

# CHAPTER 1:

## *Introduction*

### *The Onondaga Creek Conceptual Revitalization Plan*

The Onondaga Creek Conceptual Revitalization Plan (OCRP) was conducted to initiate a *revitalization* planning process for the Onondaga Creek Watershed. This plan represents a best effort towards transforming different, and at times disparate, ideas and priorities into a common vision. The document attempts to accommodate all ideas rather than compromise any single thought.<sup>1</sup> The plan emphasizes common themes received from the *community* through the Onondaga Creek Working Group and other public meetings throughout the planning process. The themes reflect the consistent expression of a vision for a clean, natural creek reintegrated into everyday experience through recreational and educational opportunities. The OCRP is intended to guide future public policy decisions and expenditures as the vision is implemented throughout the corridor. Public desire for reconnection to Onondaga Creek necessitates a commitment to maintaining publicly-owned lands along the creek corridor.

As much of the corridor is in private ownership, many future decisions will be made by individual property owners setting land use priorities for single parcels or small tracts of land. Haphazard development can be addressed by realizing that we all need to work together, in some cases through enhanced regulatory action, and in others, through volunteer participation (i.e., carrots and sticks). As is discussed elsewhere, these ideas are in the formative stage and will require additional public discussion to build consensus before projects can be implemented.<sup>2</sup> *Implementation* is the most critical issue facing us. The OCRP can help transform our collective vision into reality and convert good ideas on paper into progress on the ground.

<sup>1</sup> Paraphrase of a quotation by T. Allen Comp (2003).

<sup>2</sup> See various parts of Chapter 8.

# What is the Onondaga Creek Conceptual Revitalization Plan?

## Project Goal

The goal of the OCRP project is to develop a community-based revitalization plan for the Onondaga Creek watershed, providing a guide for future development, water quality, and *habitat* improvements that can enhance environmental, social, and economic conditions along Onondaga Creek.

## Project Area

The project area of the OCRP is the Onondaga Creek watershed in Onondaga County, New York. Figure 1.1 illustrates the watershed in relation to the City of Syracuse, the Onondaga Nation and nearby towns. Figure 1.2 illustrates the watershed location in Onondaga County and regionally, as part of the Seneca-Oneida-Oswego river basin. The *headwaters* of Onondaga Creek originate in southern Onondaga County, near Tully; the creek flows north to its outlet in Onondaga Lake, and eventually drains into Lake Ontario.

## Project Sponsorship and Funding

The Onondaga Lake Partnership (OLP) sponsors the OCRP project with funds from the U.S. Environmental Protection Agency (USEPA).

## Project Participants

Two groups are responsible for completing the OCRP. The first, the Onondaga Creek Working Group is a diverse cross-section of volunteers who live or work in the Onondaga Creek watershed, and has assisted in developing and reviewing the OCRP. Members are from Syracuse, Nedrow, the Onondaga Nation, LaFayette and Tully. Table 1.1 lists Onondaga Creek Working Group members as of March, 2008.

The second group, Project Team, completed several project objectives for the OCRP: established and facilitated the Onondaga Creek Working Group; compiled a comprehensive inventory of information pertinent to the characterization of the Onondaga Creek watershed; solicited and compiled issues and goals from a broad spectrum of community members and stakeholder groups; assisted the Working Group in development of the conceptual revitalization plan; and produced the plan document.

Figure 1.1 Onondaga Creek Watershed

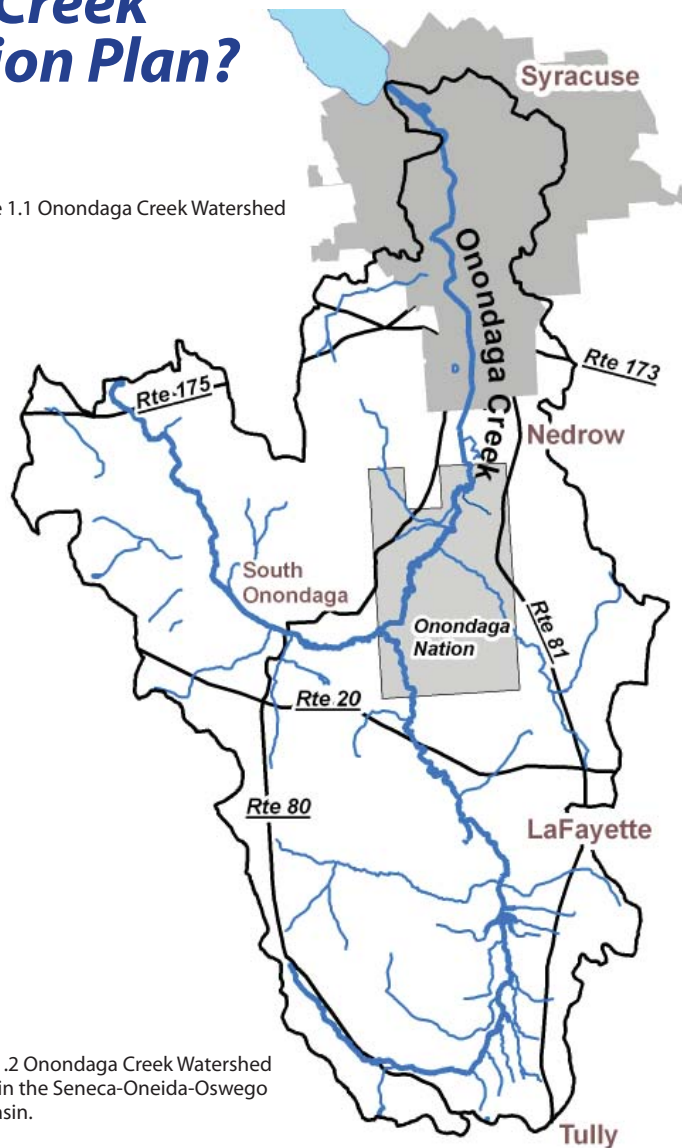
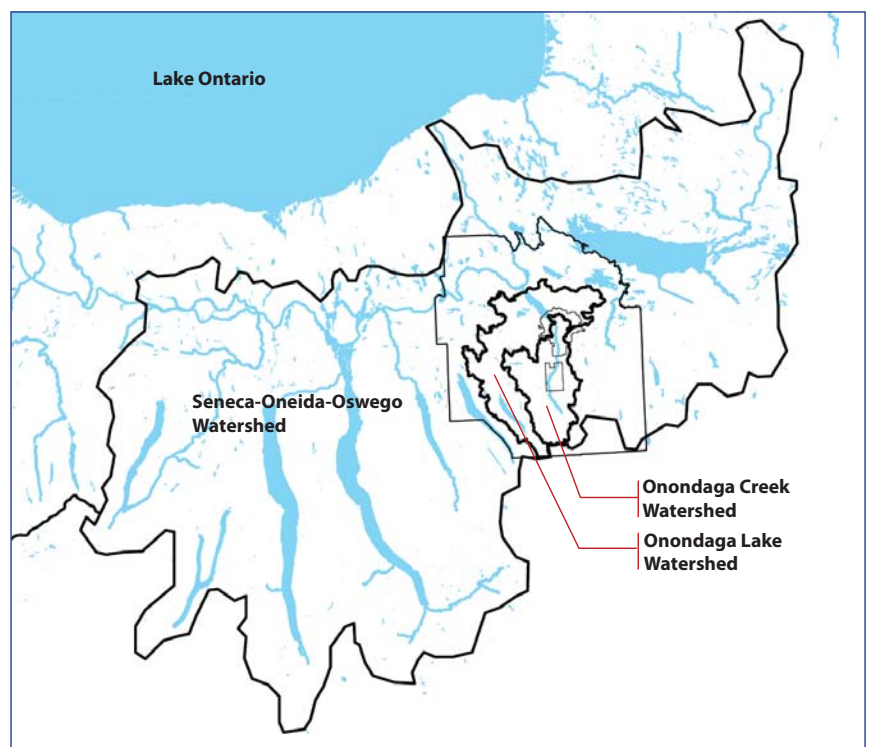


Figure 1.2 Onondaga Creek Watershed nested in the Seneca-Oneida-Oswego River Basin.



**Table 1.1 Onondaga Creek Working Group Members**

Name	Organization(s), Geographic Area or Constituency Represented
Stream Segment:	The Business District (Kirkpatrick St. to W. Onondaga St. and Clinton St.)
Charles Goodman	Franklin Square resident, business community representative
Claire Fisher	President, Fisher Associates
Robert Haley	Arcitect, Ashley-McGraw, American Institute of Architects; Vice President, Board of Directors, FOCUS Greater Syracuse; Eastside resident
Steve Kearney	Senior Urban Planner, Office of Economic Development, City of Syracuse
Paul Mercurio	Neighborhood Planner, Department of Community Development, City of Syracuse, Eastside resident
Stream Segment:	The Southside (from W. Onondaga and Clinton to Brighton Ave.)
Marcia Duncan	Salvation Army Adult Rehabilitation Center Counselor; Southside area resident; Creekside property owner
Louise Poindexter	Board of Directors, Syracuse United Neighborhoods; Partnership for Onondaga Creek; Southside resident
Stream Segment:	The Valley (from W. Brighton Ave. to Dorwin Ave.)
Teresa Doherty	Educator, Corcoran High School
Robert Dougherty	Facilitator, Tomorrow's Neighborhoods Today (TNT) Area 4 – Valley; Valley Junior Athletic Association; Valley area resident
Stream Segment:	Nedrow (from Dorwin Ave. to the Onondaga Nation Boundary)
James Daly	Anglers Association of Onondaga; Valley Men's Club; Waterfowlers Association; Nedrow area resident
Stream Segment:	Onondaga Nation
Jeanne Shenandoah	Haudenosaunee Environmental Task Force; Onondaga Nation resident
Stream Segment:	West Branch (the West Branch to the Onondaga Nation Boundary)
William Guptill	Guptill Farms; South Onondaga/West Branch resident
Stream Segment:	LaFayette (South of the Onondaga Nation to Otisco Road)
Knowlton Foote	Town of LaFayette Environmental and Conservation Advisory Board; LaFayette area resident
Kitty Burns	Otisco area resident, along Rattlesnake Gulf
Stream Segment:	Tully Valley (South of Otisco Road)
Tarki Heath	Educator; Partnership for Onondaga Creek; Tully area resident
John Snavlin	Snavlin farms; Tully Town Council; Tully area resident

**Mandate and Authority**

The mandate of the Project Team and Working Group was to develop the OCRP, based on community input and technical information. The Project Team was responsible for producing the draft plan document and executing the OCRP work plan (see Appendix A). The Working Group's responsibility was to review the draft plan to ensure that it accurately reflected their ideas, recommendations, and intentions for the future of Onondaga Creek, and to guide the document revision process. The Working Group is an all-volunteer committee made up of interested persons who live or work in the Onondaga Creek watershed, each member has a stake in the future of Onondaga Creek. Working Group members' authority rests in their ability to act as *stakeholders* and as informal representatives to the diverse communities throughout the Onondaga Creek watershed.<sup>3</sup> The plan document was delivered to the OLP, which may choose to incorporate the conceptual plan into the overall management plan for Onondaga Lake.

**OCRP Project Team members:**

- Samuel Sage**, Atlantic States Legal Foundation (ASLF)
- Lee Gechas**, Canopy
- William Owens**, City of Syracuse
- Amy Samuels**, Cornell Cooperative Extension of Onondaga County (CCE)
- Ed Michalenko and Meredith Perreault**, Onondaga Environmental Institute
- Richard Sardon and graduate students**, SUNY College of Environmental Science and Forestry (SUNY ESF)



<sup>3</sup>US EPA (2001) defines stakeholders as those who have a share or an interest in an issue.

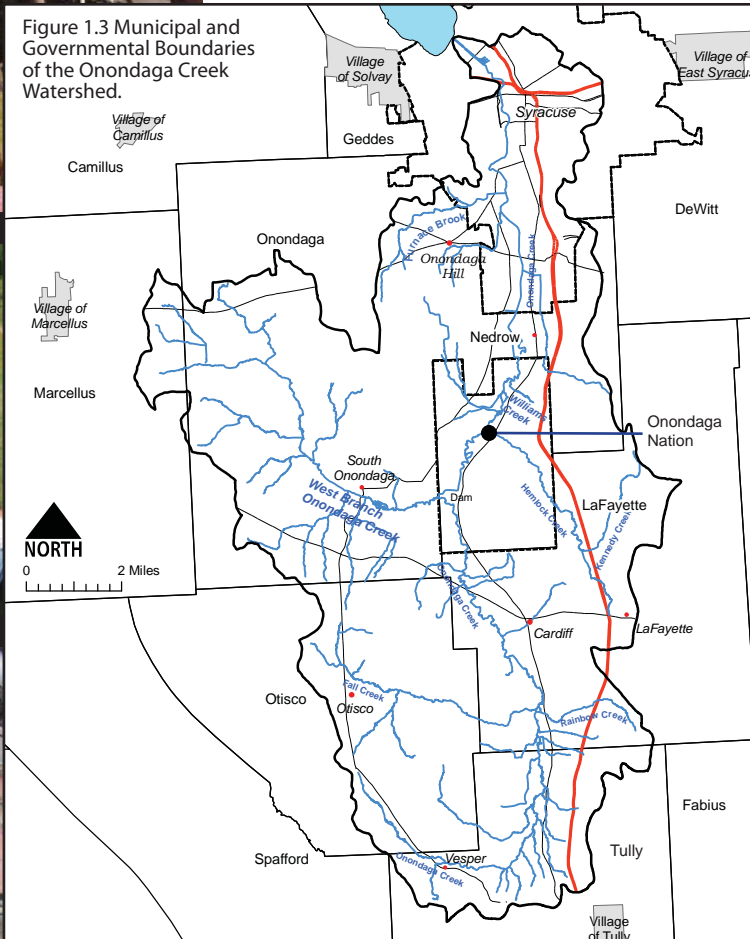


# Why do we need a plan?

Community *visioning* is a powerful tool for managing change. Its primary purpose is to unite the community around common goals. Visioning can also help a community reach agreement on it's biggest challenges, how the choices it makes might affects it's future, and how it can balance

identification of common goals amongst diverse interests, and outline a process towards achieving those goals in revitalizing Onondaga Creek. A clear need exists in the Onondaga Creek watershed for integrated planning to attain and sustain economic, aesthetic, recreational, ecological, and regulatory goals and for coordinated efforts for targeted study and restoration of various aspects of the system.

Figure 1.3 Municipal and Governmental Boundaries of the Onondaga Creek Watershed.



these pressures in the face of change. Visioning projects give local government leaders direction on where the community wants to be in the future (Portland Vision 2007).

Managing local land use can be a means towards protecting the environment; in turn environmental protection provides lasting economic and social benefits. The Onondaga Creek watershed encompasses five towns, the City of Syracuse and the Onondaga Nation (see Figure 1.3); each entity is responsible for affecting its own land use and enforcing/encouraging environmental protection. The governmental entities have varied approaches towards managing the sub-watershed within their jurisdiction; some municipal plans reference importance of the Creek, others do not. A coordinated planning effort will lead to

Usual symptoms of unmanaged watersheds include unchecked suburban sprawl, scarred landscapes, aesthetically unpleasing vistas, traffic congestion, and loss of greenspace, in particular, *wetlands* and *riparian* habitat, exacerbated flooding, and poor air and water quality. Watershed management is a complex process that requires knowledge of point source and *nonpoint source pollution*; the interconnection between land use decisions and water quality; and their resultant effects on the health of aquatic *ecosystems*. While the combined sewerage system and aging *infrastructure* of the central city are significant challenges (point source), so too is the management of *runoff* from farmland, lawns, roads, parking lots, and roofs (nonpoint source). Nonpoint source pollution is the leading cause of water pollution in the United States today (Coyle 2005).

The City of Syracuse and Onondaga County have proposed a creek walk through the city that would connect with the Onondaga County Parks and Recreation Department's planned Loop the Lake trail system, and potentially be a key segment of the New York State vision of a continuous Erie Canal trail extending from Albany to Buffalo. In the City of Syracuse, the creek is currently largely *channelized*, providing very little wetland and *floodplain* habitat. Significantly improved water quality in the waterway would enhance aesthetic and recreational enjoyment of the proposed creek walk. Several recent studies completed for the City of Syracuse have referenced the importance of restoring the creek as a primary component for the revitalization of the city. The Syracuse Sustainable Design Assessment Team (SDAT) report states, "More than any other major civic project, this project has the potential to create a new civic identity and amenity that could possibly reverse the severe disinvestment in this part of the city, create new cultural linkages, and entice new development into the city.... Great new parks and public amenities could be constructed along this waterway. It can,

in effect, become the city's new cultural heritage corridor" (Giattina et al. 2006).

Revitalization within the Onondaga Lake watershed is a priority of the Onondaga Lake Partnership (OLP). The OLP is sponsoring several on-going pollution mitigation projects concerning the Tully mudboils and nonpoint source pollution control in the Onondaga Creek watershed. The impetus for these projects was to reduce pollutant loads to Onondaga Lake, but they also serve to improve water quality in the creek. Integration of projects within the Onondaga Creek watershed that have been conceived or designed for *restoration* purposes would provide added cultural and environmental benefits. Environmental enhancement of the Onondaga Lake watershed is also a concern of the Onondaga Nation and the Haudenosaunee people, as their cultural heritage is intrinsically linked to the ecological integrity of the watershed. The Onondaga Nation considers restoration of the Onondaga Creek watershed a priority.

### What is a Conceptual Plan?

The OCRP is intended to reflect the collective hopes and dreams of the citizens of Central New York in relation to the creek corridor. The plan is *conceptual* in that its recommendations were born from community input and have not been subjected to rigorous professional and technical analysis; this will need to happen as the plan moves toward implementation. Revitalization implies that this and future efforts are not limited to the creek itself; nor to the stream banks, but rather how proper planning can serve as a catalyst for comprehensive neighborhood and land use changes.

### The Role of Public Participation

Public participation is a fundamental element of the OCRP project. The Onondaga Creek Working Group is a citizen-based, volunteer watershed group convened to develop the OCRP. The OCRP Project Team, aided by advice from the Working Group, conducted public participation meetings and events through the first half of the OCRP process, using a variety of methods. Methodology is summarized in Chapter 4. This plan will also undergo a period of intense public scrutiny upon its release for public review and comment.

Public participation is a direct method through which citizens exercise their power to act (Briand 2007). The USEPA (USEPA 2005a) defines public participation as a two-way process of outreach

and involvement; stakeholders receive information, and participate in programs and decision-making processes.

Plans based on collaborative participation have demonstrated greater long-term successes. The goal in the OCRP process was to capitalize on the beneficial impacts of public participation in order to empower citizens to create a successful, well-supported revitalization plan for Onondaga Creek.

### Understanding the system

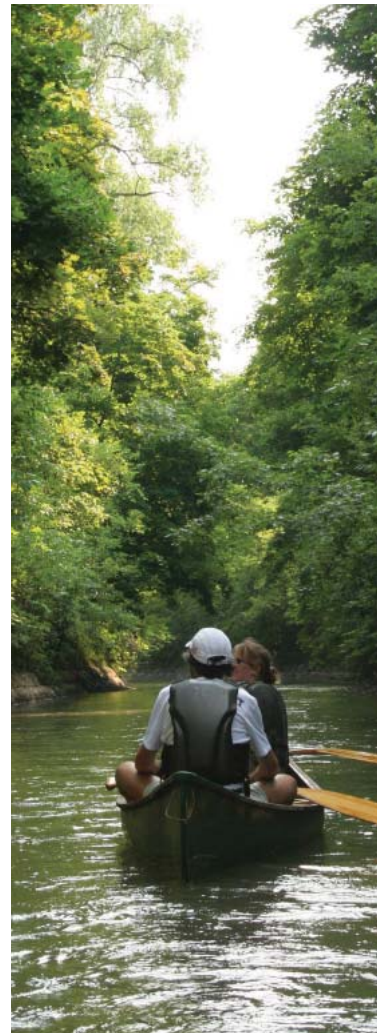
As part of the OCRP planning process, the Onondaga Creek system was characterized; chapters 2 and 3 summarize data-gathering efforts for both the history and current state of the creek. Watershed characterization is a technical term for the task of understanding current conditions. USEPA (2005b) promotes characterization to identify and understand possible causes of impacts seen in the watershed. Characterizing the watershed allows for the development of effective management strategies to meet goals for revitalization (USEPA 2005b).

A keen understanding of historical and current conditions is critical to creating a plan for the future of a waterway (USEPA 2005b, Smardon et al. 1996). Studying historical information helps to establish prior conditions of a river and its watershed, such as changes in the channel and *biota*, including conditions that have been lost, or are even irreversible. Consequently, research findings help to define options for restoration (Palmer et al. 2005, Wohl et al. 2005).

### Conclusion

Onondaga Creek flows through disparate economic, social, and environmental contexts on its way from the Tully Valley to Onondaga Lake. The OCRP project was conceived under the premise that sound technical understanding of the watershed combined with open public participation can lead to effective strategies that achieve the community's vision and enhance the ecological integrity of the system. Over the past thirty months, input was collected from the public and various stakeholders; baseline information<sup>4</sup> about the corridor was compiled and assessed; goals and recommendations from the Working Group were formulated into plan components. The resulting plan provides a unified and comprehensive<sup>5</sup> dialogue for the ongoing restoration of one of Central New York's most important assets. This plan is a vital first step towards the revitalization of the Onondaga Creek corridor.

**The act of giving new life or vigor to something is known as revitalization.**



<sup>4</sup> This data included both natural and cultural history – from pre-European to post-European. See Chapters 2 and 3.

<sup>5</sup> **Comprehensive refers to the following aspects:**  
1. geographically north to south, 2. general public stakeholders, any interested parties, 3. characterization and assessment of multiple parameters, 4. governmental/jurisdictional involvement (village, town, city, county, and the Onondaga Nation).



# Watershed Planning: a new approach



“(T)he new watershed approach is inherently civic...(T)he idea that long-term protection and restoration of such complex ecosystems [watersheds], ...requires citizens to develop a sense of genuine ownership and a protective civic ethic. Local knowledge, relationships, and initiative are essential to develop effective strategies for reducing nonpoint sources of pollution, as well as to generate the political will to assume the costs of upgrading sewage treatment or altering sensitive land-use policies. Diverse stakeholders must develop a shared vision and find ways to collaborate: farmers upstream with boaters and ... environmentalists with developers, scientists and regulators with lay citizens and students. Peer education is also critical... Since the health of watersheds depends on the everyday choices of citizens (lawn care, trash disposal, household chemical use), public education plays a central role in the watershed approach. Because watershed boundaries do not dovetail neatly with local political jurisdictions and watershed problems do not conform to segmented agency authority, a civic network strategy, combined with interagency collaboration, is essential.”

- Sirianni 2006, p19-20

Environmental law, especially when dealing with water quality considerations, has undergone continuous evolution since the federal government became involved at the end of the nineteenth century. Initial concerns were principally related to navigation as waterways were the most important means of transportation and anything that interfered with this function also impaired economic activity. Beginning at roughly the same time, knowledge of disease transmission improved and so public health considerations came to the fore. For example, Onondaga Creek was first channeled, not for flood protection, but to create a swiftly running creek that could carry human and animal waste away from the population and to Onondaga Lake. Eventually, other uses and concerns were recognized for our waters and we created a legal system that allowed for pollution unless you could prove that a specific usage was causing a specific degradation. Thus it was necessary to prove that an action caused impairment.

By 1972 our waterways were in dismal condition and existing law was not allowing for clean-up. At that point Congress, over the veto of President Nixon, passed new and radically different legislation. The Federal Water Pollution Act Amendments of 1972, public law 92-500, changed the basis for action by going to purely technological standards that must be met by dischargers – municipal and industrial alike. During subsequent amendments to the law in 1977, the name of the law was changed to the Clean Water

Act (CWA). After several decades and many billions of public and uncounted private dollars spent on water pollution control, our waterways are much cleaner, fish have returned to rivers and streams, and gross pollution has been eliminated. However, these so-called “command and control” regulatory approaches had their limitations and for the last decade other approaches have been tried; some based on incentives rather than punitive measures.

## **Preventive Strategies**

One approach involved using preventative strategies; which are predicated on the idea that by changing industrial processes one can eliminate or reduce discharge before it is released into the water. This approach has been successful. Another emergent issue is how to mitigate diffuse or non-point sources (NPS) of pollution. By and large NPS pollution is carried by runoff from the land. It is much more difficult to control than point-source pollution, because land use decisions are usually controlled by each individual property owner. An amendment to the CWA tried to address the impacts of NPS pollution by calling on the states and USEPA to designate impaired waters for which additional study and analysis needed to be performed.<sup>7</sup>

## **Restoring Biological Integrity**

By using a combination of “carrots and sticks” and different kinds of technology, great progress has been made in cleaning up the nation’s

waters. However, this regulatory approach is concerned with the chemical and to a lesser extent the physical integrity of the water and not its biological integrity. Mending and restoring aquatic ecosystems requires a more holistic approach. In many ways, Congress had enacted a comprehensive regulatory strategy as the 1972 law included ambitious goals that called for restoring the biological integrity of our waters and wetlands. The original law contains various provisions that called for basin-wide approaches for dealing with waterways.<sup>8</sup> Since 1972, different federal administrations have stressed various parts of the CWA, and enforcement activities have intensified and relaxed. Funding priorities have further limited some of the more holistic ecosystem-wide approaches as different interest groups have lobbied for provisions that protected their interests.

### **Watershed and Sub-Watershed Planning**

Thinking has gradually evolved to where we now realize, the perhaps obvious idea, that procuring clean water is much more than an engineering exercise.<sup>9</sup> Two issues stand out. For one, a restored water body is more than clean water. It involves habitat for fish and other aquatic flora and fauna, it involves riparian vegetation, it involves human interactions, and it involves beauty. For another, arriving at an end point becomes an exercise in democracy: diverse stakeholders are the key to successful planning. This stems from the public's knowledge and aspirations, but also as the key motivators to the political system.

Before looking at examples of how this watershed approach has been and can be used, we should also mention other programs and priorities that were long ignored in considering our waterways and are now being integrated into planning efforts. Two items in particular come to mind and serve as part of the impetus for revitalizing the Onondaga Creek corridor. These two approaches are largely independent of each other, but clearly require similar thinking. First is the interest by many stakeholders in restoration of fishery resources either for recreational or cultural reasons.<sup>10</sup> Oftentimes, certain fish species can serve as "sentinel" or "indicator" organisms whose survival indicates that all water quality and habitat conditions are suitable, thereby, signaling the system is functioning properly. The second is what has been a grassroots effort in the United States and increasingly around the world to look at waterway restoration.<sup>11</sup> Many communities, for many different reasons, have

come together and begun to look at their rivers and lakes and understand how they can be an enhanced resource for their community.<sup>12</sup>

Perhaps the best known and grandest attempt at watershed-wide management is the long term program to restore the Chesapeake Bay through the government sponsored Chesapeake Bay Program of USEPA<sup>13</sup> and from a civic perspective through the Alliance for the Chesapeake Bay.<sup>14</sup> This model initiative has resulted in extensive collaborative efforts around the United States in such diverse areas as Puget Sound, Long Island Sound, and Onondaga Lake.<sup>15</sup>

Smaller watersheds are of perhaps more interesting for the purpose of the OCRP. Some of the exciting initiatives occurring across the United States can be located within annual reports of the USEPA Targeted Watersheds Grant Program.<sup>16</sup> These grants are awarded to citizen groups to assist in efforts to protect and restore watersheds. Example locations with similarities to Onondaga Creek include:

- Charles River (Massachusetts)
- Ipswich River (Massachusetts)
- Kalamazoo River (Michigan)
- Long Island Sound (Connecticut and New York)
- Passaic River (New Jersey and New York)
- Raritan River (New Jersey)

In New York, perhaps the most successful effort has been in the Bronx River Watershed, although the efforts within New York City and those of Westchester County are still not totally integrated. This effort has been included as one of the case studies summarized in Appendix C. Another reference is the chapter in **Groundswell** published as a collection of civic actions to save places around the United States that was compiled by Alix Hopkins for the Trust for Public Land.<sup>17</sup>

<sup>7</sup> This analysis requires the preparation of so-called TMDLs, total maximum daily loads.

<sup>8</sup> See especially sections 208 and 305(b). Provisions dealing with geographically specific areas such as the Great Lakes are also considered.

<sup>9</sup> A provocative article that framed some of the ideas in this chapter is by Carmen Sirianni, *Can a Federal Regulator Become a Civic Enabler? Watersheds at the U. S. Environmental Protection Agency*, National Civic Review, Fall 2006, pages 17-34.

<sup>10</sup> The definition of restoration/enhancement of fisheries resources is controversial and is further described within the OCRP.

<sup>11</sup> Chapter 1 and 8 discuss both revitalization and restoration.

<sup>12</sup> See the appendix showing various case studies. More of these can be found on the OCRP website.

<sup>13</sup> Created by citizen pressure that led to action by Congress and was not an initiative of EPA.

<sup>14</sup> For more on these two programs see the websites of these two agencies.

<sup>15</sup> In fact, the OCRP was funded by and may become part of the overall efforts of the Onondaga Lake Partnership.

<sup>16</sup> Information on this and other USEPA programs can be found on the USEPA website. The most useful publication is EPA 840-R-06-001 which is the *Targeted Watersheds Grant 2005 Annual Report*.

<sup>17</sup> Alix W. Hopkins, *Groundswell: Stories of Saving Places, Finding Community*, published by the Trust for Public Lands, 2005. Chapter 6 relates to the Bronx River Project. This book is available at Onondaga County Public Library.



