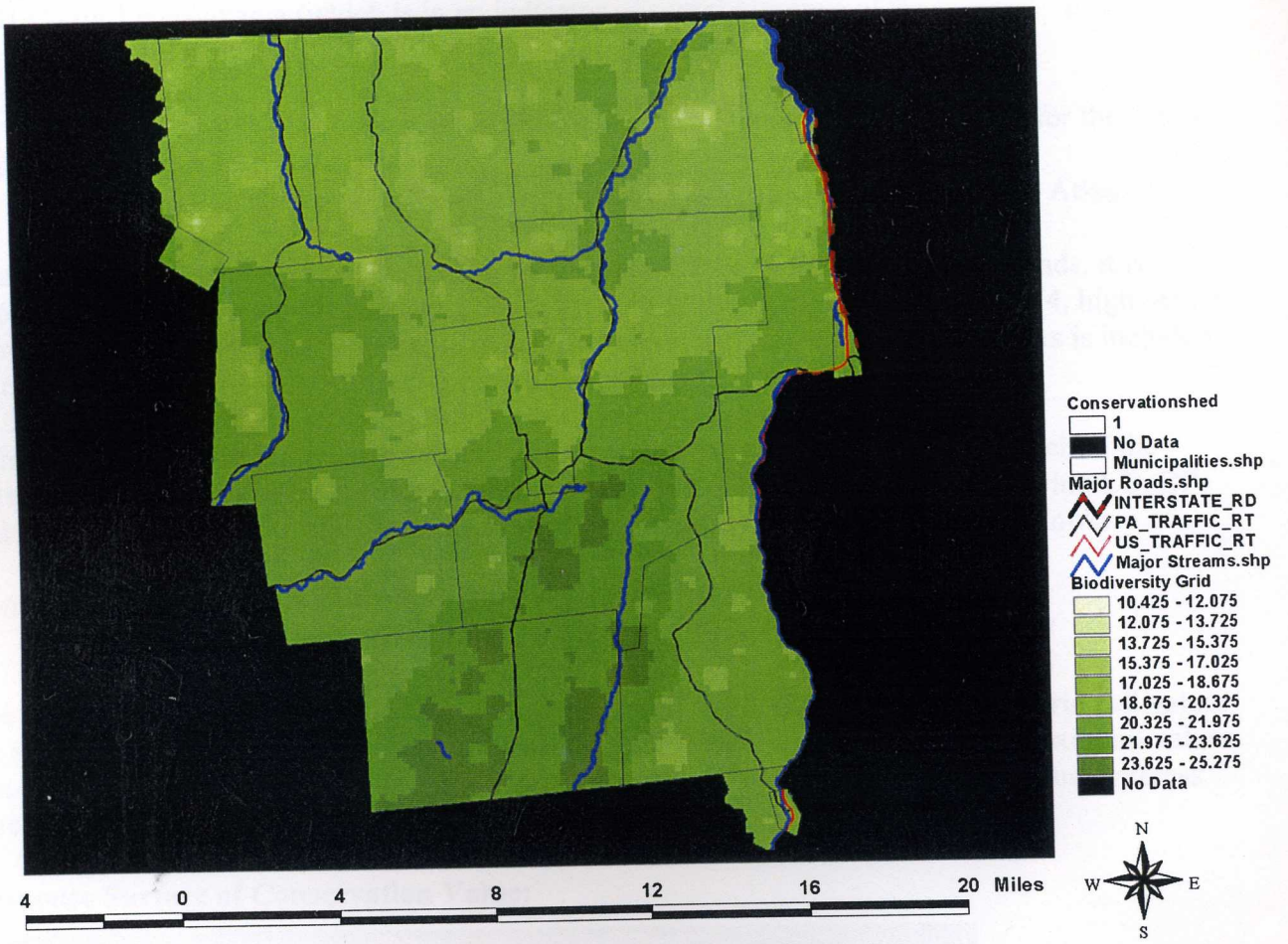


- *Landscapes of Conservation Value*

Conservation Value was meant to reflect qualities, which render particular areas in the landscape more desirable than others based on various conservation interests. For example, connectivity of protected areas is a desirable goal in order to create larger management and eco-system patches. One of the criteria for conservation value is then proximity to other lands already in conservation. Other criteria included spatial uniqueness of the landscape typology, proximity to cultural nodes and corridors, potential bio-diversity, and potential habitat value for specialists. Conservation value is thus a composite of Connectivity, Cultural Landscape Value, Spatial Uniqueness and Bio-diversity.

Potential Bio-diversity ("BD") is determined through looking at overall species richness. Using the Pennsylvania GAP 1km map, a centroid map is created, which then is used to create a response surface of bio-diversity based on the potential number of species in that grid cell according to the GAP model and values range from 85 to 255.

Potential Biodiversity



Connectivity ("CY") reflects the value of increased patch size and is calculated by determining proximity to different types of protective land (3, close to 1, far).

Cultural Landscape Value ("CL") reflects the proximity to different landscape cultural elements, including cultural landscape nodes, such as four corner, hamlets and boros and cultural corridors, such as the EMHT scenic by-ways, the Turnpikes and other historic roads, and roads whose scenery and history are particularly important to the ELRC (e.g. Route 167). It is calculated using the following:

1) Proximity to Cultural Corridor ("CC") (6, close (adjacent to road) to 1, far)
2) Proximity to Cultural Nodes ("CN") (10, close to 1, far)

Spatial Uniqueness ("SU") reflects the spatial distribution of the landscape typology. Where the typology is rare in the Conservationshed, then there is a higher value. It is calculated by determining the inverse of the density of the typology (6, rare to 1, common)

Potential habitat value ("PH") for specialists is determined by using the Pennsylvania GAP species model for four habitat specialists (2 birds, a mammal and a herp) and the Breeding Bird Atlas ("BBA") for Pennsylvania (which is in an indicator of actual presence of the species). It is calculated using following:

1) Potential specialist habitat value (PHV) based on the sum of GAP models for the habitat specialists (16, high to 1, low), and

2) Observed presence of bird specialists in the model based on Breeding Bird Atlas.

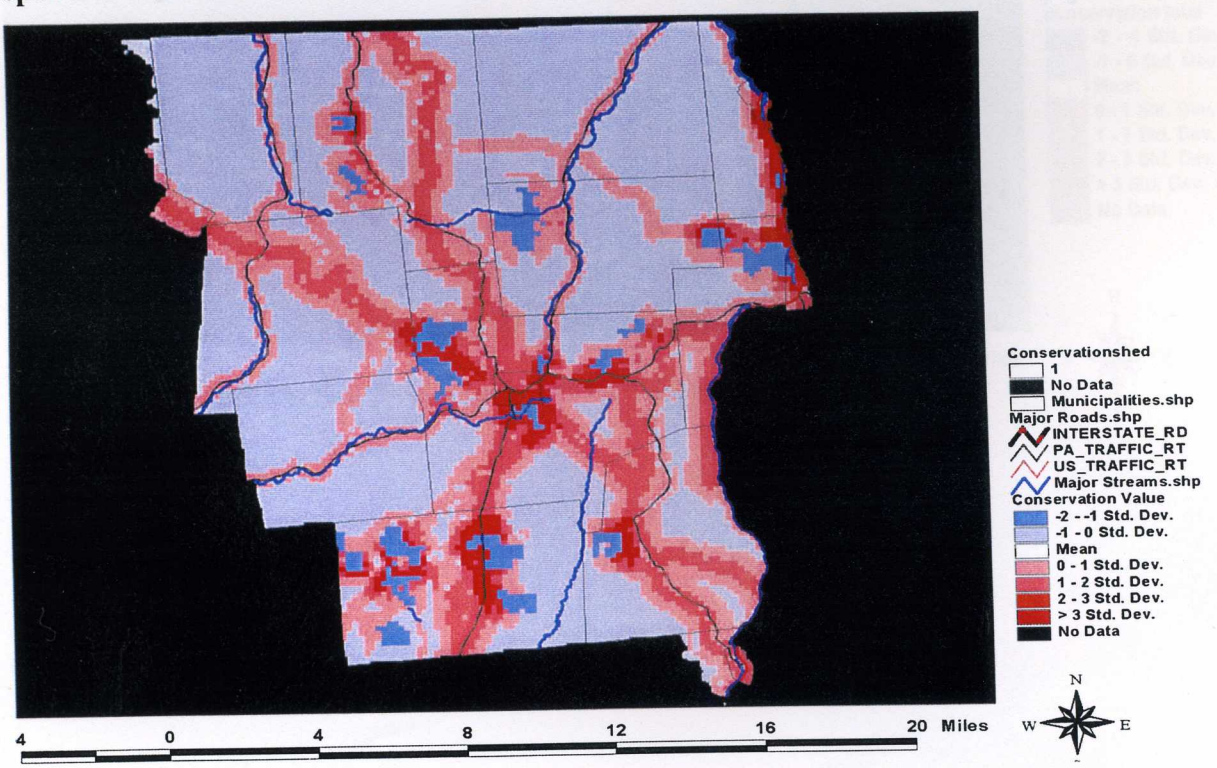
Finally, there is a typology specific weighting variable ("TSV"). In the case of wetlands, it is whether it is a headwaters (4, yes, to 1, no). In the case of the field, it a soil variable (4, high yield to 1 low, yield) is included and in the case of forested areas, proximity to forest corridors is included (4, close to 1, far).

Values for the DL and DP are calculated by by summing the weighting factors for each of the criteria in the category. The final Conservation Threat value is calculated by multiplying LD, DP and NH. The equation for calculating Conservation Threat can be summarized as follows:

Conservation Value (CV) = BD x CY x SU x CL x PH x TSV
= BD x CY x SU x (CC + CN) x (PHV + BBA) x TSV

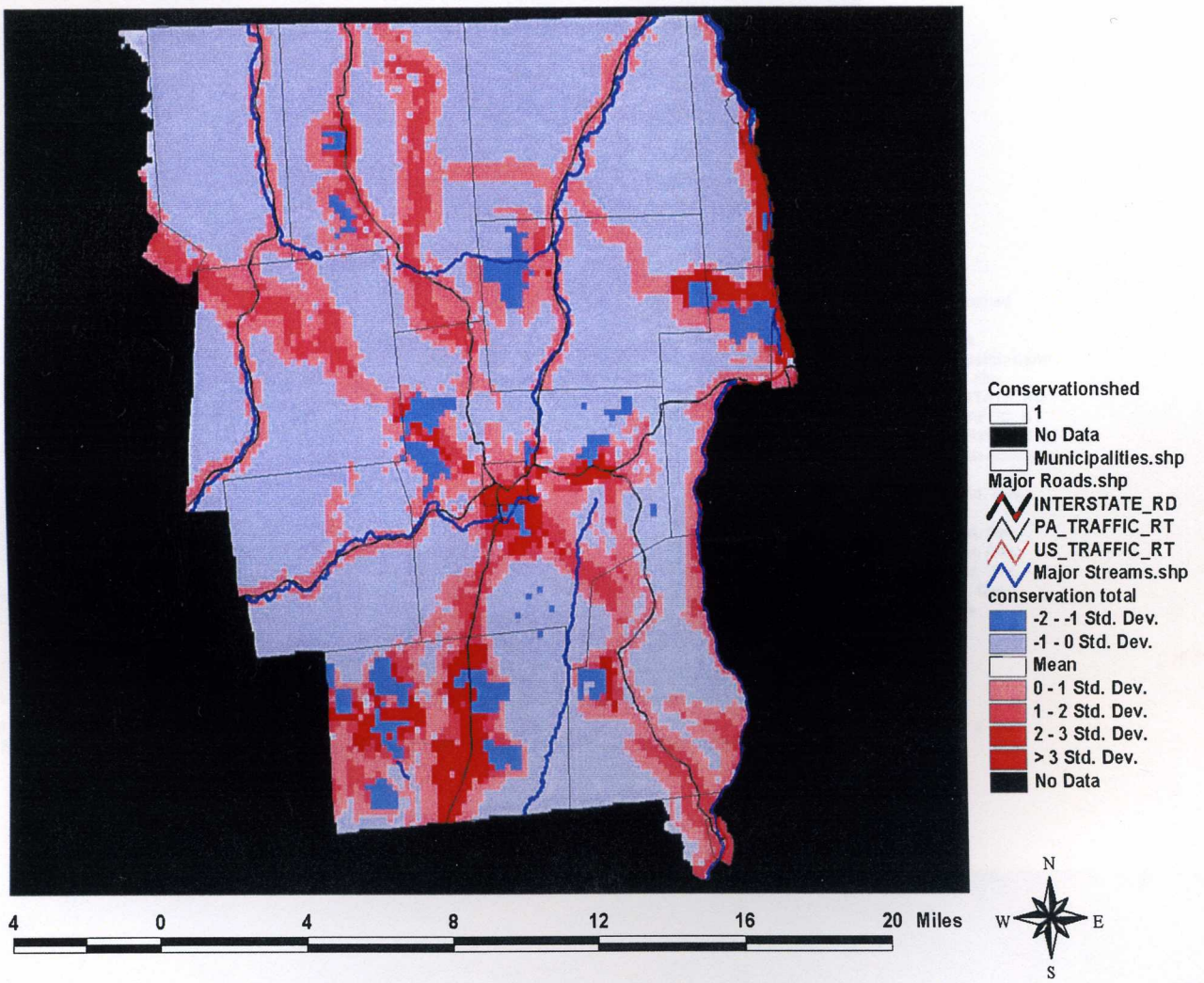
The response surface in the map below is the result of this process. In the map, the grid cell values are sorted by standard deviation from the mean, with the deepest red representing maximum values and dark blue, the minimum values. Red represents areas of greater conservation value, whereas blue represents areas of lesser conservation value.

Response Surface of Conservation Value:



The cumulative conservation weighting is then determined by multiplying Conservation Threat and Conservation Value. The response surface in the map below is the result of this final process. In the map, the grid cell values are sorted by standard deviation from the mean, with the deepest red representing maximum values, and the dark blue, the minimum values. Red represents areas of greater conservation priority, whereas blue represents areas of lesser conservation priority.

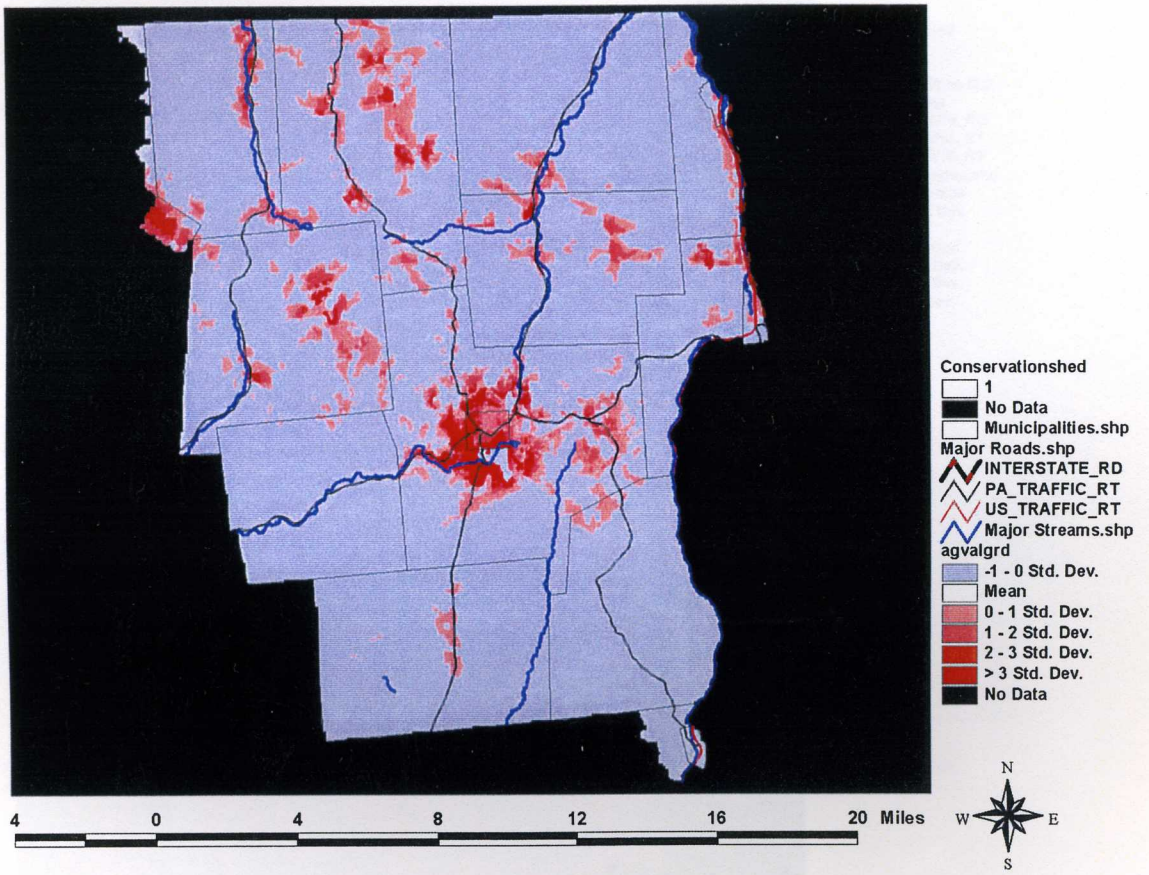
Cumulative Conservation Weighting:



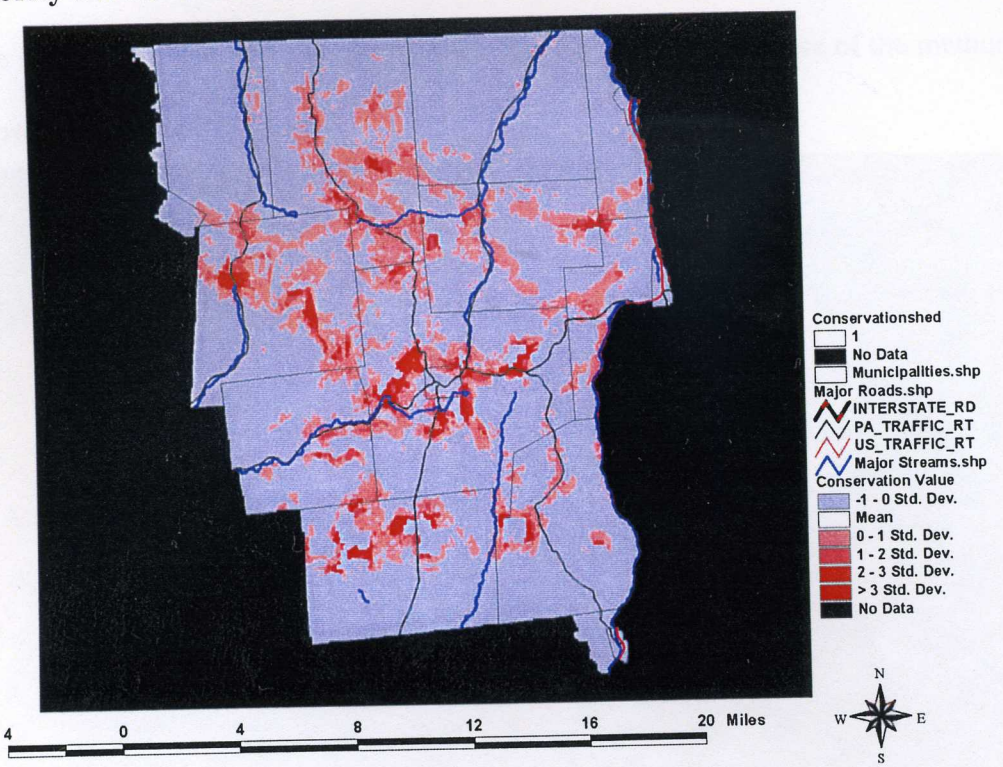
IV. PRIORITY CONSERVATION AREAS

The following areas area priority areas for the various landscape typologies. They are the sums of the priorities and threats evaluation.

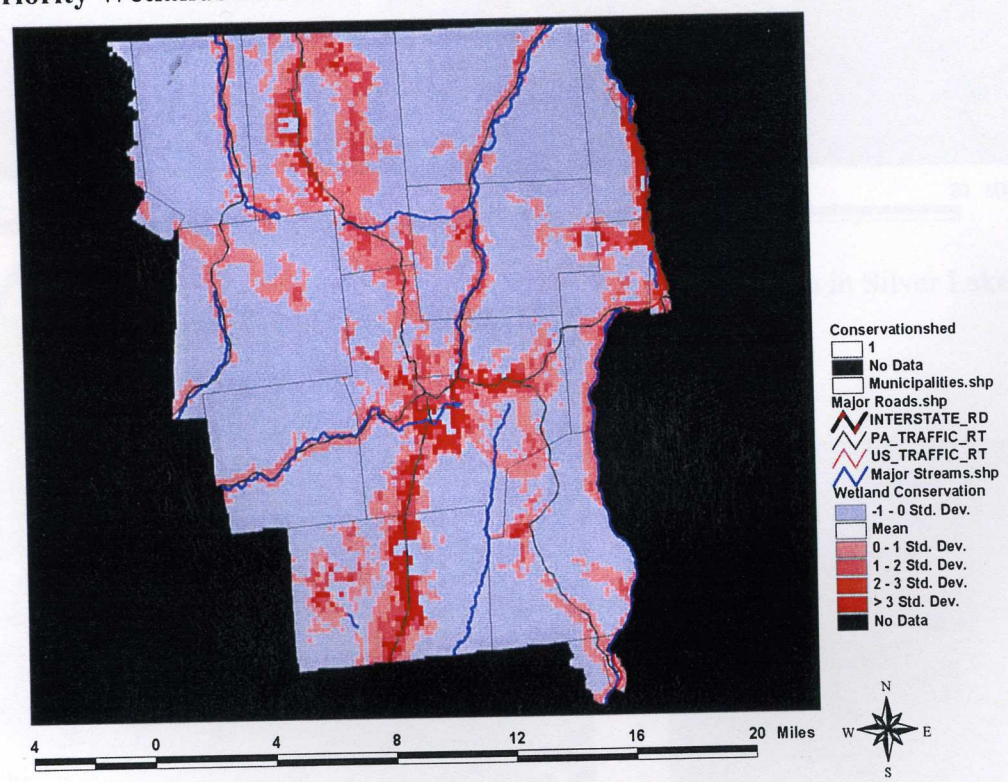
Agricultural Priority Areas



Priority Forest Areas



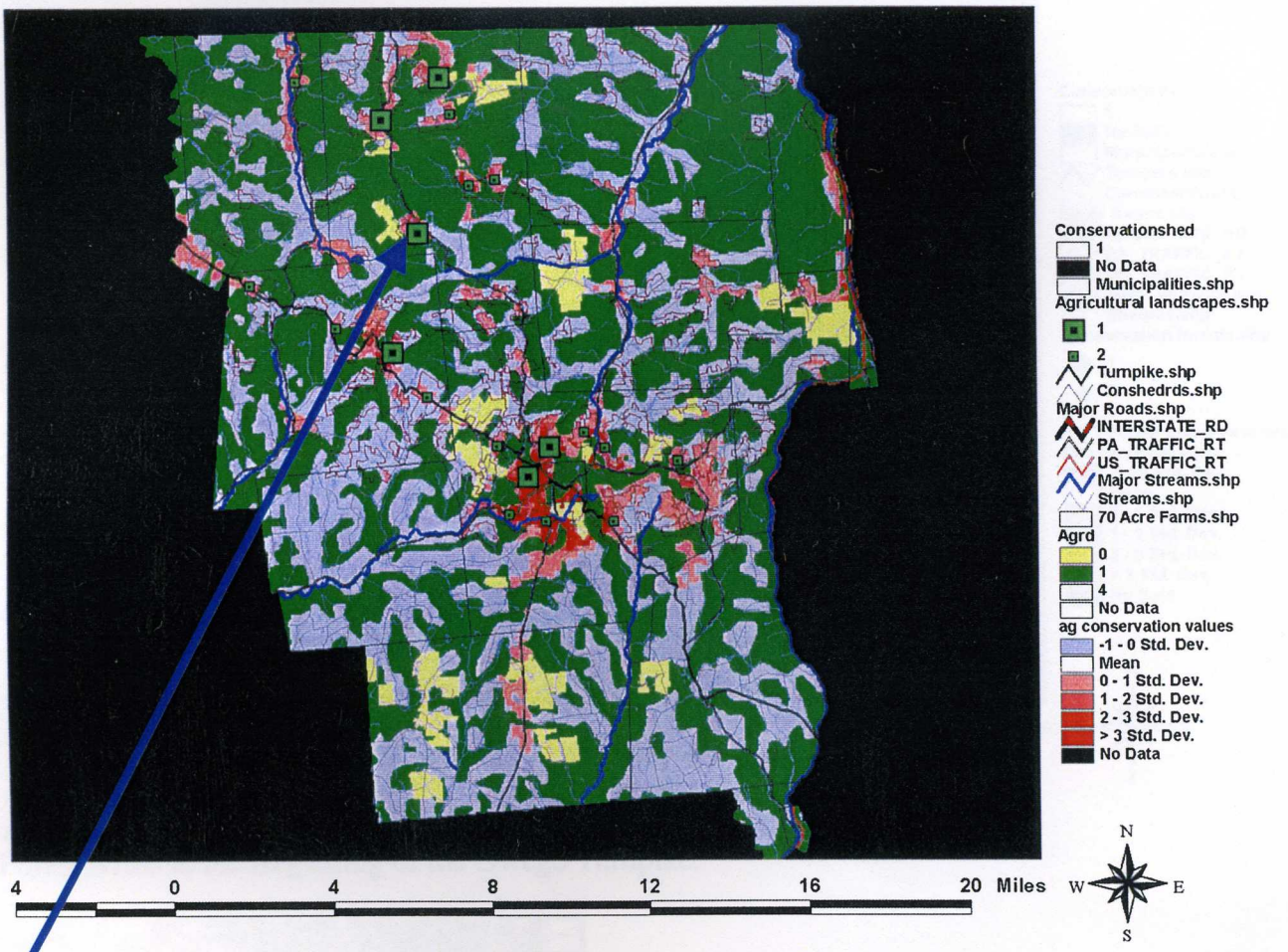
Priority Wetlands Areas



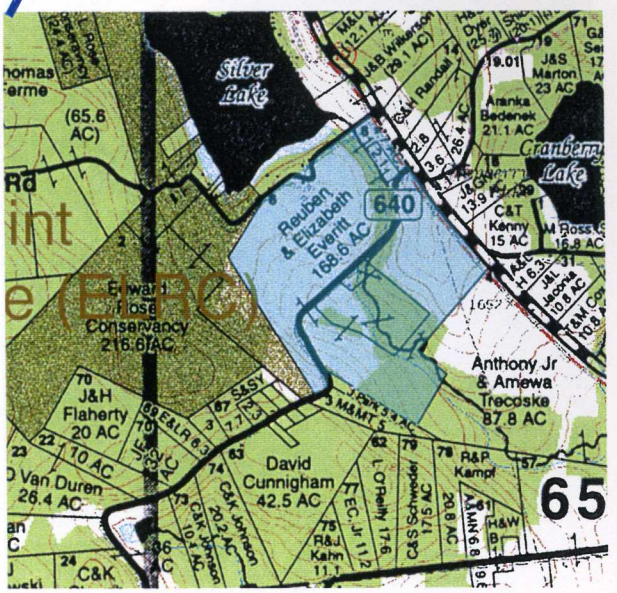
V. PRIORITY CONSERVATION SITES

The following maps portray priority sites suggested through the use of the methodology.

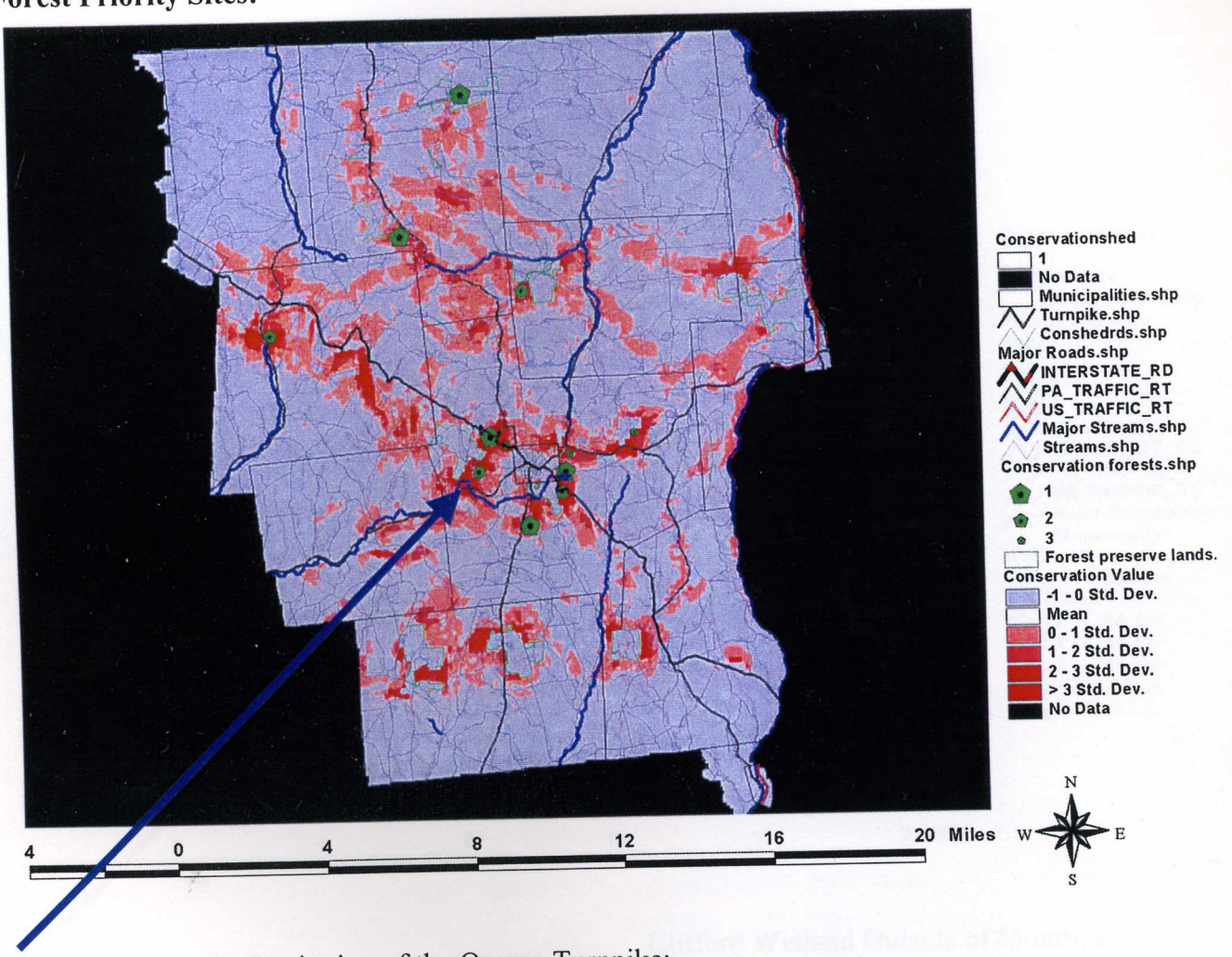
Agriculture Priority Sites:



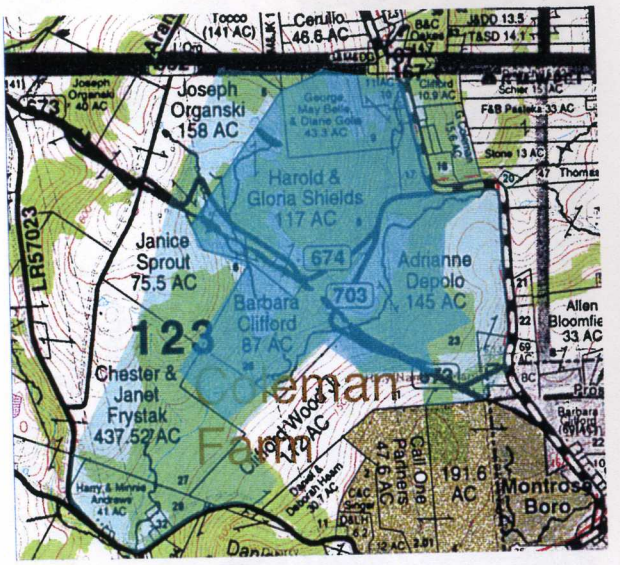
Everitt Farm in Silver Lake



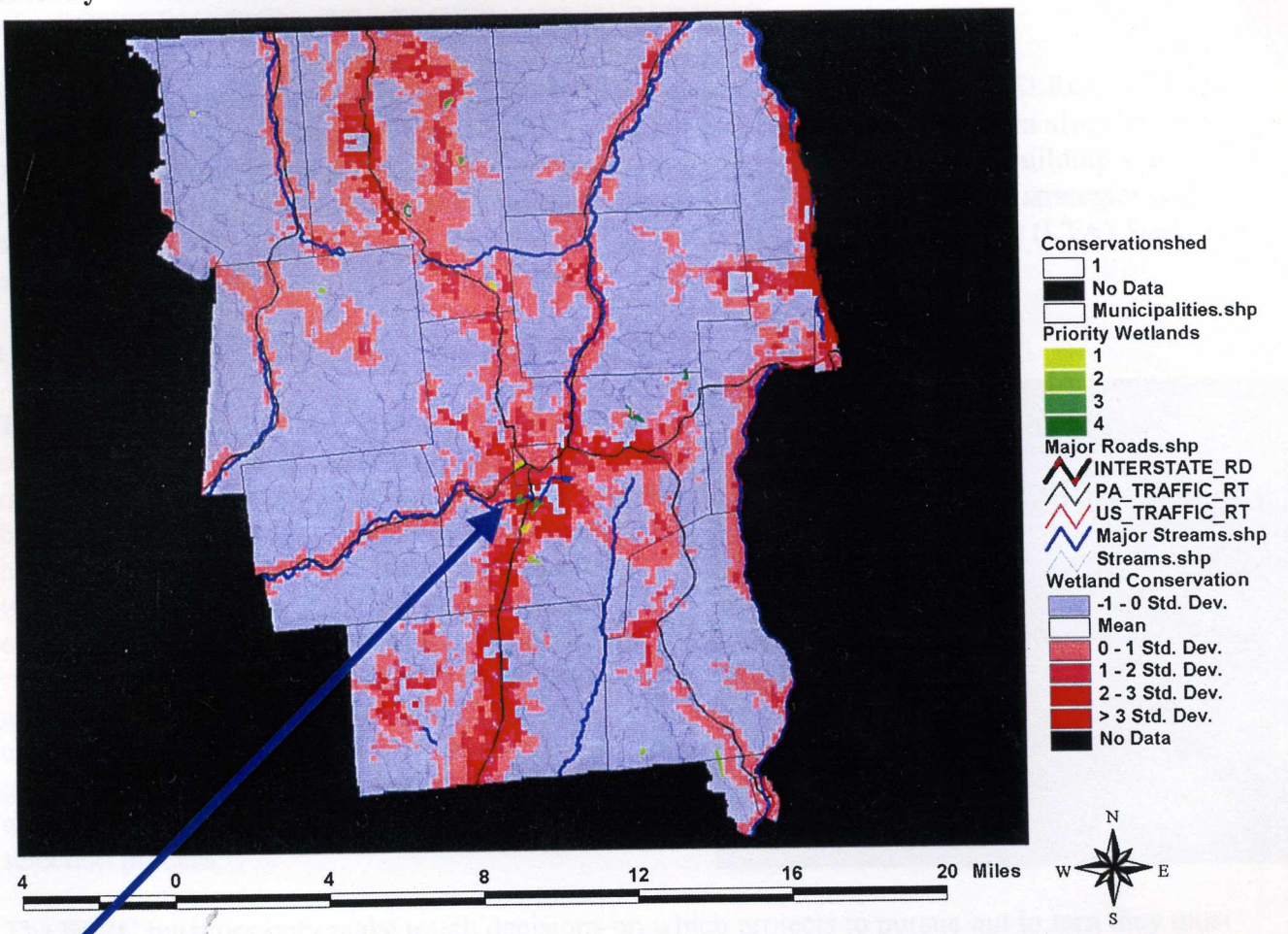
Forest Priority Sites:



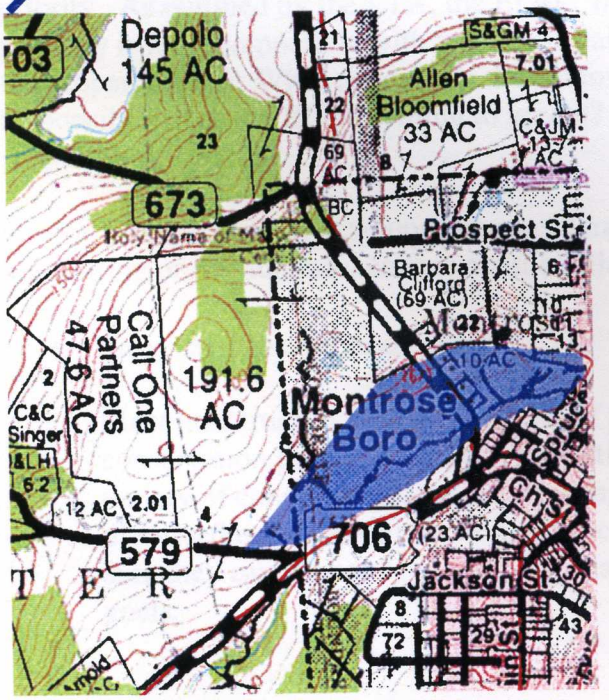
Forest Areas at the Beginning of the Owego Turnpike:



Priority Wetland Sites:



Clifford Wetland Outside of Montrose



VI. CONSERVATION STRATEGIES AND CAPACITIES

The following section outlines specific conservation strategies important for the ELRC to consider as they explore taking action on identified conservation opportunities. The section also provides a partial list of implementation considerations important to future ELRC capacity building and conservation action. For more detailed examination of any of these conservation strategies and organizational development issues, we refer the ELRC to the Land Trust Alliance (LTA) *Standards and Practices Guidebook*.

I. Landscape to Site-based Conservation Strategies

The ELRC's conservation planning process makes selecting which projects to pursue as involving much more than opportunism. All land trusts strive to make best use of their resources in the interest of protecting high priority sites. However, project selection typically requires finding the balance between opportunities that come to the land trust through community outreach and those projects actively pursued as a strategic priority. The ELRC conservation plan provides a framework for this project selection. Future discussion and project experience will further refine ELRC's project selection process.

The ELRC must not only make tough decisions on which projects to pursue but in turn they must also select the best available method for protecting each property identified as a conservation priority. As outlined by the LTA, the ELRC must address several questions: What use of the property is most compatible with the ELRC values? How does the broader community wish to see the property used? What options are the landowner willing to consider? What type of stewardship responsibilities is the ELRC willing to accept? What financial resources are available for the property's protection?

Several ELRC program development considerations important to both project selection and negotiating protection mechanisms are the following:

- Targeted Preserve Acquisition

  Most land trusts manage a portfolio of preserves as important places that exemplify the conservation purposes of the organization. They are the flagship properties maintained for a variety of conservation, resource management, and public enjoyment objectives. As discussed earlier in this section, great care must be given to selecting these projects to make sure they can be managed properly, that they serve the public interest, and fit organizational goals.

Utilizing the "Conservation Plan" the ELRC will in time develop a project assessment process to help guide appropriate actions based the conservation threats at the site, the community and organizational context, as well as stakeholder analysis. This is an explicit effort to evaluate organized groups and influential individuals that may affect conservation efforts at the site.

- Development of a Conservation Easement Program

A conservation easement is the land trust's primary land protection tool though other options are available (i.e. direct acquisition, registration, bargain sale). Easement-protected land may be used for any purpose (such as farming, logging, hunting, fishing, and recreation) except those limited or prohibited (usually subdividing and large-scale development). An easement is customarily permanent: the landowner receives compensation either by direct payment or, more often, by federal income tax and estate tax relief. The particular property tax relief for the landowner is typically determined on an individual case-by-case basis by the local municipality. As the ELRC pursues a conservation easement program, the following are some considerations:

1. Model/Base Legal Document

   The ELRC needs to develop a base legal document to share with prospective landowners and to use as a guide for future negotiations. The ELRC has likely already drafted such a document and other models are available through the LTA.

2. Lawyer With Conservation Interests on Staff/Board

   ELRC representatives need not be lawyers, but they should familiarize themselves with the basic principles of real estate and property law. As a small land trust, the ELRC could also benefit from having a Board member with a real estate law background to assist with land transactions including conservation easements. An area lawyer should also be retained from time to time. As the organization grows, a staff lawyer may be possible although most land trusts do not have the luxury of such in-house capabilities.

3. Defensible Process Developed for Adopting Easements

   The ELRC must ensure that every land transaction is legally and technically sound and take steps to avoid future legal problems.

4. Flexible Management Regimes

Individual preserves including parcels with conservation easements will require management regimes developed after consideration of not only the eco-system functions of the properties but landowner preferences as well. The management plan typically is far more involved than pure "preservation." What uses are possible? How is the vegetative cover to be managed? What is permissible in terms of public access?

5. Establishment of an Endowment Fund for Preserve/Easement Monitoring

   The ELRC must recognize the financial and management implications of each land transaction and raise the funds needed to monitor the status of the property.

6. Process of Yearly Monitoring of Properties

   The ELRC must regularly monitor its properties for potential management problems as well as for enforcing the terms of its conservation easements.

- Encouragement of Gifts of Land as Preserves

Landowners frequently find it attractive to donate all or portions of their properties to land trusts. The ELRC will certainly want to be open to this possibility and particularly when the property could become one of their preserves. The LTA provides considerable guidance to land trusts to assure that landowners are informed of relevant IRS requirements as well as legal aspects of the transaction. Various legal mechanisms exist for use by the ELRC and their interested landowners including bequests, remainder estates, trusts, etc. Future management is another important consideration in the transaction. The donor may wish to be involved in determining the uses and the long-term management of the preserve. Increasingly, land trust attempt to acquire endowments for management as part of the overall transaction.

- Development of Stewardship Goals and Capacity

A land trust that holds conservation easements commits itself to their perpetual stewardship. The ELRC must regularly monitor its easements, maintain contact with easement property owners, and enforce easement terms when they are violated. In addition, several considerations influence future stewardship decisions related to acquired properties including easements. They also point to the need for the ELRC to expand its capacity in the days ahead to address these management challenges. Some of the considerations include:

1. A process is needed for creating Management Plans for each preserve and easement

2. Management flexibility is needed to achieve the unique conservation goals of each property.

3. It's important to always be attentive to the ELRC organizational goals – the focus must remain on protecting eco-system functions.

4. The Susquehanna County area abounds with local specialists who can help in the development of preserve management plans (e.g. Soil and Water Conservation District, County Forester, PSU Extension,…)

5. Opportunities also exist to involve other community groups in the management process and usage including area schools, recreational clubs, and environmental groups.

II. Implementation Considerations

- Conform to LTA Standards and Practices

The Land Trust Alliance urges each land trust to bring its operations into compliance with the *LTA Standards and Practices Guidebook*. The ELRC is urged to pass a board resolution adopting the LTA Standards and Practices as guiding operations of the organization. The *Guidebook* provides practical information on every aspect of ELRC operations.

- Partnering with Efforts and Capacities of Other Conservation and Planning Organizations

1. Governmental Organizations

Land trusts are discovering that they can build support for landscape conservation by becoming more involved with their state/local government's land use planning efforts. Because most land use decisions are made at the local level, land trusts have much to gain by engaging in the processes by which policies for future land use of land are drafted, adopted, and implemented (Land Trust Exchange, Winter 1999). The ELRC Comprehensive Plan also calls for partnering with "township and county organizations" by attending meetings, volunteering for committees, and inviting officials to Conservancy meetings. Several of the governmental organizations important to the ELRC include:

a. DEP and DCNR
b. Northern Tier (Endless Mountains) Regional Planning
c. Soil and Water Conservation District
d. PSU Extension
e. County Planning
f. County Assessor

g. Municipal Planning Boards and Supervisors

2. Private Organizations

Similarly, many private organizations have complementary interests to the ELRC. Opportunities exist to share and pool resources, exchange information, collaborate on projects (e.g. greenway planning), and idea sharing. A few examples in this area include:

a. The Nature Conservancy
b. North Branch Land Trust
c. Countryside Conservancy
d. American Farmland Trust

3. Quasi-Public/Private Organizations

A significant number of organizations are focused on protecting the water quality of the area. The watershed organizations (e.g. Snake Creeks Watershed Group) have formed in recent years and can be important partners with the ELRC. Similarly, Lake Associations can play a role.

a. Lake Associations
b. Watershed Organizations

- Recognizing Political Independence and an Impartial Role of the Conservancy

Land trusts struggle to retain political neutrality as they work to conserve rural landscapes. As local authorities wrestle with land use planning and community management decisions impacting landscapes important for conservation, the ELRC will need to maintain objectivity. Often resisting the temptation to take a particular position on an issue, they rather can become recognized as a community resource to help resolve such environmental issues. This is achieved through it's own direct intervention [e.g. acquiring easements] or through the provision of information and technical assistance to planning boards or other local structures.

- Building Administrative Capacity

The ELRC Comprehensive Plan calls for improving "organizational operations" through training, widening committee membership, revising By-laws as appropriate, and information resources. Several key steps important to acting on the Conservation Plan include:

1. Having a Lawyer available or even on staff.
2. Establishing a central office.

3. Maintaining key committees (i.e. acquisitions, preserve management, easement stewardship, education and outreach, fundraising, conservation planning)
4. Support appropriate training for ELRC staff and volunteers.

- Community and Public Relations Through Education/Outreach

The ELRC Comprehensive Plan calls for promoting "local conservation ethic" as well as "increasing public awareness of conservancy goals and purposes." Several specific education and outreach activities include:

1. Information sharing through field trips, school programs, news articles, organizational presentations as well as such traditional activities as the Fourth of July booth.
2. Become a "community voice" for conservation through development of a web site, presentations, assistance to other organizations.
3. Continue the "Community Survey" approach to gaining insights about conservation interests.
4. Develop promotional literature and educational materials about the ecology of the area.
5. Utilize narrative and visual materials in the Conservation Plan and companion Resource Inventory to introduce a wide set of audiences to the landscape ecology and cultural heritage of the area.

IV. SUMMARY & CLOSING RECOMMENDATIONS

The E. L. Rose Conservancy is at the threshold of major action in response to their goal to "preserve the area's rural character and natural environment." Efforts the past two years by ELRC leadership in partnership with the Cornell Department of Natural Resources team have resulted in a much better understanding about the area's natural and cultural resources. Over the past year, the ELRC Conservation Planning Committee has collaborated with the Cornell team to complete a Natural Resources Guide and Inventory as well as draft this companion, first ever, Conservation Plan. All the participants in the process fully recognize that the ELRC vision to help protect the area's special rural attributes like scenic beauty, rich cultural heritage, and abundant natural resources comes down to responsive local planning, sustainable countryside management, and attention to specific land conservation opportunities.

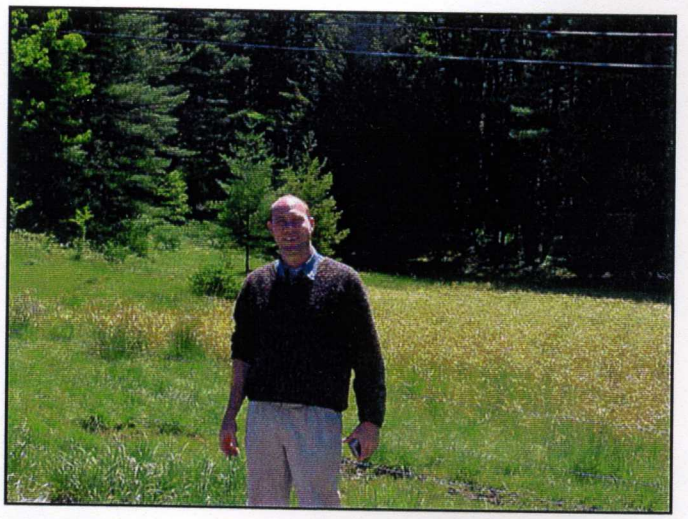
The ELRC Cornell team members congratulate ELRC leadership and members for staying so closely involved in the process. We fully appreciate that all the meetings and workshops have come at the expense of other activities, interests and needs. We also celebrate the considerable progress in organizational development during this period including establishing an Executive Director position. Most of all, we are pleased that the ELRC-Cornell partnership continues and that our colleague, Charlie Smith, will be able to capitalize on the resource inventory and planning effort to

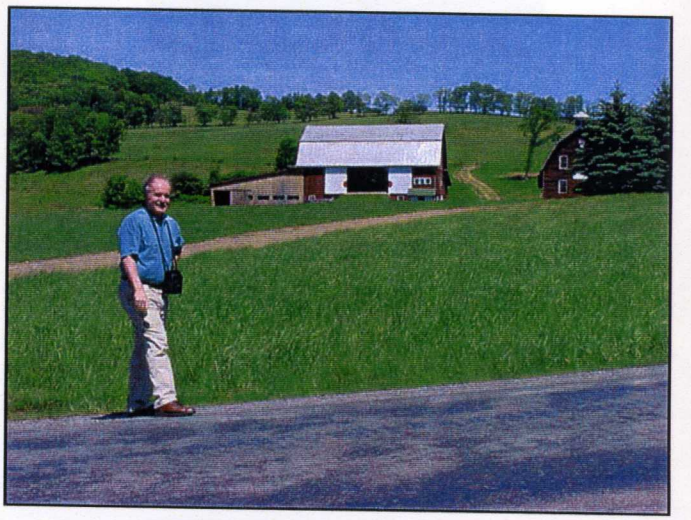
help the ELRC further understand the ecology of its current holdings as well as identify specific conservation targets for the ELRC to add to it's project portfolio.

Our simple recommendations for the future are as follows:

- As soon as possible, move into specific projects to further catalyze organization changes.
- Continue the close involvement with the Cornell DNR team.
- Expand collaboration with key organizations in the immediate area and region.
- Celebrate your successes.
- Keep up the Good Work!!!

John Barney and David Gross





Appendix A: Rules Based Conservation Models

Analysis:

GIS Data Set:

Typology — **Wetland** — **- Wetland Map**

Filters(site)

- < 10 acres → Out
- >10 acres or unique Type (e.g. Peat, Calcareous, Forested) — **- Wetland Map**

Threat (landsacape)

- Conservation Status — **- GAP Class**
- Development Pressure — **- Subdivision Surface**, **- Population Change**
- Likelihood of Development — **- Dist. to Tri-cities**, **- Distance to Main rd.**, **- Proximity to Amenity**, **- Development Corridor**, **- Population Density**, **- Disturbance**

Value (landsacape)

- Potential Bio-diversity — **- GAP grid**
- Cultural Landscape — **- Cultural Landscape Value Grid**
- Spatial Uniqueness — **- Density Grid**
- Headwaters — **- Hydrology**

Priority — High / Medium / Low

Analysis:

GIS Data Set:

Typology — **Field**

- **Land Use Map**

Filters (site)

- <70 acres
- >70 acres — **- GAP Avian Model**
  - Working Farm
  - Not Owned by Working Farm — **- Parcel Map & Aerial Photo**
    - Out

Threat (landsacape)

- Conservation Status — **- GAP Class**
- Development Pressure — **- Subdivision Surface**, **- Population Change**
- Likelihood of Development — **- Dist. to Tri-cities**, **- Distance to Main rd.**, **- Proximity to Amenity**, **- Development Corridor**, **- Population Density**, **- Disturbance**

Value (landsacape)

- Potential Bio-diversity — **- GAP species richness grid**
- Cultural Landscape — **- Cultural Landscape Value Grid**
- Spatial Uniqueness — **- Density Grid**
- Habitat Value for Specialists — **- GAP Analyis for Specialists**
- Soils — **- Soil Grid**

Priority

- High
- Medium
- Low

Analysis:

GIS Data Set:

Typology — **Forest** — **- Land Use Map**

Filters (site)

- <200 acres → Out
- >200 acres
  - No Significant Evergreen Patches → Out
  - Significant Evergreen Patch(es) — **- GAP Species Models**

Threat (landsacape)

- Conservation Status — **- GAP Class**
- Development Pressure — **- Subdivision Surface**, **- Population Change**
- Likelihood of Development — **- Dist. to Tri-cities**, **- Distance to Main rd.**, **- Proximity to Amenity**, **- Development Corridor**, **- Population Density**, **- Disturbance**

Value (landsacape)

- Potential Bio-diversity — **- GAP species richness grid**
- Cultural Landscape — **- Cultural Landscape Value Grid**
- Spatial Uniqueness — **- Density Grid**
- Habitat Value for Specialists — **- GAP Analyis for Specialists**
- Forest Corridor — **- Forest Corridor Grid**

Priority — High, Medium, Low