

CHAPTER 1. INTRODUCTION, PROJECT CONTEXT AND GOALS



1: 1 Introduction

The Quassaick Creek Watershed Management Plan brings together an extensive amount of information, in-depth analysis of existing conditions in the Watershed, and a robust list of management recommendations for protecting and enhancing the Watershed. As detailed below, the bulk of the work undertaken to prepare this Plan occurred between the spring of 2012 and the spring 2014, although research and other efforts focused on the Quassaick Creek and its Watershed have been underway for many years.

Components of this Plan include:

- Brief narrative of historical conditions and efforts in the lower Quassaick Creek, including the background on how this watershed planning project was initiated (Chapter 1)
- Discussion of the Vision, Goals, and Objectives that were developed for the Watershed (Chapter 1)
- Assessment of Waterbodies and Watershed Resources (Chapter 2)
- Assessment of Laws, Policies, and Programs Affecting Water Quality (Chapter 3)
- Management Recommendations for the Watershed (Chapter 4)
- Appendices A - F

1: 2 Historical Context and Project Background

The Quassaick Creek has been the subject of conservation and restoration interests for decades, especially its lower corridor that forms the border between the City of Newburgh and the Town of New Windsor. At one time called the Vale of Avoca by Irish immigrants because natural beauty reminded them of a valley in Ireland, the nearly 1-mile stretch of the Creek from the Hudson River to the Holden Dam later supported up to 18 industries, many of which used the Creek's flow for powering their operations or for carrying away their waste products and wastewater. By the 1980s, the Creek was so contaminated with volatile industrial chemicals that it could reportedly be set on fire.



In their landmark book, [The Riverkeepers](#), John Cronin and Bobby Kennedy recount the condition of this lower corridor of the Creek when they walked up the Creek in the 1980s. Kennedy writes (p. 101):

Despite the stream’s biological resilience, our investigation had its Dantean aspect. Quassaick [sic] had become a conveyance for industrial and municipal waste. Just south of Quassaick’s mouth, Consolidated Metal Junkyard’s cranes towered over giant heaps of scrap iron and wrecked and compacted car bodies. Crushed cars, drums, tires, bicycles and baby carriages, pallets and paint cans, rusted machinery, and demolition debris moved glacially into the river beckoned by a listing barge lashed to the shore . . . When I seined the Quassaick in August I noticed so many pipes and drains emptying into the mouth that I wondered that there was anything alive in this part of the creek.

Their new organization, [Riverkeeper](#), went on to file 16 lawsuits against the polluters dumping waste into the Quassaick, in addition to four lawsuits filed by the U.S. Attorney’s office. All twenty cases were settled prior to trial, due to the abundance of evidence presented by Riverkeeper; the Quassaick Creek Fund (a fund created by Riverkeeper to collect penalties from the creek’s polluters, to be used for remediation activities) collected \$200,000 in settlements, and the creek’s biggest polluters stopped polluting the creek and remediated the damage where possible.

Although these historic industrial impacts have long diminished in magnitude, the lower portion of the Creek continues to suffer from degraded water quality. In its Priority Waterbodies List, the [NYS Department of Environmental Conservation \(NYSDEC\)](#) identified the lower Quassaick Creek as having impaired aquatic life, recreation, and aesthetics due to combined sewer overflows (CSOs) and urban/stormwater runoff. The causes of impairment are listed as being nutrients and unknown toxicity. Additionally, stream water quality data commissioned annually by the [Orange County Water Authority \(OCWA\)](#) have consistently indicated that the Creek is “moderately impacted” since 2006 at a site immediately upstream of the Creek’s confluence with the Hudson River.

In the late 1990s, a group of advocates came together to form the Quassaick Creek Coalition with the goal of developing an estuary preserve in this lower corridor. The Coalition included representatives from a broad range of interests including the City, land conservation groups, various state and regional agencies, citizens, and many others. Their efforts were documented in a Capstone Project by PhD-candidate Marcy Denker, whose report “Past Industry to New Actions: Envisioning the Keystone Park for a Hudson River Estuary Trail,” relayed the history of the corridor, identified opportunities for and obstacles to the development of a trail, and proposed unique approaches and details for park development in the corridor. Ultimately, efforts to create the estuary preserve and trail were thwarted due primarily to issues relating to access through private properties.

But interest in the Quassaick Creek continued, with some members of the Quassaick Creek Coalition deciding to expand their efforts to a larger geographic area, to take a watershed approach to cleaning up and enhancing the Creek. They formed a group called the [Quassaick Creek Watershed Alliance \(QCWA\)](#), which declared:

“Our Mission is to involve individuals and entities, both public and private, as advocates for the development and implementation of a Quassaick Creek Watershed Plan. Our efforts will focus on the protection and restoration of water quality and quantity, recreational values and biodiversity of the Quassaick Creek and its tributaries to promote the health, safety and welfare of our communities. This will be done by making recommendations for sustainable land use, flood and erosion control practices and relevant regulations in this watershed.”

In 2009, the QCWA began meeting with the Orange County Planning Department (Planning) and the OCWA to determine how a watershed plan could be undertaken. Both County agencies had a history of collaborating on or leading watershed planning efforts: both led the development of the [Moodna Creek Watershed Conservation and Management Plan \(2009\)](#) and contributed to the [Wallkill River Conservation and Management Plan \(2004\)](#), and the OCWA was about to embark on a watershed plan for [Glenmere Lake](#), a local reservoir. Collaboration between Orange County and the QCWA led to a successful application to the NYS Department of State’s Local Waterfront Revitalization Program in 2010. The grant that was awarded to Planning to develop a watershed plan for the Quassaick Creek was matched by funds from the OCWA and by donated professional and volunteer services from an array of local and regional stakeholders. Funds were to be primarily used to hire a consultant to lend professional support to the

- The **ADVISORY COMMITTEE** included representatives of:
- City of Newburgh
 - HDR, Inc.
 - Hudson River Watershed Alliance
 - NYSDEC’s Hudson River Estuary Program
 - NYS Department of State
 - Orange County Department of Health
 - Orange County Land Trust
 - Orange County Municipal Planning Federation
 - Orange County Planning Department
 - Orange County Soil & Water Conservation District
 - Orange Lake Civic Association
 - Quassaick Creek Watershed Alliance
 - Town of Newburgh
 - Town of Plattekill
 - Ulster County Planning Department
 - Winona Lake Homeowners Association



development of the watershed plan and to fund additional stream water quality monitoring.

In March of 2012, Planning convened the first meeting of the Quassaick Creek Watershed Plan Advisory Committee, which was formed to guide the planning process, provide information, and to review products and documents developed for the project. The Committee agreed to meet on a bimonthly basis and to form subcommittees to carry out technical and in-depth work for the Committee. Advisory Committee members are listed in the text box on the previous page.

All members lend a unique perspective and have access to information or otherwise possess knowledge that is indispensable to the project. The Committee has rallied support and solicited interest from the public, municipal officials, and outside agencies. The QCWA members, in particular, have donated significant amounts of time to the project, gathering extensive information through outreach and research, including documenting on-the-ground conditions.

1: 3 Vision for Watershed

Developing guiding principles at the beginning of a planning project focuses the work of those involved by establishing consensus on topics to address in the Plan, thus providing direction for the planning process. The Advisory Committee developed a vision statement early in the process, and then established goals and objectives to support this vision. The goals are broad ideas, while the objectives provide further detail on how a goal can be met. The vision, goals, and objectives were refined through public meetings and discussions with municipal officials and other watershed stakeholders. The final versions are below.

VISION STATEMENT:

This watershed planning process will help to improve **water quality**, safeguard **water supplies**, enhance **ecological processes** and protect **wildlife** in the Quassaick Creek Watershed and will provide a framework for creating a **resilient** watershed that is **adaptive** to future conditions.

This vision will be attained by identifying and increasing **awareness** of local water resource issues through strategic **outreach** and **education** to the **public** and **decision-makers**, by recognizing water-related **opportunities** and **vulnerabilities** within the Watershed, and by encouraging **intermunicipal** collaboration that results in economically and ecologically **sustainable development practices**.

These ideas steered the course for the research, data gathering, and analysis that went into the Assessment of Waterbodies and Watershed Resources. The Assessment of Laws, Policies, and Programs Affecting Water Quality focused the municipal audit on laws and programs relating to objectives listed under the following goals:

- Improve water quality, and ensure drinking water sources are protected

- Improve and enhance natural watershed functions and ecological processes
- Promote watershed awareness and sustainable development practices

The ultimate intent of the full Watershed Management Plan is to enable the realization of the vision, goals, and objectives through the implementation of the watershed management strategies that are recommended in the Plan.

Goal	Objectives
ENVIRONMENTAL	
Improve water quality, ensure drinking water sources are protected and that water quantity is adequately managed	1. Develop a more comprehensive understanding of surface water and groundwater quality and quantity, including sources of impairments, throughout the watershed.
	2. Promote water quality protection measures and watershed-friendly practices throughout the watershed.
	3. Improve stormwater management, where appropriate, in order to reduce point (e.g., Combined Sewer Overflow's) & non-point source loadings.
Improve and enhance natural watershed functions and ecological processes	4. Protect, enhance, and restore critical habitat for fish and wildlife.
	5. Reduce the negative effects of hydraulic constrictions, including those created by bridges and culverts
	6. Address impacts of problematic dams through repair, removal, or other mitigation
PROGRAMMATIC	
Establish coordinated inter-municipal implementation of the Quassaick Creek Watershed Management Plan.	7. Develop a mechanism for ongoing collaboration between the municipalities and other key stakeholders
SOCIAL/CULTURAL	
Promote watershed awareness and sustainable development practices	8. Enhance awareness of and public access to of the Creek and other waterbodies in the Watershed
	9. Encourage watershed stakeholders to act in ways that are conducive to watershed protection 10. Appropriately manage water-related cultural resources, including historic and archaeological sites 11. Identify opportunities for creative partnerships and renewable energy sources
Create a watershed that is resilient to current and future weather conditions	12. Identify areas, facilities, and infrastructure that are vulnerable to storm surges and flooding due to increasing storm intensities

