

Watershed Forestry Bus Tour Program Application

Submission Deadline: **Friday, August 6, 2021 by 5PM**

Program Overview

The purpose of the Watershed Forestry Bus Tour Program is to educate the public, especially students, about watersheds, trees and forests, and the New York City drinking water supply system. Participants learn about the NYC watershed's lands, waters, and people with a ***special focus on how trees and forests filter and protect water quality***. This application is designed to help the reviewers understand how these themes will be addressed before, during and after your proposed tour.

Recipients of the Watershed Forestry Bus Tour grant will be required to demonstrate a dollar-for-dollar funding match, complete online pre- and post-tour surveys, engage their students/participants in pre- and post-tour activities, and submit photos and representative student/participant work related to their tour.

Visit our **Teacher Resources webpage** (www.nycwatershed.org/teacher_resources) for excellent teaching resources on NYC watershed forestry topics, including our downloadable **Watershed Forestry Activity Kit designed for Bus Tour Program participants**. Take a look at the **Watershed Forestry Education BIG Ideas** on the following page to review the core themes of our program. We strongly encouraged you to read the **Sample Application** available on our webpage to understand what a strong application looks like. (www.nycwatershed.org/bustours).

Program Eligibility

Any organization, community group, or 4-12th grade classroom in municipalities wholly or partially within the East and West of Hudson Watersheds or the 5 boroughs of NYC is eligible to apply for up to \$3,090 in funding to participate in one of the four Bus Tour Options described below. If you're unsure of your eligibility, email education@nycwatershed.org. Student groups younger than 4th grade may be considered for funding if specific watershed and forestry learning outcomes are part of the proposed tour. Please note that partial grant funding is often awarded and is intended primarily to help pay for transportation costs associated with a bus tour. Two rounds of grant funding are awarded each year with submission deadlines in early January and early August.

All Submitted Applications Must:

- **Be complete!** All questions answered and the budget table filled in.
- **Be typed!** Handwritten applications will not be considered.
- **Be received on time!** Via e-mail or fax and received no later than **Friday, August 6, 2021 by 5PM**

All applicants will be notified of their application status by **Friday, September 17, 2021**.

For more information and to submit an application, contact:

Tyler Van Fleet, East of Hudson Forestry Program Coordinator, or
Brittany Mondore, Forestry Program Executive Assistant and West of Hudson Educator
Watershed Agricultural Council
33195 State Highway 10, Walton, NY 13856
Email: education@nycwatershed.org
Phone: (607) 865-7790 ext. 101
Fax: (607) 865-4932

Watershed Forestry Education BIG Ideas

1. **What is a watershed?** A watershed is an area of land that drains all of its water into a single water body, like a stream, pond, lake or reservoir.

- A watershed drains surface water (rain and snowmelt) and groundwater into a water body.
- Watershed boundaries are determined by the shape of the land, or topography, and water always flows downhill from higher elevation to lower elevation because of gravity.
- A reservoir is a manmade lake created by building a dam across a natural stream or river.

2. **What is the NYC Watershed?** The New York City Watershed is the area of land that drains its water into the drinking water reservoirs for the city. There are 2 watershed regions: The Croton Watershed and the Catskill/Delaware Watershed.

- The NYC Watershed is 2,000 square miles and contains 19 reservoirs and 3 controlled lakes.
- The East of Hudson watershed supplies up to 10% of NYC's water and the West of Hudson watershed supplies 90% of NYC's water.
- Each day, the NYC Watershed supplies 1.3 billion gallons of fresh water to 8.5 million consumers in NYC and 1 million more consumers in towns north of the city. This volume of water would fill up the Empire State Building 4 times!

3. **Forests are filters.** As water flows downhill through a watershed, the forest canopy, roots and soils slow down, filter and clean the water. Forests are the best type of environment to have in a watershed for protecting water quality.

- "Woods wash water" by trapping loose soil and absorbing nutrients and pollution.
- The forest canopy breaks the fall of raindrops, softening their impact and reducing soil runoff.
- Loose soil (or sediment) is the #1 fresh water pollutant in North America.

4. **Your drinking water is forest-filtered.** Forests cover 70% of the NYC Watershed and these forests are our water filter. In fact, 90% of NYC's water is ONLY filtered by forests – instead of by technology.

- 9.5 million New Yorkers rely on the forest-filtered NYC water supply system for their drinking water, which is more than half the population of New York State.

5. **Be a forest steward.** In order to have clean, safe drinking water we need to protect and care for our forests. This is called stewardship. Most of the NYC Watershed is privately owned by more than 36,000 families and individuals. Everyone can help be a steward of our forests and water.

- Examples of forest stewardship include: Maintaining a diverse and healthy forest, reducing pollution, building trails and roads that don't erode soil into streams, removing/controlling invasive species, sustainably harvesting trees, planting native plants and trees, protecting forests along streams (also known as forest buffers), etc.
- City trees are important and need our help, too! Urban forests clean water by absorbing and filtering storm water, trapping air pollution, providing shade, wildlife habitat, and beauty, reducing heating and cooling costs, storing carbon, and more!

Bus Tour Options:

IMPORTANT: Review our online [Bus Tour Guides](http://www.nycwatershed.org/bustours) at www.nycwatershed.org/bustours. These Guides include sample itineraries and detailed cost and programming information for each bus tour option below.

OPTION 1: *Environmental Center & Reservoir Tour*

Explore the NYC Watershed at 1 of 4 Environmental Centers. Select programming from among the centers' watershed forestry-themed courses listed below. At Clearpool and Frost Valley, you will explore a [WAC Model Forest](#), which is an outdoor living classroom that demonstrates sustainable forestry practices for water quality protection. All tours include a guided visit to the [Cross River Dam & Reservoir](#) or [New Croton Dam & Reservoir](#) (on East of Hudson tours) or the [Neversink Reservoir](#) (on West of Hudson tours). Teatown Lake Reservation hosts day trips only. All other centers host day and overnight trips.

East of Hudson

- [Clearpool Education Center & Model Forest](#) (day & overnight) *Watershed Connections, Water Conservation & Waste Water Treatment Facility, Forest Ecology, Introduction to Forestry, Stream Study, Pond Study, Wetland Ecology, Field to Forest: Succession, Beginners Botany, Maple Sugaring*
- [Taconic Outdoor Education Center](#) (day & overnight) *Forest Ecology, Aquatic Ecology & Watersheds, Soil Ecology, Environmental Issues (Water Use), Energy Flow (Water & Nutrient Cycles), Maple Sugaring*
- [Fresh Air Fund's Sharpe Reservation](#) (day & overnight) *Forest Ecology, Maple Sugaring, Aquatic Ecology, Dirty Water, Tracks & Traces, Sensory Trail, Birds in our Backyards, Orienteering, Wilderness Survival*
- [Teatown Lake Reservation](#) (day only) *All About Water, Stream Study, Pond Study, Trout in the Classroom, Trees are Terrific, Exploring Ecosystems, Forest Dynamics, From the Highlands to the Hudson - Watershed Connections, Our Home in the Watershed, Maple Sugaring & Climate Change*

West of Hudson

- [Frost Valley YMCA & Model Forest](#) (day & overnight) *Full/Half Day Model Forest Hike, Watersheds and Wilderness, Freshwater Ecology, Forest Ecology, Maple Sugaring, Ice Cutting*

OPTION 2: *Trout in the Classroom (TIC) Trout Release & Reservoir Tour*

TIC participants travel to Ward Pound Ridge Reservation in Westchester County April-May to release their trout into the Cross River, which flows into the Cross River Reservoir and supplies drinking water to NYC. TIC & WAC educators lead customized watershed, forestry, and water quality activities about the connection between healthy forests, trout habitat & clean drinking water. All tours include a guided visit to the [Cross River Dam & Reservoir](#). *Maximum number of participants per trip, including adults, is 112, or the capacity of 2 coach buses.*

OPTION 3: *Trees for Tribs Tree Planting & Reservoir Tour*

Be an active steward of your watershed and help improve water quality by planting trees along tributaries (streams) that flow into NYC drinking water reservoirs! Trees for Tribs tree planting tours are day trips that take place in April-May at [Hilltop Hanover Farm](#) in Westchester County. In addition to planting trees, WAC educators lead customized watershed, forestry, and water quality activities. All tours include a guided visit to the nearby [Cross River Dam & Reservoir](#). *Student groups must be 6th grade or higher. Maximum number of participants per trip, including adults, is 56, or the capacity of 1 coach bus.*

OPTION 4: *Adult Professional Development Tour*

Witness the source of your drinking water and explore how well-managed forests protect water quality and support community vitality in the NYC Watershed. All tours include a guided visit to a NYC-DEP drinking water reservoir. We strongly recommend visiting a [WAC Model Forest](#), which is an outdoor living classroom that demonstrates sustainable forestry practices for water quality protection. Other environmental or cultural sites may be included depending on group interests. Visit the Catskill Watershed Corporation's [Field Trips webpage](#) for a list of excellent destination options throughout the Watershed regions and NYC.

1. APPLICANT INFORMATION:

I am a:

- School
- Adult group/organization
- Other:

I am a:

- New Applicant - you have never applied for WAC funding before
- Repeat Applicant - you have applied for WAC funding before and...
 - └─▶ You have received funding in the past
 - You have NOT received funding in the past

I am applying for Bus Tour option (Choose one option only):

- Option 1: Environmental Center & Reservoir Tour
- Option 2: Trout in the Classroom Trout Release & Reservoir Tour
- Option 3: Trees for Tribes Tree Planting & Reservoir Tour
- Option 4: Adult Professional Development Tour

Contact Information:

Your Name:

School/Org Name:

Grade(s) you currently teach:

Subject(s) you currently teach:

School/Org Mailing Address:

Email:

Cell Phone:

2. BUS TOUR OPTION:

Check your preferred Bus Tour option below and complete all required information for your selected option.

Option 1: Environmental Center & Reservoir Tour

Check your preferred Environmental Center destination below. Under each destination we have also listed the name of the NYC-DEP drinking water reservoir that you will visit as part of your tour.

East of Hudson

Clearpool Education Center & Model Forest
+ Cross River Reservoir
Taconic Outdoor Education Center
+ Cross River Reservoir
Fresh Air Fund's Sharpe Reservation
+ Cross River Reservoir
Teatown Lake Reservation
+ New Croton Reservoir

West of Hudson

Frost Valley YMCA & Model Forest + Neversink Reservoir

Option 2: Trout in the Classroom Trout Release & Reservoir Tour

Applicants coordinate with Trout in the Classroom NY & WAC to schedule a visit to Ward Pound Ridge Reservation in April or May. Tours include a guided visit to the Cross River Dam & Reservoir. Check that you meet all tour requirements below and check if you plan to visit Ward Pound Ridge Reservation or a different trout release location that you have arranged.

Total group size, including adults, is no more than 112 individuals (the capacity of 2 coach buses).

The tour will be scheduled during April or May.

Tour to Ward Pound Ridge Reservation and the Cross River Reservoir.

OR

I have arranged a different location:

Option 3: Trees for Tribes Tree Planting & Reservoir Tour

All tours go to Hilltop Hanover Farm and include a guided visit to the Cross River Dam & Reservoir. Check below that you meet all tour requirements:

Participants are 6th grade or higher.

Total group size, including adults, is no more than 56 individuals (the capacity of 1 coach bus).

The tour will be scheduled during late April or early May.

Option 4: Adult Professional Development Tour

All tours must visit a NYC-DEP drinking water reservoir. We strongly recommend visiting a WAC Model Forest. Check your preferred destinations from the options below.

East of Hudson

Clearpool Education Center & Model Forest
+ Cross River Reservoir
Other:

West of Hudson

Frost Valley YMCA & Model Forest
+ Neversink Reservoir
Agroforestry Resource Center & Siuslaw Model Forest + Ashokan Reservoir OR
Schoharie Reservoir
Other:

3. BUS TOUR DETAILS:

Proposed tour date(s) or best estimate:

Estimated number of participants:

Students:

Grade Level(s):

Adult educators/chaperones:

OR

Adult Professional Development tour participants:

Will your trip have an overnight component?

Yes - How many nights:

No

4. PROFESSIONAL INFORMATION:

IMPORTANT: Please adhere to the **maximum word limits** for all questions below. Exceeding a word limit will result in a loss of points during the application review process. In MS Word, use the “Word Count” tool under the “Review” tab to check your work.

How did you learn about the Watershed Forestry Bus Tour Program and do you have any suggestions for how/where we should promote the program? **(100 words max.)**

Have you ever attended the Watershed Forestry Institute for Teachers*?

Yes, what year(s):

No

**The [Watershed Forestry Institute for Teachers](#) is a summer professional development program from the Watershed Agricultural Council that immerses 4th -12th grade teachers in a hands-on study of the New York City watershed, forestry and water quality sciences.*

Please share any environmental professional development and/or teaching resources you have engaged with recently that you would recommend. This helps us stay informed and allows us to share your recommendations with other educators. **(200 words max.)**

5. PROGRAM DESCRIPTION:

IMPORTANT: Funding priority goes to applications that address **ALL 3** program themes:

Theme 1: Watershed form and function *(e.g. what is a watershed, what defines a watershed and how does it function, what is the connection between watersheds and water quality, etc.)*

Theme 2: Watershed trees and forests *(e.g. what are forest ecosystems, how do trees & forests filter and protect water quality [in upstate drinking water watersheds and in downstate suburban/urban environments], what other benefits do trees & forests provide, etc.)*

Theme 3: The New York City water supply system *(e.g. what are the different parts of the system, the history of its construction, how can we conserve water and help care for our drinking water watersheds, etc.)*

If funded, WAC staff will help you develop a detailed teaching plan for the trip, but you should have some specific ideas about how you will integrate these 3 themes into your teaching before, during, and after the tour. Visit our **Teacher Resources webpage** www.nywatershed.org/teacher_resources for resources on these topics.

OVERALL PURPOSE: Why do you want to go on a Watershed Forestry Bus Tour? Explain how your proposed tour integrates with and enhances your overall unit/curriculum/program. **(300 word max.)**

BEFORE THE TOUR: Describe how you will address the 3 program themes before the proposed tour in order to help prepare your students/participants for significant learning on the trip. Include any specific lessons, activities and/or resources you plan to use. **(300 word max.)**

Before the Tour

THEME 1: Watershed form and function

THEME 2: Watershed trees and forests

THEME 3: New York City water supply system

DURING THE TOUR: Describe the specific activities, courses, and/or experiences you would like your students/participants to have during the tour that will address the 3 program themes.

- For *Environmental Ed. Center* trips, include the Reservoir visit and specific courses that interest you.
- For *Trout in the Classroom* or *Trees for Tribes* trips, include the Reservoir visit and the specific components of the trip. Some of the components are standard while others may be customized. See the **Bus Tour Guides** at www.nycwatershed.org/bustours for more details about the programming provided on your specific type of trip and to see example itineraries. (300 word max.)

During the Tour

THEME 1: Watershed form and function

THEME 2: Watershed trees and forests

THEME 3: New York City water supply system

AFTER THE TOUR: Describe how you will address the 3 program themes after the proposed tour in order to help your students/participants synthesize and apply their learning from the tour. Include any specific lessons, activities and/or resources you plan to use. **(300 word max.)**

After the Tour

THEME 1: Watershed form and function

THEME 2: Watershed trees and forests

THEME 3: New York City water supply system

REPEAT PARTICIPANTS ONLY: If you have received bus tour funding before, please reflect on your past experiences and explain how you will adapt your teaching plan AND trip logistics to improve future experiences and outcomes. **(200 word max.)**

6. BUDGET INFORMATION:

You may apply for up to \$3,090 for your proposed tour. See our online **Bus Tour Guides** for cost information for each **Bus Tour Option**: www.nycwatershed.org/bustours. Email education@nycwatershed.org for budgeting assistance.

As a matching grant program, all requested funds must be matched dollar-for-dollar with in-kind time (e.g. the value of the time that teachers, staff and volunteers devote to the tour, including preparation and follow-up), in-kind goods (e.g. donated meals, supplies, etc.) or cash (from any source, including school budget, PTA funds, student fees, etc.). You will be asked to demonstrate your matching funds. Many participants are able to meet the matching funds requirement primarily with their in-kind time, which is calculated using the following hourly rates:

- **\$48/hour for teachers and staff** (may vary depending on your school)
- **\$28/hour for volunteers like parent chaperones** (New York State official rate)

In the Budget Table below, estimate the costs associated with your bus tour, including the value of the cash, time and materials/supplies your team will contribute in-kind. Your total matching funds (bottom of column B) must be equal to or greater than the total grant funds being requested (bottom of column A).

Grant Funds may ONLY be used for:

- Transportation costs (bus rental)
- Program/Facilitator/Lodging fees
- Meals during the tour

Your Matching Funds may come from:

- Teacher/Staff/Volunteer hours
 - Materials/Supplies
- You may also contribute to the cost of:
- Transportation (bus rental)
 - Program/Facilitator/Lodging fees
 - Meals during the tour

BUDGET TABLE (Estimates are OK!)			
	A	B	A + B
Expense Category	Grant Funds (how you will spend your requested grant funds)	Matching Funds (how you will contribute to the cost of the tour)	CATEGORY TOTAL (add across rows)
Transportation	\$	\$	\$
Program/Facilitator/Lodging Fees	\$	\$	\$
Meals	\$	\$	\$
Teacher/Staff/Volunteer Hours	N/A	\$	\$
Materials/Supplies	N/A	\$	\$
Other – Please Explain:	\$	\$	\$
BUDGET TOTAL (add down columns)	\$ <i>(Total amount being requested in application)</i>	\$ <i>(Total value of your matching funds. Must equal or exceed Column A total to the left)</i>	\$ <i>(Total value of your bus tour)</i>

Are you a Title I School? Yes
 No
 N/A

Explain why you need funding from the Watershed Forestry Bus Tour Program. **(50 words max.)**

Show your calculations for each estimated Grant Funds expense in column A of your budget table above. **(100 word max.)**

(E.g. 1 bus at \$1,200/bus = \$1,200; 55 lunches at \$8.50*55 students = \$467.50, etc.)

Explain the source(s) of your matching funds in column B of your budget table above. **(100 word max.)**

(E.g. Program fees for 50 students and 5 chaperones for 1 full-day at Clearpool Education Center is \$25/student*50= \$1250, \$10/adults*5=\$50, Facilitator fees \$240*3=\$720, paid by school and student fees; In-kind time: 20 teacher hours at \$48/hour = \$960; 8 volunteer hours at \$28/hour = \$224, etc.)

Who will be responsible for the budget and reporting requirements of the grant program? If this is not the same person as the applicant, please explain why it is a different person and how you will work together to manage the budget and reporting.

7. PROGRAM REQUIREMENTS

Please check the boxes next to each statement below to indicate that you understand and agree to the program requirements.

I UNDERSTAND THAT I AM REQUIRED TO OBTAIN ADMINISTRATIVE SUPPORT FOR PARTICIPATION IN THE BUS TOUR PROGRAM. I AGREE TO PRINT THE ATTACHED ADMINISTRATOR SUPPORT FORM, DISCUSS THE PROGRAM WITH MY ADMINISTRATOR, OBTAIN THEIR SIGNATURE ON THE FORM AND SUBMIT THE FORM WITH THIS APPLICATION.

I UNDERSTAND THAT, IF FUNDED, I WILL BE REQUIRED TO COMPLETE A W-9 TAX IDENTIFICATION NUMBER FORM AND OBTAIN PROOF OF ADEQUATE INSURANCE FOR THE BUS TOUR. (Note: The proof of insurance and W-9 form DO NOT need to be submitted with this application and public school participants are not required to submit proof of insurance.)

I UNDERSTAND THAT, IF FUNDED, I WILL BE REQUIRED TO MEET WITH A BUS TOUR PROGRAM STAFF PERSON EITHER AT MY SCHOOL/OFFICE OR VIRTUALLY TO REVIEW PROGRAM DETAILS AND SUBMIT THE REQUIRED PAPERWORK.

Please return the completed application by e-mail or fax to:

Tyler Van Fleet, East of Hudson Forestry Program Coordinator, or
Brittany Mondore, Forestry Program Executive Assistant and West of Hudson Educator
Watershed Agricultural Council
33195 State Highway 10, Walton, NY 13856
Email: education@nycwatershed.org
Phone: (607) 865-7790 ext. 101
Fax: (607) 865-4932

The Watershed Forestry Bus Tour Program is a program of the Watershed Agricultural Council

Watershed Agricultural Council
www.nycwatershed.org



with support from the following:



For Office Use Only: UREI Working Group Approval	YES	NO	Approval Date
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Administrative Support Form *Watershed Forestry Bus Tour Program*

Dear Administrator,

We are excited that a teacher/staff person in your school/organization is applying for a *Watershed Forestry Bus Tour Grant* from the Watershed Agricultural Council (WAC)!

Our grants help fund field trips to New York City's world-famous Watershed, which supplies clean, safe drinking water to over half the population of New York State. Our field trips are a powerful way for students to investigate how forest ecosystems clean and protect water quality and to learn how they can help care for their environment. To learn more, visit www.nycwatershed.org/bustours.

If your school/organization is awarded a grant, the applying teacher/staff person will be expected to:

1. Meet with WAC staff to review program details. Administrators are encouraged to attend!
2. Work with WAC staff to integrate watershed forestry themes into their existing curriculum.
3. Complete a W-9 tax identification number form, submit proof of one-to-one matching funds (100% of which may be in-kind contributions), and, if you're a non-public school participant, provide proof of adequate insurance.
4. Complete pre- and post-tour surveys, submit photos and student work examples.

We encourage you to read through the application your teacher/staff person has submitted. Signing this form serves as a statement of your support of the application, which is required for it to be considered for acceptance. Questions may be directed to Tyler Van Fleet, East of Hudson Forestry Program Coordinator at education@nycwatershed.org. Thank you!

Additional Comments (Optional):

Print Name: _____

Title: _____

Signature: _____ Date: _____