Getting Started: Summary of the Approach

1. **Establish a work group**
   - Invite local boards, community groups, and area residents to attend an initial planning meeting to brainstorm NRI goals and objectives.
   - Establish a smaller work group of 7-10 interested people to direct the project.
   - Elect a project leader/coordinator.
   - Solicit volunteers.
   - Determine technical and GIS capacity of the group and identify technical advisors as needed (e.g., county planning department).

2. **Determine goals and scope of project**
   - Review community needs and prioritize NRI goals.

3. **Define the study area**
   - Decide on the focal area of the NRI (e.g., the town, a subwatershed within the town, a region involving several towns).

4. **Review existing natural resources documents**
   - Gather and review existing natural resource documents, e.g., comprehensive plan, watershed management plan, environmental impact statements, etc.

5. **Develop a draft inventory outline**
   - Develop a draft outline that addresses project goals and proposes what to include (components to be inventoried and described, maps and tables to be compiled, and other narrative sections) and a rough timeline.

6. **Develop a budget and scope of work**
   - Investigate costs, identify potential funding sources, and develop a budget. If hiring a consultant, develop a scope of work that details expectations.

7. **Publicize the inventory and solicit public input**
   - Keep the community informed about the project. Provide updates and get feedback at community events and meetings, through websites and social media, and with public displays.

---

**Establish a work group**

Once a community has decided to create a natural resources inventory, it should establish a work group and determine who will take the lead on the project. Conservation advisory councils (CACs) (also known as environmental commissions) are an ideal work group to coordinate a municipal inventory. Some municipalities may have staff capacity to lead the NRI. Other communities or organizations may find it’s best to establish a steering committee and project leader to oversee the NRI project.

While a CAC is a logical leader in developing a municipal natural resources inventory, not all New York communities have active conservation councils, nor should any one group carry the entire load of an inventory project. An inventory that relies primarily on volunteers will be accomplished most effectively by pooling a variety of local talent into a well-organized work group. By inviting local boards, community groups, and residents to an initial planning meeting, the goals and objectives of the NRI project can be brainstormed and discussed, and potential members of the work group can be identified. This approach provides a diverse range of constituents with an opportunity to contribute to the NRI, facilitates communication between groups, and strengthens support for the NRI. Here are some suggestions:

- **Members of municipal boards, commissions, and committees:** Invite members of the CAC, planning, zoning, and legislative boards, comprehensive plan committee, recreation commission, historical commission, agriculture committee, and other municipal groups to participate in the project. This ensures a variety of interests are represented.

- **Members of the community:** Identify residents of the municipality who have relevant backgrounds, professional experience, or particular knowledge about the community’s natural and cultural resources who might be willing to provide some assistance with the project.
**Conservation Advisory Councils (CACs)**

The State of New York General Municipal Law (Article 12-F Section 239-x) gives any town, city, and village the authority to create a conservation advisory council (CAC) “…to advise in the development, management, and protection of its natural resources.” The law also states that CACs are to provide an inventory of open areas and wetlands within the municipality. The open areas inventory is defined in Section 239-y as having each area “identified, described, and listed according to priority of acquisition or preservation.” Before priorities can be determined, a basic inventory of natural resources is needed.

**Other groups:** Local land trusts, watershed associations, historical societies, nature groups (like bird clubs), not-for-profit organizations, and colleges and universities are helpful groups to involve in an NRI project (see Appendix A). If the municipality is within a watershed with an active watershed association, notify them of the project and solicit their input. Find out what work they have done that could be used in the inventory. College interns, high school groups, and educators may be able to assist with technical aspects of the project.

After the initial planning meeting, establish a smaller work group of 7-10 people and elect a project leader/ coordinator. The project leader can be tasked with general organization and management of the NRI work group and project. He or she can keep the inventory project on track by scheduling meeting times and places; coordinating members of the work group, including volunteers, local officials, municipal and county staff, and consultants; and arranging for public input and information sessions. Smaller work teams can be formed to focus on specific inventory components and tasks can be delegated based on people’s interests and skills, such as mapping, field observation, and researching and compiling local information. A steering committee or select work group members can be assigned with instituting criteria for data collection, reporting and documentation, and overseeing the NRI.

It is recommended that the work group assess its technical capacity at the beginning of the project. This, along with other factors, will help determine the potential scope of the NRI. Does the municipality have GIS staff available to assist with the project? Are there funds to hire a consultant to assist with map creation? Does the work group have knowledge of the local and county data sets that should be included in the NRI? County agencies such as planning departments, environmental management councils, soil and water conservation districts, and extension offices may be able to assist with technical aspects of the project and should be invited to participate as advisors early in the process.

**Determine goals and scope of the project**

At the outset, establish the goals, objectives, and scope of the project. An NRI isn’t an end in itself. The real purpose is to use the inventory as the basis for future planning. Key questions include:

- Why do you want to develop or update a natural resources inventory?
- What do you hope to accomplish? How will the NRI be used?
- What are the community’s needs and concerns?
- Are natural resources goals identified in the comprehensive plan? If so, which recommendations have been acted upon? How can the inventory address recommendations that haven’t yet been implemented?
- What natural resources information would you like to see included in the inventory?
- Are there specific natural resource priorities in the study area, such as water resources, wetlands, connected habitats, farmland, or scenic views?

The goals will help to determine the scope of the project. Both short- and long-term goals should be identified. Inventory goals can be broken down into more specific objectives and actions, such as water resources evaluation, wetlands inventory and evaluation, wildlife habitat assessment, and identification of outdoor recreation opportunities. Broader goals for using the results of the inventory might include open space planning, land protection, updating the comprehensive plan, updating local regulations (e.g., zoning regulations), and public education (see Chapter 6 for a more detailed discussion).

Other factors that will help in finalizing the project scope include technical capacity and available funding.
**Considerations for Hiring a Consultant**

Communities often hire consultants to supplement their own staff and volunteer resources or to gain use of special skills. This is sometimes the case for natural resources inventories, where certain technical skills and expertise may be needed, such as geographic information systems (GIS) and land-use planning. Consultants can provide input on the NRI scope and help with gathering data, creating maps, suggesting implementation ideas, and writing the report. When considering whether to hire a consultant, it is helpful to answer some key questions, including:

- What does the work group want the consultant to do? Is the consultant needed for the whole project, or for specialized work that can’t be accomplished by volunteers?
- What skills, expertise, and experience must the consultant have to develop the NRI?
- What is the time frame for the project?
- What is the budget?
- How will the work group oversee and coordinate the work of the consultant?
- Is the consultant familiar with the municipal planning framework and natural and cultural resources of the region, and have they worked on similar projects? Has the consultant worked with volunteer groups before?

If the work group decides to hire a consultant, it will need to prepare a request for proposals (RFP). The RFP must meet all applicable procurement rules and be designed so that responses from consultants will provide all the information that the work group will need to select and hire a consultant. Make sure to fully describe the project needs, deliverables, and the schedule for completion in the RFP. Make sure to request details of the consultant’s experience on similar efforts. To ensure a comprehensive response, the RFP itself should be advertised as extensively as possible and mailed to a wide range of consultants.

After receiving responses and reviewing them carefully, set up interviews with potential consultants and talk with references. Prior to setting up interviews, prepare a set of questions to ask each consultant team. Find out more about them and their proposal, and try to determine how well they can achieve the project goals. Fully explore the financial requirements of each consultant’s proposal. Interviews are a great opportunity to develop an understanding of everyone’s expectations and to set the stage for a strong partnership. Once the work group has selected the project consultant and a contract is executed, the consultant can begin assisting the work group with the NRI project.

Adapted from *Watershed Plans Guidebook: Protecting and Restoring Water Quality* (New York State Department of State 2009).

**Define the study area**

Setting goals and objectives will help define the study area. Most communities inventory their entire municipality, but there may be reasons to inventory a larger (e.g., intermunicipal) or smaller (e.g., subwatershed in the municipality) area based on project goals and capacity. Below are some examples of potential study areas:

- **Municipal boundary**: If the goal is to inventory a village, city, or town’s natural resources, the municipal boundary will define the study area. Recognizing that natural resources cross political boundaries, it is important to include a portion of the area that extends beyond the municipal boundary on the inventory maps; approximately one-mile beyond the study area is recommended. This is especially valuable for considering large, connected habitats, stream corridors, ridgelines, and other features that may require intermunicipal conservation planning. (See examples of municipal inventory maps in Appendix J).

- **Local watersheds**: Since issues like water quality, water quantity, and source water protection also extend beyond municipal boundaries, watersheds provide logical units to study and manage natural resources. Watersheds come in many sizes, and the community’s goals can help identify the appropriate watershed scale to inventory; for example, the watershed of a drinking water reservoir may be a top priority, or of a popular trout stream that crosses three towns. Watershed groups may choose to conduct an NRI as part of a watershed management plan. If the municipality is not involved in a current watershed planning effort, look at opportunities for collaborating with adjacent municipalities. Larger watershed boundaries have already been delineated in the United States Geological Survey (USGS) National Hydrography Dataset and some county agencies have mapped subwatershed boundaries. The USGS StreamStats tool can be used to delineate a local subwatershed boundary.

**A watershed is the area of land where all of the water that is under it, or drains off of it, goes into the same stream, river, lake, or other waterbody.**

— US Environmental Protection Agency

**Regional studies involving several towns**: Some regional conservation initiatives have inventoried resources based on natural features or watersheds, rather than political boundaries. These inventories encompass multiple municipalities and often involve cooperative efforts (e.g., the Shawangunk Mountains Regional Open Space Plan involved representatives from 11 adjacent municipalities and the Natural Resources Management Plan for the Wappinger Creek Watershed included 13 municipalities in the watershed; see Appendix J).
Review existing natural resources documents

Many of the maps that form a basic NRI will be compiled from existing, widely-available national and state-wide data sets. The accuracy and value of the NRI will be greatly enhanced by incorporating more local-scale information and data that are available for the study area. Before starting to compile the inventory or planning any new detailed studies, collect and review existing natural resource studies completed in the study area. This may require going through municipal records, searching the library, checking with academic institutions, and checking with other municipal boards (e.g., the planning board) and county agencies like the planning department or environmental management council (EMC) about what studies may have been done. Include the natural resources section of the comprehensive plan in the review. An NRI should be part of, and contribute to, future revisions to the comprehensive plan. Knowing what natural resources information is already available will help avoid duplication and can provide a head start on the inventory.

Develop a draft inventory outline

Work with local officials and other interested citizens to develop a draft outline that addresses project goals. Propose a list of items to include: components to be inventoried and described, maps and tables to be compiled, and other narrative sections to write (introduction, methods, recommendations for using the NRI). Refer to Chapter 4 and Table 2 for a listing of suggested inventory items and recommended data sources. Sketch out a rough project timeline and some idea of costs. Identify tasks and assign responsibilities, and begin to consider options and opportunities for funding the project. Encourage local boards and commissions to endorse the project outline.

Develop a budget and scope of work

The direct cost of an inventory depends on the goals and scope of the project, and the extent of the mapping work and collection of new data. Investigate the costs of producing inventory maps, factor in other potential costs (e.g., hiring a consultant, student interns, photocopies, etc.), and develop a budget. If hiring a consultant, give careful thought to the scope of work or contract to ensure all desired deliverables are included; for example, the work group may want large-format maps printed along with the NRI report, and the community may want all GIS files for future use. The next step is to identify potential funding sources, which could include the CAC’s budget, municipal general funds, private funding, and grants (e.g., Hudson River Estuary Program Grants and Greenway Community Grants).

Publicize the inventory and solicit public input

Throughout the project, it is important to keep the community informed. Publicize the NRI project from the start. Community members are more likely to be supportive of a project if they feel involved. Some natural resources may be best identified and evaluated based on community input. For instance, a questionnaire asking residents to list the most attractive natural landscapes in the community may provide information about popular scenic areas and destinations for recreation.

There are many opportunities to share updates on the project and solicit feedback from the community. Be creative and strategic about how best to reach a diversity of residents. Display initial inventory maps at community events and board meetings, and have members of the NRI work group on hand to ask for ideas, answer questions, and provide information. Write articles documenting project progress for publication in local newspapers or for posting on the community blog, municipal website, or Facebook page. Create a dedicated project website or page on an existing municipal website. Run an informational video on the local access TV channel. Ask to be a guest on a local talk radio show. Sponsor a potluck dinner at a community hall and invite everyone to attend with an idea and a dish to share.

Where to find help

There are a number of public and private organizations that can help with an inventory project. Communities can benefit from their technical knowledge, experience, and objectivity. Many of these groups are mentioned throughout Chapters 1-4. Appendix A lists these and other organizations that can provide assistance, along with their websites and phone numbers.