

Kent Land Trust Strategic Reassessment: Developing a More Balanced Approach

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Goals of Project:

- Develop a system to quantify a property's conservation value which:
 - Incorporates traditional KLT selection criteria
 - Adds criteria related to protecting biodiversity and maintaining climate resilience
 - More effectively balances cultural, recreational, and aesthetic values with natural resource conservation
- Use the new system to identify high-scoring unprotected properties in Kent
- Share findings with local and regional conservation partners

Property Evaluation Methods Overview:

1. Develop list of conservation criteria
2. Gather relevant maps
3. Use maps to analyze eligible properties
4. Assign scores to each property
5. Analyze scores and rank properties


Methods Part 1: Conservation Criteria


- Parcel size (minimum 25 acres)
- Town Character Areas
- Recreational value
- *Wetland buffer zones*
- *Riparian buffer zones*
- *Critical habitats*
- Surface water features
- Forest cover
- Agricultural value
- Contiguity with other protected parcels
- Scenic value, based on ridgelines and horizon belts
- Unique natural or cultural features

Methods Part 2: Mapping Resources


- Commissioned the Housatonic Valley Association to produce GIS maps (see next page) highlighting:
 - Property boundaries
 - Critical habitats for endangered, threatened, or special concern species
 - Wetland and riparian buffer zones
- Gathered other relevant references, including tax maps, National Diversity Database maps, and resource maps produced by the Kent Conservation Commission

Ideal Riparian Buffer


 Zone 1: 25 ft., plus critical habitats, plus wetlands

 Zone 2: Zone 1 Buffer plus 100 ft., plus flood plains, plus steep slopes

 Aspetuck River Watershed

 Major Roads

 Local Roads

 Town Boundary

 River Stream

 Waterbody

 Parcel Boundary



Methods Part 3: Property Analysis



- Identified unprotected properties ≥ 25 acres
- Used a grid to estimate % of each property made up of:
 - Forest
 - Wetland buffer (bright green)
 - Riparian buffer (yellow)
- Read other property attributes, such as critical habitats (pink hashes), directly from relevant maps

Methods Part 4: Scoring System Outline

Property size:	0-25 points, based on 6 size categories
Town Character Area:	Up to 15 points, based on proximity vs. inclusion
Recreational value:	Up to 10 points, based on accessibility and other features
Wetland buffer area:	Up to 10 points, based on % of property covered
Riparian buffer area:	Up to 10 points, based on % of property covered
Critical habitat:	5 points if present
Surface water:	Up to 5 points, based on number of water features
Forest cover:	Up to 5 points, based on % of property covered
Agricultural soils:	5 points if agricultural soils present or designated farmland
Contiguity with protected land:	Up to 5 points, based on abutting vs. connecting protected lands
Scenic ridgeline/horizon belt:	5 points if present <u>Up to 5 points</u>
Unique features:	Maximum of 100 points
Total =	

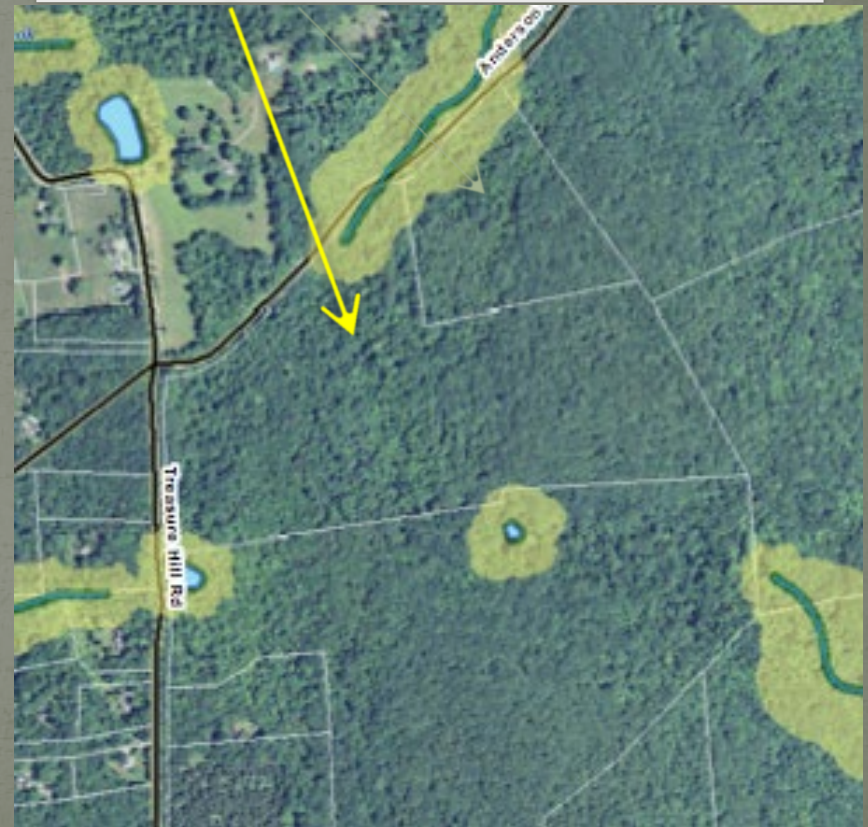
Below Median Score Property Example

Description

- 60.14-acre undeveloped forested property
- Farm soils present
- Adj. to Town Character Area
- Abuts protected property
- Limited recreational value
- No wetland buffer zone
- Limited riparian buffer zone
- Very little surface water
- No critical habitat
- Not in scenic ridgeline

Score = 32 points

Treasure Hill Road



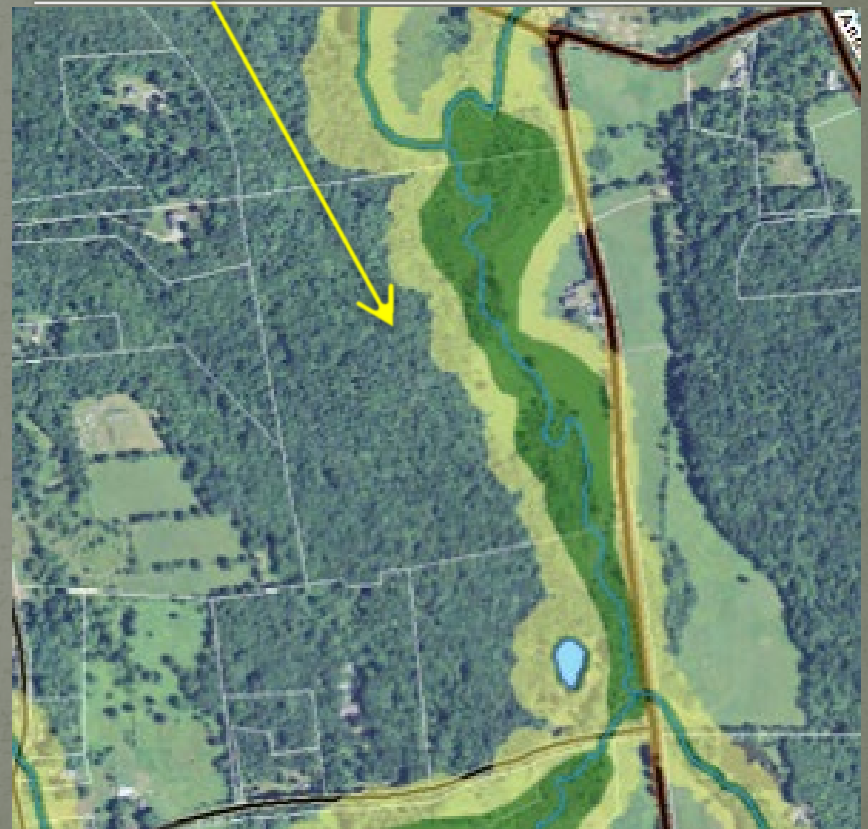
Higher Scoring Property Example

Description

- 64-acre forested property with home near road
- No farm soils
- In Town Character Area
- Abuts protected property
- Limited recreational value
- Significant wetland buffer zone
- Significant riparian buffer zone
- Significant surface water feature
- No critical habitat
- Not in scenic ridgeline

Score = 47.5 points

220 Kent Hollow Road



Methods Part 5: Analysis of Scores

- 64 eligible unprotected properties evaluated
- Scores ranged from 10-69 points; Median = 35 points
- 22 properties earned scores ≥ 45 points, with appraised land values ranging from \$673 K to \$3.1 M

- KLT fee properties were evaluated for comparison
- Scores ranged from 11.5-76 points
- No unprotected property in Kent scored as high as the highest scoring KLT fee properties

20 Top Scoring Properties:

#	Total Score	Acres	Appraised land value
1	69	143.9	\$3,096,100
2	68.5	271.46	\$2,244,300
3	66.5	147.48	\$1,721,200
4	57.5	245.7	\$1,856,100
5	57	210.4	\$1,764,100
6	55	96.34	\$1,190,500
7	54.5	78.17	\$1,163,000
8	52	90.45	\$1,574,500
9	51.5	88.4	\$1,889,500
10	51.5	116.23	\$1,057,000
11	50	53.78	\$1,723,400
12	49	68.65	\$1,026,300
13	47.5	64	\$847,800
14	47.5	99.48	\$1,389,200
15	47.5	29.8	\$731,700
16	47.5	196.75	\$1,700,100
17	47	69.07	\$1,031,800
18	46.5	72.3	\$1,474,800
19	45	44.94	\$1,165,000
20	45	24.22	\$721,900

Ranked Scores for KLT Fee Properties:

<u>Property Name</u>	<u>Total Score</u>	<u>Acres</u>
<u>Skiff Mountain South Preserve</u>	<u>76</u>	<u>249.89</u>
<u>East Kent Hamlet Nature Preserve *</u>	<u>74.5</u>	<u>262.6</u>
<u>Southern Gateway: all</u>	<u>74</u>	<u>242.45</u>
<u>Tobin Preserve *</u>	<u>73.5</u>	<u>241.66</u>
<u>Kent Hollow Preserve</u>	<u>47</u>	<u>26.21</u>
<u>Avian Preserve</u>	<u>46.5</u>	<u>57.6</u>
<u>Bull Mountain Preserve</u>	<u>36.5</u>	<u>75</u>
<u>Beard Farm Preserve</u>	<u>34.5</u>	<u>40.02</u>
<u>Currie Sanctuary</u>	<u>27.5</u>	<u>62.26</u>
<u>Dobson Preserve</u>	<u>22.5</u>	<u>7.56</u>
<u>Geer Mountain Preserve</u>	<u>20</u>	<u>1.61</u>
<u>Alger Preserve</u>	<u>12.5</u>	<u>25.4</u>
<u>Duchacek</u>	<u>11.5</u>	<u>19.42</u>

* Only the Kent portions of EKHNP and the Tobin Preserve were fully evaluated.

Conclusions:

- Properties in Kent, including KLT fee properties, vary widely with respect to calculated conservation values
- Many high value properties are out there, but none as valuable as those already protected by KLT
- Past efforts have resulted in protection of some parcels with relatively low overall conservation value
- Evaluation method could be applied elsewhere

Next Steps:

- Refine evaluation process as needed
- Reach out to property owners with respect to granting easements or donating/selling property
- Share methodology and findings with conservation partners
- Reexamine management of existing properties in the context of natural resource management, including enhancing biodiversity protection and climate change resilience