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# National Fish and Wildlife Foundation GRANT APPLICATION proposal ID of 13359

**Applicant Information** 

APPLICANT INFORMATION									
Project Name:		E	Eastern Brook Trout Joint Venture (EBTJV)						
Organization:		С	Conservation Management Institute at Virginia Tech						
Organization Typ	oe:	Н	Higher education institution						
Primary Contact (Title, First Name Name, Suffix)		М	Ms. Lila B Wills						
Street Address:		19	1900 Kraft Dr. Suite 250 MS 0534						
City, State, Zip a	ind Country:	В	lacksburg, VA	24061	Uni	ited States			
Phone:		54	40-231-8996 I	≣xt.					
Fax:		54	40-231-7019						
Primary Email:		lb	orge@vt.edu						
Secondary Emai	l:	fv	viexchg@vt.ed	du					
Organization's Ir Address:	ternet	ht	http;//www.cmiweb.org or http://www.easternbrooktr						
Financial Officer (Title, First Name, MI, Last Name, Suffix)			Ms. Lisa Cotting						
Phone	54	540 231-9373 Ext.							
Fax:		54	540 231-9374						
Email:		lc	lcotting@vt.edu						
Tax ID#:		54	54-6001805						
Fiscal Year End	(MM/DD):	06	06/30						
			PROJECT INFORMATION						
Project Site:			Native brook trout range throughout the Appalachian region from Maine to Georgia. The parties responsible for site management include partners (state, federal agencies, NGO's, University members.						
Project Site Location Zip Codes:			<b>ZIP Code</b> 24061	City Blacksl		<b>County</b> Montgomery		Congressional VA09	Dist
Anticipated Period of Performance:	Project : (MM/DD/YY	Date	06/30/2007		Project End Date(MM/DD/YYYY): 05/31/2009			05/31/2009	
Application	Submission   (MM/DD/YY		02/02/2007						
			FUNDIN	IG INFO	RMA	TION in U.S.	dollars		
Line-Ite	m		Requ	uested N	FWF	Funds		Matchi	ng Funds
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Salaries and Benefits:	\$27,500	\$13,572			
Explanation:	Lila Borge Wills, Project manager Annual salary: \$64,176  NFWF funds: 27% of annual salary over 2 years; Benefits: \$6,798  Cost Share funds: 14% of annual salary over 2 years; Benefits: \$3,616  Shelia Crowe, Administration manager Annual salary: \$33,372  NFWF funds: 4% of annual salary over 2 years; Benefits: \$623  Cost Share funds: 0				
Equipment:	\$0	\$0			
Explanation:					
Other:	\$9,036	\$59,500			
Explanation:	NFWF Funds Matching Funds Total Funds  Coordination Meetings \$1,000 \$16,486 Web Site Maintenance \$1,000 \$9,500 Public Outreach \$2,036 \$9,000 \$1 Travel \$6,000 \$6,000  Travel to coordination and planning meetings (place and be completed by automobile. Costs will not exceed \$3,4000  All lodging and per diem expenses will fall under the Vi	\$10,500 1,036 ad dates TBD).Travel will 000 per year.			
Totals	\$36,536	\$73,072			

	Sources of Matching Funds					
-	Source:	Amount:	Status:			
-	State Fish and Wildlife Agencies	\$ 52,500	Received			
_	Virginia Polytechnic Institute and State University	\$ 13,572	Received			

	Sources of Non-matching Funds				
-	Source:	Amount:	Status:		
_	Non-profit/environmental	\$ 7,000	Received		

# **Narrative Information**

#### PROPOSAL NARRATIVE

Please provide a comprehensive narrative to describe your project. This section enables applicants to provide an expanded and complete description of the proposed project so that the Foundation may fully assess conservation merits, scientific underpinnings, and operational feasibility.

### **Project Sumary:**

Support coordination of implementation of regional and range-wide conservation strategies developed in 2005 and 2006 for Eastern Brook Trout.

#### **Conservation Need:**

The brook trout Salvelinus fontinalis is a recreationally and culturally important species, regional

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icon, and indicator of high water quality. Biologists have long known that brook trout populations are declining across their historic eastern range from Maine to Georgia. The Eastern Brook Trout Joint Venture (EBTJV) is a partnership among state and federal agencies, nongovernmental organizations, and academic institutions based on the consensus that a collaborative approach to brook trout management is justified because (1) brook trout are declining across their entire eastern range; (2) causes for these declines are similar; (3) an integrated approach would be cost effective; and, (4) watersheds of concern span state borders and state and federal jurisdictions.

The EBTJV partners agreed that a broad-scale, range-wide conservation strategy is necessary to stop brook trout declines, improve technology transfer, and effectively prioritize funds and projects to restore this recreationally and culturally important species. The Conservation Strategy developed by the EBTJV is a goal-oriented and science-based action plan that states explicitly what the partnership wants to accomplish, presents guidance for decision-making and provides methods for evaluating success. The EBTJV believes this structure will result in a carefully focused, technically credible, and publicly accountable program linking EBTJV projects to specific objectives so that funding will be effectively utilized.

In 2005, the EBTJV completed a range-wide assessment of brook trout populations throughout the Appalachian region from Maine to Georgia (Hudy et al. 2005). The assessment revealed wild brook trout populations in the eastern United States are impaired. Intact stream populations of brook trout populations (where wild brook trout occupy 90-100% of their historical habitat) exist in only 5% of the watersheds (6th level Hydrologic Unit) assessed. Wild stream populations of brook trout have vanished or are greatly reduced in nearly half of the watersheds. The findings from the rangewide status and threats assessment serves as the foundation for the development of the vision, goals, key priorities, and strategies contained within the EBTJV Conservation Strategy.

The vision of the EBTJV is to ensure healthy, fishable brook trout populations throughout their historic eastern United States range. The principal goals of the EBTJV are: (1) conserve, enhance and restore brook trout populations that have been impacted by habitat modification, or other threats and disturbances; (2) encourage partnerships among management agencies and stakeholders to seek solutions to issues such as regional environmental and ecological threats; (3) develop and implement outreach and educational programs to ensure public awareness of the challenges that face brook trout populations; and (4) develop support for implementation of programs that perpetuate and restore brook trout throughout their historic range. To assist the EBTJV achieve its vision the following key priorities were established: protect brook trout populations across the species eastern United States range; restore brook trout (subspecies, stocks and populations) throughout their historic ranges where original habitat conditions exist and where habitats can be feasibly restored; monitor and evaluate brook trout population responses to habitat protection, enhancement and restoration projects; complete quantitative status assessments of brook trout distribution throughout its eastern United States range; and increase recreational fishing opportunities for wild brook trout.

The EBTJV partnership addresses Actions in Support of a National Fish Habitat Initiative, which is a National Conservation Need. By addressing this need, the proposed project will directly affect a majority of states in one US Fish and Wildlife Service Region, the Northeast, and 5 states in the Southeast.

# Objectives:

The EBTJV partnership consists of state and federal agency representatives, important NGO and University partners. The partnership completed a detailed range wide status report and preliminary threats assessments. States are currently working with partners to complete detailed action plans. To keep the partnership engaged and communicating requires staff time to promote the partnership, sponsor meetings, record decisions, communicate about the partnership through outreach materials and a web site, complete work products and serve as a clearinghouse for information regarding the effort. An important task of the EBTJV coordinator will involve coordination and focus of local resources in accordance with state level, regional, and range-wide strategic plans and prioritizing on-the-ground projects for funding as Congress and others make additional resources available to address brook trout habitat restoration projects. This partnership cannot function as an all-volunteer organization.

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					$Output \to$	Outcome
Sponsor four semi-annual coordination meetings*	Meeting of 20+ partner representatives, publication of meeting notes, limited travel for state participants.*	Coordination of agency and organization activities regarding habitat restoration. Coordinated action will lead to improved status of eastern brook trout populations.*	# of active partners (MOU signatory)	20	30	40
Maintain EBTJV Web Site*	Posting of meeting notes, reports, outreach materials, databases, contact information, and links to partner agencies.*	Coordination of agency and organization activities regarding habitat restoration. Identify priority areas for action.*	# of web hits. Size and complexity of website.	100/mo Downloadable maps and data	400/mo Updated data and maps	500+/month Interactive website
Four semi- annual project prioritization meetings.*	Evaluate and prioritize habitat restoration project proposals for agencies and organizations.*	More efficient and effective use of public funds on habitat restoration projects. Greater conservation success as measured by improved population status over time.*	# of active and funded projects for E brook trout	5 projects	10 projects	15
Outreach to the Public*	Regular press releases at least quarterly. Sponsorship of AFS Symposia. Regularly send contributions to the TU volunteer coordinator for their newsletter. *	Greater public literacy regarding Eastern brook trout status, threats, and corrective actions. Transfer of model to other aquatic systems and partnerships.*	# of media reports (cumulative). # of presentations.	100 media hits 25 presentations, training	300 media; 50 annually throughout region	400 media; 60 annually throughout region
Data Management*	Work with the Data Committee to update the status and threats database on the web.*	An ongoing assessment of status and threats for the Eastern Brook Trout. Outcome measurement as an important feedback loop for adaptive management.*	# of datasets actively updated on interactive website. Data updated on a regular basis	Create accurate and up-to-date maps.	Update data annually	Update data quarterly or as necessary
Develop a funding plan.*	Obtain commitments on the part of a partner(s) to house and fund the	Stabilize the management of the EBTJV to allow for long-term commitments of funding and	# of funding mechanisms. # of partners funding the	1 funding mechanism 10 funding partners	3 funding mechanisms 30 funding partners	5 mechanisms; 40 funding partners

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EBTJV for a five- year period.* resources for habitat restoration projects.*	EBTJV			
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#### Methodology:

If awarded, the Conservation Management Institute at Virginia Tech will provide a part-time coordinator and support personnel to accomplish the objectives described above. The EBTJV Steering Committee will oversee the project.

This is a two-year request. Our plan is that in that two-year period, we will institutionalize brook trout conservation work within and across states and develop a long-term solution for housing and funding the EBTJV.

# **Potential Negative Impacts:**

Unintentional negative outcomes are not anticipated because efforts to improve the status of brook trout will begin by protecting habitat that supports existing relatively healthy and productive populations. Where habitat for brook trout is absent or severely diminished restoration efforts will focus on restoring habitats and developing ecosystem conditions and functions that will allow for expanding and maintaining diversity within and among species in order to sustain a system of robust populations in the face of environmental variation.

#### **External Effects:**

Two of the most serious perturbations that occur at the range-wide scale are climate change and acidic deposition. Long-term temperature increases across the eastern U.S. is likely to have enormous consequences on the distribution and abundance of brook trout. Acidic deposition severely impacts brook trout in several states although it does not constitute a widespread threat across the entire eastern range. Emissions of sulfur dioxide, nitrogen oxide, and ammonia are the primary causes of acidic deposition, which has been most evident in the eastern United States.

To address the effects of these external threats the EBTJV has developed a series of monitoring strategies:

- 1. Use remotely-sensed data to monitor brook trout habitat and water quality trends.
- 2. Monitor long-term brook trout population trends at selected sites throughout its eastern US range using probabilistic (statistical) site selection procedures and standard protocols for data collection.
- 3. Establish experimental research monitoring locations to determine underlying causes for changes in brook trout habitat and population indicators.
- 4. Use effectiveness monitoring when cause-and-effect relationships between habitat improvement and brook trout population responses are being established. The design of effectiveness monitoring requires data be collected simultaneously at both treatment and control sites before and after treatment.

#### **Project Transferability:**

The EBTJV effort will develop a useful model for other regional initiatives established under the National Fish Habitat Action Plan. The partnership s focus on science-based assessment and monitoring, multi-agency coordination and conservation planning, and management and outreach to the public are essential to the success of the National Fish Habitat Action Plan.

Improved data sharing will give management agencies a way to compare brook trout populations from watershed to watershed. A clear understanding of population status, trends, and threats will help the management agencies prioritize restoration efforts. Coordination of restoration efforts will improve the ability of management agencies to recover brook trout populations. A better informed public will make political decisions that support brook trout conservation actions easier to acquire.

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#### Dissemination:

Dissemination will take place through the web site, through press releases (print, radio, and video media sources), and through the already established email listserver. Project reports will be mailed via the US Postal Service as needed. Partner organizations will inform their constituencies through their own networks. Partners will make presentations at regional and national meetings when appropriate.

#### Project staff and their qualifications:

Lila Borge Wills, Research Associate and Project Manager

Ms Wills has extensive expertise in coordinating conservation projects, grant tracking, meeting scheduling, database management and web services. Ms Wills also has an MS in Natural Resources Management and is well versed in conservation issues.

Shelia Crowe, Office Manager

Ms Crowe has 10 years experience with CMI in handling meetings, travel schedules, reimbursements and general office administration.

Implementation Information

PROJECT IMPLEMENTATION	N		
Project Phase 1: (Write a brief Scope of Work for the phase):			
Sponsor four semi-annual coordination meetings. Meeting of 20+ partner epresentatives, publication of meeting notes, limited travel funds for tate participants. Coordination of agency and organization activities		Budget Category	NFWF Funds
		Salaries & Benefits:	3,000
regarding habitat restoration. Coordinated action will lead to improved status of eastern brook trout populations.		Equipment:	0
			1,000
Matching Contributions allocated to Phase 1:	21,000	TOTAL:	4,000
Project Phase 2: (Write a brief Scope of Work for the phase):			
Maintain EBTJV website. Posting of meeting notes, reports, outreach materials, databases, contact information, and links to partner agencies. Coordination of agency and organization activities regarding habitat		Budget Category	NFWF Funds
		Salaries & Benefits:	10,682
restoration. Identify priority areas for action.		Equipment:	0
		Other:	1,000
Matching Contributions allocated to Phase 2:	19,500	TOTAL:	11,682
Project Phase 3: (Write a brief Scope of Work for the phase):			
Four semi-annual project prioritization meetings. Evaluate and prioritze		Budget Category	NFWF Funds
habitat restoration project proposals for agencies and organizations.  More efficient and effective use of public funds on habitat restoration		Salaries & Benefits:	6,409
projects. Greater conservation success as measured by improved population status over time.		Equipment:	0
		Other:	6,000
Matching Contributions allocated to Phase 3:	10,072	TOTAL:	12,409

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Project Phase 4: (Write a brief Scope of Work for the phase):			
Outreach to the public. Regular press releases - at least quarterly. Sponsorship of AFS Symposia. Regularly send contributions to the TU olunteer coordinator for their newsletter. Greater public literacy		Budget Category	NFWF Funds
		Salaries & Benefits:	4,273
regarding Easten brook trout status, threats and corrective actions.  Transfer of model to other aquatic systems and partnerships.	ording Easten brook trout status, threats and corrective actions.  Install the status of the status		0
		Other:	2,036
Matching Contributions allocated to Phase 4:	9,000	TOTAL:	6,309
Project Phase 5: (Write a brief Scope of Work for the phase):			
Data Management. Work with the Data Committee to update the status adn threats database on the web. An ongoing assessment of status and threats for the Eastern brook trout. Outcome measurement as an important feedback		Budget Category	NFWF Funds
		Salaries & Benefits:	2,136
loop for adaptive management.		Equipment:	0
		Other:	0
Matching Contributions allocated to Phase 5:	13,500	TOTAL:	2,136
Project Phase 6: (Write a brief Scope of Work for the phase):			
Develop a funding plan. Obtain commitments on the part of a partner(s) to		Budget Category	NFWF Funds
house and fund the EBTJV for a five-year period. Stablize the management of the EBTJV to allow for long-term commitments of funding an	d	Salaries & Benefits:	
resources for habitat restoration projects.		Equipment:	
		Other:	
Matching Contributions allocated to Phase 6:	3,000	TOTAL:	

# Organizational Information

# Organizational Information Virginia Polytechnic Institute and State University Mission Statement Virginia Polytechnic Institute and State University (Virginia Tech) is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The discovery and dissemination of new knowledge are central to its mission. Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life. Organization's mission and goals. Virginia Tech in the next decade will: 1. Double its research expenditures to exceed \$540 million per year. 2. Continue to strengthen the quality of its programs as indicated by the achievements of its students (for example, through nationally competitive scholarships), recognition of the faculty (for example, by memberships in national academies), and other indicators. 3. Sustain an entrepreneurial culture characterized by public/private strategic partnerships to diversify sources of income for the university

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the various public constituencies that the university represents.	ent. S r and n n geared
Mr. Michael Anzilotti President Virginia Commerce Bancorp, Inc. Arlington, VA 22207  Ms. Beverley Dalton Board Chair English Construction Lynchburg, VA 24504  Mr. Ben J. Davenport, Jr. President First Piedmont Corporation Chatham, VA 24511  Ms. Michele (Shelley) L. Duke Rallywood Farm Middleburg, VA 20118  Mr. Robert L. Freeman, Jr. President Tower Park Corporation Newport News, VA 23606  Mr. L. Bruce Holland Partner & Farmer V.T. Holland & Sons, Inc. New Church, VA 23415  Mr. John R. Lawson, II President and CEO W.M. Jordan Company, Inc. Newport News, VA 23601  Ms. Sandra Stiner Lowe Oak Hill, VA 20171  Mr. Jacob A. Lutz, III Managing Partner Troutman Sanders LLP Richmond, VA 23219  Mr. George Nolen President and CEO Siemens Corporation New York, NY 10022  Mr. James W. Severt, Sr. Martinsville Travel, Inc. Martinsville Travel, Inc. Martinsville, VA 24112  Mr. James R. (Jim) Smith CEO and Chairman of the Board Smith/Packett Med-Com, Inc. Roanoke, VA 24014  Mr. Philip S. Thompson	

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Collierville, TN 38017

Dr. Lori L. Wagner

Manager, Advanced Fibers and Composites

Honeywell International, Inc. Colonial Heights, VA 23834

Dr. Kerry J. Redican Faculty Representative Teaching and Learning Virginia Tech Blacksburg, VA 24061

Ms. Jean Brickey Staff Representative Virginia Tech Blacksburg, VA 24061

Ms. Ennis McCrery Graduate Student Representative Virginia Tech

Blacksburg, VA 24061

Mr. Gregory J. Sagstetter Undergraduate Representative Blacksburg, VA 24061

Ms. Kim O'Rourke Secretary to the Board Office of the President Virginia Tech (0131) Blacksburg, VA 24061

Statement of any legal actions by your organization in which a state or federal government agency is a party, which are pending, are anticipated, or were completed within the past year (not applicable for federal, state, or local government applicants).

None

## **Attachment Information**

Attached File Name

A-133+audit.pdf annual-report-04-05.pdf financial\_statements\_2006-1.pdf

#### **Peer Reviewers Information**

	CEL INEVIEWEIS IIIIOIII	1 eei itevieweis iiioiiilatioii							
Peer Reviews Information									
Title	Name	Organization	Туре						
Research Fellow	Bill McShea	Wildlife Conservation Society	Conserva						
Chief, Aquatic Resources	Christopher Estes	Alaska Department of Fish and Game	State						
Professor	James (Jay) L Shelton	University of GA	Academic						
Professor	James Rice	NC State University	Academic						
Assistant State Conservationist for Programs	Ken Carter	Natural Resources Conservation Service	Federal						

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President Robert Ramsey American Fly Fishing Trade Association	n Resource
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