Nashua River Communities Core Principles for Forest Management

The Principles described below were developed over the course of the first year of the Nashua River Communities Resilient Lands Management Project in partnership with the Forest Task Group.

1. Learn by Observing and Interacting: Forests as Teachers

What can we learn from the forest? Forests are, and always have been, dynamic, evolving communities. They change over time to adapt to changing conditions, and with time, develop more ecological complexity and diversity. When we get to know a forest intimately, we may come to think of ourselves as a part of her system, in ongoing relationship with her, not separate. By becoming students and participants in learning from the forest, the actions we take to care for her can respond effectively to her unique history, needs, opportunities, and potential. There is no "one size fits all" solution for resilient forests or communities.

2. See the Forest and the Trees: Forests as Nested Living Systems

Forests are not static objects; they are nested webs of living systems, and can be found in all kinds of environments, from urban to rural and in between. An individual forest patch makes contributions to the functioning, diversity, and connectivity of the regional forest, and the regional forest influences the forest patch in turn. In the same way, individual trees contribute to and are influenced by the forest as a whole. By learning to see and appreciate the ways that forests and trees interact across landscapes and scales, and how human systems of governance shape those interactions, people have the power to strengthen and reinforce these contributions.

3. Participate in Reciprocal Relationships: *Forests as Partners*

By changing our species' narrative of power over nature to one of balance and reciprocity with nature, we shift the paradigm toward true sustainability: reciprocity is the foundation of long-term resilience, and this recognition enables a deeper relationship with nature that improves our stewardship of the land. When we take from the forest, we must also give back, or the forest will become depleted and suffer – and so will we humans. We can start by acknowledging the gifts of the forest, and by asking what the forest needs and wants. In this way, we open up to the potential of a relationship with the forest that goes beyond the knowledge we may have today.

4. Encourage Diversity and Connectivity: *Forests as Connections and Intersections*

In areas with relatively high rainfall such as Massachusetts, forests are the predominant cover type. Over time, development of human settlements, roads, legal boundaries, and other infrastructure has fragmented the forest that existed before colonization. As forest stewards, we can help heal this fragmentation by weaving together fragmented forest patches. Regenerating these connections can support healthy ecologies and human communities. Through this lens, marginal spaces such as vacant lots, roadside shoulders, utility corridors, and other strategic locations become valuable opportunities for forest regeneration and community connection.

5. Focus on Function for Resilience: Forests as Dynamic Forces

As large-scale patterns of temperature, precipitation, and other forces shift, it is helpful to think in terms of restoring functionality (which may or may not restore former conditions). This means assisting the forest ecosystem in returning to a self-organizing state on a trajectory towards full health and resilience. Whatever the specific strategies being considered may look like, the key is to focus on sustaining healthy forest function and complexity, while preserving native biodiversity as much as possible. Recognizing that forests and climatic conditions are constantly changing and evolving, humans have the potential to play beneficial roles in these processes.

6. Take the Long View to Evaluate Success: Forests as Legacies

Every forest has a unique history and context. For instance, forests are at different successional stages throughout the New England area – younger and older, more or less disturbed. As a result, they will experience climate change impacts differently. Continued development and land use change creates additional pressures on remaining forests, increasing both their value for climate resilience and their vulnerability. When we take the long view, and educate and empower others to do the same, we can learn from the past and ensure the health and resilience of forests today and for future generations.

For more information, visit the project website by scanning the QR code or visiting <u>https://climateresilient.wixsite.com/nashuariver</u>.

