



# R E F L E C T I O N S B E L I E V E C L I O N ?

A clean lake reflects well on all of us.

VOL II, ISSUE 6

FALL 2006

A QUARTERLY UPDATE FROM THE ONONDAGA LAKE PARTNERSHIP

**WILDLIFE CONSERVATION**

## NEW YORK'S COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY APPROVED



Baby eaglets. Photo by Scott Van Arsdale, NYSDEC.

In May 2006, the New York State Department of Environmental Conservation (NYSDEC) received final approval of its New York Comprehensive Wildlife Conservation Strategy (CWCS) from the U.S. Fish and Wildlife Service (USFWS). The strategy is designed to assure New York State's wildlife and their habitats are safe for enjoyment by present and future generations of New Yorkers. The approval process has taken NYSDEC more than two years and has involved the input of 100 government and non-profit partners. The formal approval is the last requirement of the congressional mandate to develop a New York State blueprint to conserve wildlife and prevent additional species from being added to the federal Endangered Species List.

The main CWCS goals are to reverse the documented

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### THE ONONDAGA LAKE PARTNERSHIP (OLP)

Promotes cooperation among federal, state, and local governments, and other involved parties in the management of the environmental issues of Onondaga Lake and the Onondaga Lake watershed in the Syracuse, New York area.

## Onondaga Lake Partnership Annual Progress Meeting



Photo by Kyle Miller

Environmental Progress - It is Getting Better!

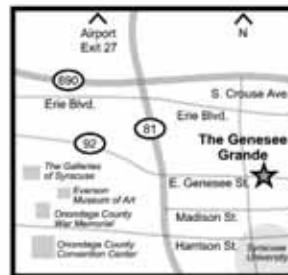
### A New Location • A New Format

Monday, October 30, 2006, 7-9 p.m.  
Exhibits open at 6:30 pm.

Genesee Grande Hotel • Tiffany Ballroom  
1060 E. Genesee Street, Syracuse, NY 13210

Join us to hear the details about our exciting progress. We want to hear from you. Ask the experts questions. See how you can get involved.

*Moderated by Dan Cummings of Channel 9*



For further information, call 1-800-833-6390 (Press "1" for OLP)

Website: [www.onlakepartners.org](http://www.onlakepartners.org)

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Eagle in flight. Photo by Lou Buscher, NYSDEC.

declines in over 554 species of fish and wildlife, inform the public and stakeholders of what actions they should take to conserve the fish and wildlife of New York, and to foster the application of good science and the quest for new knowledge in effective management of the state's most vulnerable fish and wildlife species. With the CWCS, New York State is ensured funding every year for fish and wildlife conservation under the State Wildlife Grants Program.

"Accomplishing these goals will make our fish and wildlife management more effective by conserving species before they become imperiled. Protecting and restoring wildlife in New York will enhance the quality of life of all our citizens by sustaining opportunities to enjoy our natural world," stated NYSDEC Commissioner Denise Sheehan.

Since 2001, New York has received \$11.8 million in federal funds through the State Wildlife Grants Program administered by the USFWS. To maintain eligibility for the federal funds, Congress required all states, U.S. territories, and the District of Columbia to submit a comprehensive wildlife conservation strategy to the USFWS by October 1, 2005. The CWCS documents the incredible diversity of New York's natural resources. New York has more dragonfly and damselfly species than any state except Texas and more mammal species than any state in the Northeast. However, only 55% of New York's plants and vertebrates are considered secure, and the status of most invertebrates remains unknown according to the New York Natural Heritage Program. The CWCS found that the biological diversity of New York State is challenged by development sprawl, habitat degradation

and loss, invasive species, pollution and climate change.

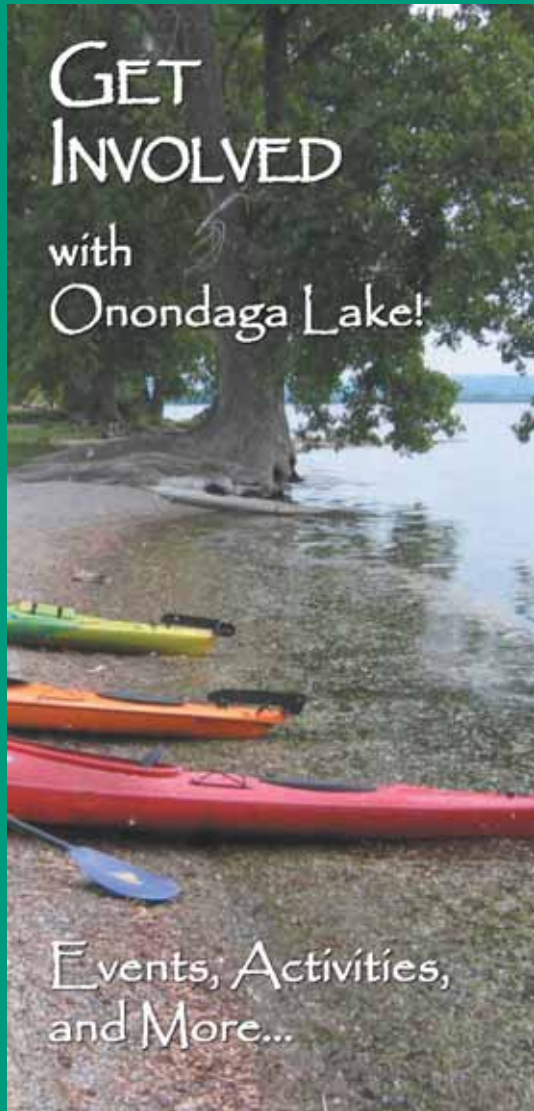
NYSDEC and its partners will be forming CWCS watershed teams to implement the strategic recommendations. Local governments, hunter and angler groups, conservation organizations and tribal nations will be asked to participate on these teams in the coming months.

Watershed planning is a more logical way to manage fish and wildlife habitat improvement versus using artificial political boundaries such as towns, counties or regions. In the case of Onondaga Lake, it allows scientific experts and local citizens groups to focus on the natural watershed in which Onondaga Lake belongs. One of the main objectives for the rehabilitation of Onondaga Lake is to improve wildlife habitat and increase the number of fish and wildlife species in and around the lake. This ties in directly with the CWCS plan.

In fact, the OLP has already implemented many programs and projects to help improve the habitat in and around the lake. Onondaga County's Ambient Monitoring program, for example, monitors many different factors that affect the lake, including chemical, physical and biological elements. The program also monitors a number of biological and water quality indicators such as the presence of zooplankton, phytoplankton, and macroinvertebrates. Studying the numbers and types of species present in the lake helps to understand how the overall water quality has improved over the past few years and what needs to be done to continue this positive trend.

One of the key habitat goals of the Onondaga Lake Partnership is to increase the lake's overall health by improving habitat on the shoreline. Increasing numbers of fish and fish species, as well as increasing numbers of wildlife found near the lake are clear evidence of overall habitat improvement. This summer, a bald eagle was seen around Onondaga Lake, clearly indicating that the watershed is becoming cleaner. With improved habitat and cleaner water, the bald eagle could be a common sight along the shores of Onondaga Lake. Imagine the truly marvelous achievement to return the bald eagle to Onondaga Lake!

*This article was co-authored by Zach Wentworth and Diane Carlton (NYSDEC). ■*



## GET INVOLVED!

Now available, OLP's latest brochure, "Get Involved with Onondaga Lake!" Learn how you can get involved with activities and events sponsored by the Onondaga Lake Partnership. View it online at [www.onlakepartners.org](http://www.onlakepartners.org) or call 1-800-833-6390 (press "1") to request your copy today ■.

## 2006 CARP FISHING WEEKEND ATTRACTS CARP ANGLERS AND FAMILIES

CARP FISHING WEEKEND



Young women anglers at the Family Fun Fishing Derby.

The Onondaga Lake Partnership and its Outreach Committee's Fisheries Subcommittee hosted a successful second annual Carp Fishing Tournament and Family Fun Fishing Derby on June 24 and 25, along the Willow Bay sections of Onondaga Lake Park. The fishing weekend was co-hosted by the Onondaga County Parks Department, the national Carp Anglers Group, and by Honeywell, who provided funding and promotional assistance for the event.

Approximately 43 anglers participated in Saturday's Carp Fishing Tournament, while Sunday's Family Fun Fishing Derby attracted over 85 anglers of all ages, nearly twice the number who attended last year's event.

Gift certificates worth approximately \$1,500 for merchandise at the Bass Pro Shops in Auburn were distributed to the winners of the Carp Fishing Tournament. Winners of the Family Fun Fishing Derby won prizes worth over \$500 in fishing tackle and merchandise. Prizes were also given out to tournament participants both days holding random lucky-number tickets.

A group of volunteer marshals helped make both days' events run smoothly from a base location at the county's Willow Bay concession stand. The volunteers also weighed and recorded the carp caught Saturday.

Winning entries in the June 24 Carp Fishing Tournament were a 26 lb-1 oz carp caught by Jenő Tamas of Pulaski and a 'Top four fish' entry totaling 67 lbs-11 oz of carp caught by Tamas Vegvary of Solvay. Winners of

**CARP FISHING** *continued from page 3*



Carp Fishing Tournament Big Fish winner Jenó Tamas of Pulaski, NY with a 26 lb. 1 oz. common carp.



10-year-old Haley Faith of Syracuse, NY won first prize in Sunday's Family Fun Fishing Derby with a 19-inch Largemouth Bass.

the Junior Big Fish prize categories were Adam France of Camillus with a 20 lb–2 oz carp and Ben Markle of Pulaski, whose second place entry weighed 15 lbs–2 oz.

Saturday's Carp Fishing Tournament attracted anglers from as far away as Pennsylvania. One happy PA angler sent a 'Thank You' note to the Carp Anglers Group website, saying, "I and my whole family would like to...thank EVERYONE involved with the [Onondaga Lake Carp Fishing Tournament]...we had a great time and won some fantastic door prizes."

For more information on carp fishing, please contact Les Monostory at (315) 637-6735. ■

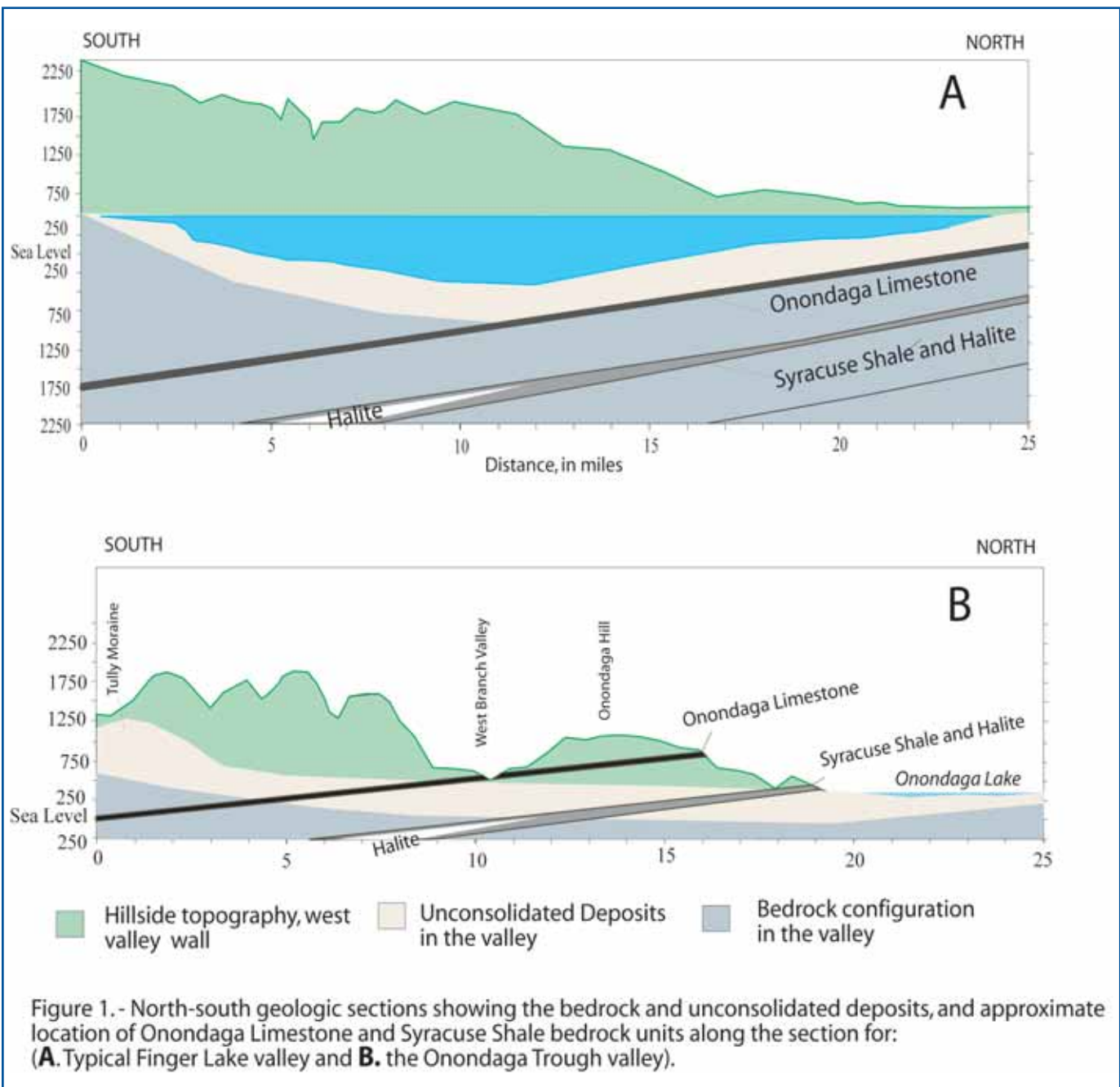
**FREE EDUCATIONAL RAIN GAUGES**

Are you teaching about the water cycle or nonpoint pollution? Or, do you just want to track the amount of rain your garden is receiving? Free gauges for public distribution were purchased under an Urban Best Management Practices grant funded by the U.S. Army Corps of Engineers and Onondaga County through the OLP. Made from recycled plastic, the gauges are imprinted with the message, "Rain carries pollution to Onondaga Lake" and lists ways people can help reduce pollution that is carried with runoff into the lake and its tributaries. Ways to help include: conserve water; bag your leaves; keep trash out of the streets; limit use of fertilizers and pesticides; and direct roof drains to lawns or gardens.

Particularly aimed at urban nonpoint pollution, city school teachers may obtain multiple gauges for distribution to classroom students. These gauges work well with other educational materials previously produced including the classroom posters, teacher guides and student activity books. Free rain gauges are available for individuals and classrooms in the Onondaga Lake watershed by contacting Sue Miller at (315) 435-2260 or [suemiller@ongov.net](mailto:suemiller@ongov.net). ■



# ONONDAGA VALLEY-NOT A TRUE FINGER LAKE VALLEY, BUT ALMOST...



The central New York landscape is commonly known for its Finger Lakes and this region includes the Onondaga Valley, yet the bedrock and glacial history of the valley prevented the formation of a true "Finger Lake". This enigma is complex but explainable.

Central New York's bedrock was created hundreds of millions of years ago and was later modified by glacial activity and subsequent erosion. Approximately two

million years ago, the earth's climate cooled overall, but still vacillated between cold and warm phases. In general, the world's temperature became cold enough to form massive ice sheets in the polar regions of the southern and northern hemispheres; these ice sheets expanded toward the equator. In the central New York region, ice sheets slowly moved south, across Canada into what is

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## ONONDAGA VALLEY–NOT A TRUE FINGER LAKE VALLEY *continued from page 5*

now the Lake Ontario Plain, and up onto the Appalachian Plateau and into northern Pennsylvania.

The Finger Lake valleys probably began as small river valleys, and as ice sheets moved through and over them, these valleys were slowly widened and deepened as the ice eroded its way into the bedrock. Through several glacial cycles, the Finger Lake valleys were enlarged during periods of glacial ice advance, and partially filled with glacial sediment as the ice melted back to the north. In most of the Finger Lake troughs, the ice easily eroded through shale bedrock but found the harder limestone units (such as the Onondaga and Tully limestone) more difficult to erode. Therefore, the present-day bedrock configuration of most of the Finger Lake valley floors follow the gentle dip of the Onondaga limestone from the northern end of most of the Finger Lakes down to about the midpoint of each lake. From that point, the bedrock surface begins to rise back into shale bedrock (Fig 1A). This bedrock erosion pattern created what are called "spoon-shaped" bedrock basins—a gentle slope dipping south from the northern end of each lake and a more-steep bedrock rise at the southern end of each lake trough. In total, these valleys were eroded to depths of over 2,000 ft (in comparison to the hilltops surrounding them today), and were partly filled with hundreds of feet of sediment on top of which hundreds of feet of water covered them, creating the Finger Lakes.

The Onondaga trough (valley) (Fig. 1B) was also constructed through the movement of glaciers following old river valleys, but the geology of the region modified how the Onondaga bedrock trough was created. At Syracuse, the Onondaga limestone forms the edge of the Appalachian Plateau—the hills just south of Onondaga Lake—Onondaga Hill to the west and the Syracuse University Hill to the east are limestone. Instead of acting like a ramp for glacial erosion, the Onondaga limestone was breached at Syracuse and the softer Vernon Shale beneath was easily eroded to create the basin in which Onondaga Lake sits today (Fig. 1B). South of Onondaga Lake, the bedrock floor of the valley is in the Vernon shale (as far south as Nedrow), but instead of eroding deeper into the bedrock, the bedrock floor of the valley slowly rises to the south, opposite to the bedrock slope in a Finger Lakes valley configuration. In fact, the spoon-shaped valley is opposite that of the Finger Lakes, that is, the steeper end of the Onondaga bedrock valley is to the north (under the

lake and the city), while the gently sloping end of the valley rises to the south, to and past the end moraine at Tully.

The average depth of glacial material in the Onondaga Valley is just over 400 feet deep, and the slope of the valley floor mimics the slope of the bedrock beneath it. Since the bedrock trough continues to rise to the south, the only depression in the land surface is that found where Onondaga Lake sits today, on the Lake Ontario Plain. Therefore the geology of the region that prevented any development of a Finger Lake in the Onondaga Valley also created the uniqueness of the Onondaga Valley (the salt springs, many freshwater springs, mudboils, and steep hillsides) that we see today. ■

### 2007 MINI-GRANT PROGRAM AND ENVIRONMENTAL EDUCATIONAL FUND ANNOUNCEMENT!!

Does your organization need funds for a creative environmental project?

- The OLP Mini-Grant Program is offering \$25,000 to eligible recipients. The OLP supports projects that encourage community education and involvement in pollution prevention and habitat restoration work for Onondaga Lake and its watershed.
- The Environmental Education Fund makes individual grants of up to \$500 for local teachers to support classroom and field projects to educate students about Onondaga Lake and its watershed.

For more details and an application, please check the OLP website: [www.onlakepartners.org](http://www.onlakepartners.org) Information may also be obtained by calling: (315) 472-2150 (ext. 25). ■

# ONONDAGA CREEK STREAMBANK RESTORATION TECHNIQUES



Before: Onondaga Creek right bank erosion prior to restoration.



After: Creek improvement using rock riffle to provide better fish habitat.

The Onondaga Soil and Water Conservation District (SWCD) is making good progress with Onondaga Creek Streambank restoration projects. Here are some examples of the techniques they are using to stabilize degraded sections of the creek.

## LAUNCHABLE STONE TOE PROTECTION

Launchable stone is placing riprap, a permanent cover of rock, at the toe of the streambank where erosion occurs, also known as the zone of attack. Launchable stone is placed along expected erosion areas at an elevation above the zone of attack. As erosion or scouring occurs below the stone, it is undermined and rolls/slides down the slope, reducing the erosion. The stone is sized based on velocity of the water.

## J-HOOK

J-hooks are structures located in the stream channel. The J-hook is a rock vane that points upstream and slopes



After: Creek erosion prevention project using crossvane weir technique in center.



After: Boil up pool project to dissipate stream energy and prevent bank erosion.

down in elevation towards the center of the stream channel. Rocks at the end of the vane are placed in a semi-circle shape to create the hook. The J-hooks are installed at the outside of meanders and move the thalweg, the line that follows the deepest part of the stream with high velocity to the point of the J-hook and flip the water into the center of the stream and takes the forces off the streambank.

## CROSSVANE WEIR

The crossvane weir is another in-stream structure. The weir is a "V" shaped rock structure, with the point of the V facing upstream. The point is the lowest elevation with each vane rising in elevation as they tie into opposite banks. The crossvanes are installed in straight stretches of the stream and are used for grade control. They also flip the water into the center of the stream and take the erosive forces off the streambanks.

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**THIS NEWSLETTER IS PUBLISHED BY THE ONONDAGA LAKE PARTNERSHIP WITH FUNDING PROVIDED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY.**

#### Executive Committee Members

*Chaired by U.S. Army Corps of Engineers*

- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- New York State Department of Environmental Conservation
- New York State Attorney General
- Onondaga County
- City of Syracuse

#### PROJECT COMMITTEE MEMBERS

*Chaired by New York State Department of Environmental Conservation*

#### Representatives of Executive Committee agencies, as well as:

- Syracuse Department of Public Works
- U.S. Geological Survey
- Onondaga County Soil and Water Conservation District
- Department of Housing and Urban Development
- Central New York Regional Planning and Development Board
- Metropolitan Development Association

#### OUTREACH COMMITTEE MEMBERS

*Chaired by U.S. Environmental Protection Agency*

#### Representatives of Executive Committee agencies, as well as:

- Izaak Walton League
- Atlantic States Legal Foundation
- League of Women Voters
- Cornell Cooperative Extension of Onondaga County
- State University of New York — College of Environmental Science & Forestry
- Onondaga Historical Association

The Executive Committee establishes and maintains the mission of the partnership and the lake improvement effort.

The Project Committee serves as the partnership technical center of expertise on specific projects and develops and maintains the funding strategy for projects.

The Outreach Committee works to enhance public knowledge and understanding of the partnership and the status of the lake improvement effort.

#### YOU CAN CONTACT THE ONONDAGA LAKE PARTNERSHIP AT:

1-800-833-6390

info@onlakepartners.org

**FOR MORE INFORMATION, VISIT THE ONONDAGA LAKE PARTNERSHIP WEB SITE AT [WWW.ONLAKEPARTNERS.ORG](http://WWW.ONLAKEPARTNERS.ORG)**

## STREAMBANK RESTORATION

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### ENGINEERED ROCK RIFFLE

An engineered rock riffle is similar to a rock riffle that occurs in nature. Natural occurring riffles are head cuts moving upstream at a temporary location where an engineered rock riffle is made with large enough stone to be permanent. The stones are installed under compression so the water is pushing them down and can not remove them.

### BOIL-UP POOLS

Boil-up pools occur when the stream flows into the streambank at a tight corner. Water is forced down and scours a deep hole. The water then returns against the current which causes the water to spin and boil up as it tries to leave the pool, due to the bank erosion. Boil up pools are only temporary occurrences. The engineered boil-up pool has a stone lined bank and an underwater rock vane (kicker) that makes the water leave on the opposite side on the stream channel which keeps the water spinning and boiling up. The boil-up pool dissipates much of the streams energy and prevents streambank erosion.

These projects are implemented under the Onondaga Creek Project (OCP) with funding from the Onondaga Lake Partnership. Please contact your local Soil and Water Conservation District for more information about stream and creek restoration projects. ■

This newsletter is intended to provide general information to the public regarding the Onondaga Lake basin and activities related to the cleanup and restoration thereof. Approval for publication by the members of the OLP does not signify adoption or approval for purposes of regulatory, enforcement or other legal actions, of the factual, scientific, or legal assertions, characterizations or conclusions contained therein.