



Conservation Scorecard

A Tool for Prioritizing Land Conservation

Developed by Manomet Center for Conservation Sciences

In Southeastern Massachusetts, the need to protect open space and to set aside land for conservation is far greater than the funds available. Because of this, acquisition efforts must focus on protecting the most important parcels of land. From a conservation perspective, this means protecting those lands with the greatest ecological value. But how can we identify these lands?

This Conservation Scorecard prioritizes lands for acquisition by providing a single value for each parcel evaluated. It does so by comparing the attributes and qualities of your parcel to those of an ideal conservation parcel. The evaluation process integrates ecological information developed specifically for this Scorecard with existing ecological and regulatory information, to provide an assessment of the **relative conservation value** of any parcel of land in the region. This Conservation Value may be used in conjunction with social considerations (e.g., aesthetics, cultural significance, cost) or by itself to prioritize open space acquisition.

This Scorecard was developed specifically to provide land trusts, open space and recreation committees, community preservation committees, conservation commissions, regional planners, and foundations that support land acquisition with an objective, science-based tool for prioritizing land acquisition. This Scorecard may also assist Smart Growth efforts by identifying those parcels most appropriate for development (i.e., those with low conservation values.)

HOW TO USE THIS SCORECARD. You will need one copy of the Scorecard for each parcel being assessed, and access to the Internet. In addition, we strongly recommend that you visit each parcel and review your municipality's planning documents. Although neither the site visit nor familiarity with planning documents is necessary to complete the Scorecard, your parcel will likely receive a lower Conservation Value than if you visit the site and review the appropriate documents.

For each of the Scorecard's 18 questions you will see two or more possible answers, information on what map layers (if any) provide you the information needed to answer the question, and a point value for each possible answer. Much of the information that you need to answer these questions is provided for you on the Conservation Scorecard thematic map on ConservationMapper (www.conservationmapper.org.) In a few instances you will benefit from site-specific information not available on ConservationMapper. For these questions the Scorecard assumes worst-case conditions until you provide additional information.

Begin by answering question 1 A. Knowing your parcel's size, find the correct answer to the question,

identify the number of points associated with that answer, and enter the resulting value in the corresponding "Score" box. For example, if you are buying a 14 acre parcel, your answer to this question is worth 5 points, and you would write the number 5 in the "Score" box.

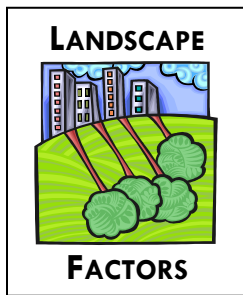
To answer most other questions you will need to use the "Conservation Scorecard Viewer" feature on ConservationMapper. First, zoom in to the location of the parcel being assessed. Next, display the information needed to answer the question by checking the "Visible" box(es) associated with the question that you wish to answer, then click the "Refresh" button. The information needed to answer your question is now displayed. For example, to obtain the information needed to answer question 3 B, you would check the boxes next to the two layers that are labeled 3 B, then click the "Refresh" button. The map now displays both the 100 and 200 foot wetland and waterway buffers near your parcel. Use this information to answer question 3 B.

Continue in this manner until you have answered all of the questions.



Need Help? Manomet provides no-cost assistance with the use of this Scorecard. Call us at (508) 224-6521





1. The size, shape, and location of a parcel of land affect its conservation value. Neighboring parcels of open space, and their proximity and connection to your parcel, also influence the conservation value of your parcel. Because of this, you must consider the parcel as part of a broader landscape.

The following three questions address your parcel from a landscape context. The first two questions each deal with size, the size of your parcel and the size of the undeveloped patch of land in which your parcel occurs. The third question deals with the concept of "Landscape Integrity." Landscape Integrity considers a variety of factors, including the shape of your parcel, distance to the nearest protected conservation lands, and the number and type of connections between your parcel and protected conservation lands.

Measurement	Map Layer	Answer	Points	Score
A. What is the size of the parcel being considered for purchase?	N/A	> 100 acres 10–100 acres 1–<10 acres <1 acre	10 5 2 1	
B. What is the size of the patch of undeveloped land (i.e., land with natural vegetation) in which the parcel occurs?	1B	> 100 acres 10–100 acres 1–<10 acres <1 acre or not indicated on map	3 2 1 0	
C. What is the Landscape Integrity Value for the area in which your parcel occurs?	1C	High Medium Low Not indicated on map	20 10 5 0	
Subtotal				

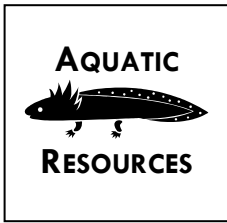


2. The preservation of biodiversity is best accomplished by preserving multiple, intact examples of every natural community type (i.e., recurring groupings of plants.) For this reason, a parcel's conservation value is greatly influenced by its vegetation. Parcels that contain rare natural communities, vegetation classes not protected or under-protected in current conservation lands, lack invasive species, and require no stewardship provide the greatest benefit to conservation. The following questions assess the conservation value of vegetation on your parcel.

Measurement	Map Layer	Answer	Points	Score
A. Are any of the vegetation classes on the parcel under-represented in existing conservation lands?	2A	Yes No	6 0	
B. What is the rank of the rarest (i.e., lowest numbered) natural community present on the parcel? [From field visit.]	N/A	S1 S2 S3 S4 or S5*	6 5 4 1	
C. How many classes of <u>natural</u> vegetation occur on the parcel? [From ConservationMapper or field visit.]	2C	3 or more 2 1 0 (only human altered vegetation)	3 2 1 -10	
D. Does the parcel require stewardship to be restored to a natural, undisturbed condition? If so, are funds and labor currently available? [From field visit]	N/A	No – Parcel is currently in natural, undisturbed condition Yes – \$ and labor available Yes – \$ and labor not available*	5 0 -5	
E. What is the abundance of invasive plants on the parcel? [From field visit]	N/A	None Single Plant Single Patch or Evenly Sparse Multiple Patches Dense Throughout*	3 2 1 0 -5	
Subtotal				

* Use this answer for your score unless you have visited the parcel.



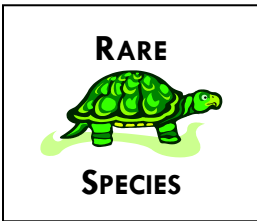


3. Water is critical for the maintenance of aquatic communities. Land use practices that interrupt the flow of surface waters or prevent the recharge of groundwater are harmful to aquatic communities. In contrast, land use that promotes groundwater recharge and maintains surface water quality is beneficial to aquatic communities.

The following questions consider the relationship between your parcel and aquatic plant and wildlife habitat. Parcels that contribute to the protection of surface and ground waters are considered to be of greater conservation value than those that do not.

Measurement	Map Layer	Answer	Points	Score
A. Has the area beneath the parcel been identified as an aquifer?	3A	Yes No	6 0	
B. Does the parcel provide a natural vegetated buffer to a stream, river, pond, or lake? If so, what is the extent of the buffer?	3B	Yes – 200 or more feet Yes – 100– <200 feet Yes – Less than 100 feet No	6 3 1 0	
C. Do one or more vernal pools occur in the parcel?	3C	Yes – Certified vernal pool Yes – Potential vernal pool No	2 1 0	
D. Does the parcel provide a contiguous, natural vegetated buffer to a vernal pool? If so, what is the extent of the buffer?	3D	Yes – 100 or more feet Yes – Less than 100 feet No	2 1 0	
Subtotal				

Note: A low score in the Aquatic Resources category does not automatically mean that your parcel is of low conservation value. Even high-quality upland sites may score low in this category. Parcels that score high in all other categories should be considered for purchase.



4. There are 448 plants and animals officially listed as endangered, threatened, or a species of special concern in Massachusetts. Although currently protected open space may provide habitat for one or more of these rare species, it is not sufficient for their conservation. Acquisition of additional properties that contain rare species habitat is necessary for the survival of these species in Massachusetts.

The following questions address the presence, or potential presence, of rare species on your parcel. Parcels with known occurrences of rare species are considered to be of high conservation value, and should receive priority for protection.

Measurement	Map Layer	Answer	Points	Score
A. Is your parcel located in BioMap habitat, or has Natural Heritage verified the presence of a terrestrial, State-listed species since the release of BioMap?	4A	Yes – Core Habitat Yes – Supporting Landscape Yes – Recently verified rare species No	6 3 2 0	
B. Is your parcel located in or near Living Waters habitat, or has Natural Heritage verified the presence of an aquatic, State-listed species since the release of Living Waters?	4B	Yes – Core Habitat Yes – Adjacent to, or immediately upstream of, core habitat Yes – Recently verified rare species Yes – Critical Supporting Watershed No	6 3 2 1 0	
C. Does your parcel occur within an area designated as “Priority Habitat of Rare Species” by the Massachusetts Natural Heritage and Endangered Species Program?	4C	Yes No	3 0	
Subtotal				





5. The conservation value of your parcel may be enhanced by legal protection afforded it, and/or to its surroundings. Parcels that occur in areas already designated as environmentally sensitive or important to conservation may be subject to increased regulation, or increased availability of funds for acquisition and stewardship. The legal protection that you place on your parcel will determine if the parcel remains in conservation, or if it will be converted to another land use at some future time. Parcels that occur in one or more regulatory overlays and those with multiple layers of legal protection are of higher conservation value.

Measurement	Map Layer	Answer	Points	Score
A. Does your parcel occur within the political boundaries of an environmental regulatory overlay (e.g., Area of Critical Environmental Concern, wellhead protection area, etc.?) This includes all federal, state, regional, local, and privately designated areas.	5A (in part)	Yes No	1 point for each "Yes" answer, up to a maximum of 3 points	
B. What type of legal protection will your parcel have after purchase? The following terms are used to answer this question. A97 = Article 97 interest, other than CR* CR = Conservation restriction Fee = Fee simple ownership by town or land trust	N/A	2 or more CRs, <u>or</u> A97 with 1 or more CRs Either A97 <u>or</u> CR Fee only	5 3 1	
			Subtotal	

* Article 97 of the Amendments to the Massachusetts Constitution includes CRs.



6. Once purchased, conservation land may be protected from the direct impacts of development but not the indirect impacts. Development of areas adjacent to protected lands decreases the conservation value of those protected lands. Because of this, you need to consider if the land surrounding your parcel is likely to be developed. In general, parcels in areas in which development is unlikely maintain their ecological value longer than parcels in areas where development is encouraged. One indicator of the likelihood, and type, of future development is the designated land use, as identified in your towns planning documents.

Measurement	Map Layer	Answer	Points	Score
A. Does the parcel occur within an area designated as "lands that are most suitable for development" in your municipality's Community Development Plan, or an area zoned for commercial or dense residential development in your municipality's Master Plan?	N/A	No No plans exist Yes*	5 0 -5	
			Subtotal	

* Use this answer for your score unless you have reviewed planning documents.

Parcel Name: _____ Date Evaluated: _____

Conservation Value	Scorecard Category	Total Points Possible	Sub-total Value
	The Conservation Value of your parcel is the sum of your six sub-totals. The higher the Conservation Value, the greater that parcel's contribution to conservation. Remember, this is a relative value that is to be used to compare multiple parcels being considered for acquisition.	1. Landscape Factors	33
	2. Vegetation	23	
	3. Aquatic Resources	16	
	4. Rare Species	15	
	5. Legal Protection	8	
	6. Potential for Development	5	
	Total	100	



A quick rule of thumb for interpreting your score!
(Based on pilot studies)

0-20 Little to no conservation value	20-40 Poor to moderate conservation value
40-60 Moderate to good conservation value	60-80 Good to excellent conservation value
80-100 Outstanding conservation value (Only pristine, ideal parcels fall into this range.)	