

**U.S. Army Corps of Engineers
Fiscal Year 2016
Handshake Program Application**

Please review instructions before completing application!

Corps Lake/River Project Name: **Beech Fork Lake**

District / Division: **Huntington District / Lakes and Rivers Division**

Handshake Proposal Title: **Rock Hollow Interpretive Trail Rehabilitation & Modernization Project**

Corps POC Name: **Charles E. Mathis**

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A. Checklist:

1. Will the Handshake funds be spent on Corps facilities and resources that are being fully maintained by the Corps? ☒ Yes ☐ No
 2. Will the Challenge Partnership agreement be with a non-federal public or private entity(ies)? ☒ Yes ☐ No
 3. Is the proposed activity within current authorities and contained in the annual or 5-year work plan in the approved lake project OMP? ☒ Yes ☐ No
 4. Have all of the NEPA requirements been considered for this project? ☒ Yes ☐ No
 5. Did you participate in a Handshake Webinar in 2015 or review a 2015 Handshake Webinar on the Gateway? ☒ Yes ☐ No
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B. Handshake Funding Request (maximum \$30,000): \$17,000

C. Cooperating Association Agreement Bonus: Challenge Partnerships that include a Cooperating Association with which your project/district has entered into a Cooperating Association Agreement are eligible to compete for an additional \$5000. Do NOT include a copy of that agreement with this application. A copy may be requested if not already provided to the Partnership Team. (Reference Chapter 9 of ER and EP 1130-2-500 for information on cooperating associations).

☐ This application qualifies for the Cooperating Association Bonus funding.

D. Incentive Points Category: Check the appropriate box if your application qualifies to receive bonus points on the evaluation score. The first category is for the partner contribution meeting or exceeding 70% of total project costs. A summary of the partners' contribution to the Handshake Project should be included in the financial worksheet below. The second category is for Lake or River Projects that have never been chosen as Handshake recipients.

☐ Partner contribution total is 70% or greater (100 points).

☒ This Lake/River Project has never received Handshake funding (100 points).

E. Describe your partnership and the proposed project:

Summary Statement of Handshake Project: Beech Fork Lake (BBF) is a 12,757 acre multi-purpose project located near Huntington, WV, that offers various recreational opportunities and supports over 750,000 visitors annually. The proposed handshake project involves removing existing signage from the Rock Hollow Trail and designing and installing new interpretive signage. USACE staff will provide oversight of all partnering efforts. The Friends of Beech Fork Lake along with nine other partnering organizations will participate by providing funding, materials, volunteer services or in-kind contributions.

Project Description: The Rock Hollow Interpretive Hiking Trail was constructed in the early 1980's and is the only interpretive hiking trail within the project boundary. It is also the most readily accessible trail, with the trailhead located directly adjacent to the primary park access road and only 400 feet from the Visitor Center (VC). The trail is a ½ mile interpretive loop trail with 16 designated interpretive points and features a scenic overlook of the dam, recreation areas, and lake. The framework of the interpretive trail is severely outdated. Existing signage for the trail consists of a large wooden overview map at the trailhead (see Attachment 1) and numbered vertical 4x4 posts at the location of each interpretive trail feature. Age and exposure to weather has degraded a significant portion of signage to an extent that it is unsuitable for continued interpretive use. The large wooden overview map has been removed from the trailhead for safety and aesthetic reasons due to its poor condition and many of the numbered posts are dilapidated. To hike the trail in an interpretive manner under the present framework a trail brochure must be obtained at the VC. The existing brochure is attached for reference (see Attachment 2).

The Friends of Beech Fork Lake (FOBFL), a 501(c) (3) non-profit organization is actively working with BBF and other stakeholders to develop a plan of action for rehabilitating and modernizing the Rock Hollow Trail. The FOBFL and nine additional partner organizations will participate, and will either provide monies, materials, volunteer services or in-kind contributions. The FOBFL recently secured a \$5,000 Governor's Community Participation Grant through the WV Development Office to use for trail improvements at BBF. The grant requires a 10% local match. FOBFL will use funds in their treasury to provide the required \$500. The FOBFL has entered into a contract with Marshall University (MU) for the completion of design and layout of interpretive materials to complement the Rock Hollow Trail. The contract totals \$5,930.00. The FOBFL will use existing funds and grant funding for payment of the contract. Of significant note, is the fact that MU has agreed in writing to waive its standard 45% overhead rate for service contracts, which results in a savings of \$2,668.50. MU's revocation of its standard overhead will be considered an in-kind contribution. The FOBFL is also securing a grant through the Wayne County Economic Development Authority that totals \$6,000, and expects to receive it in October of 2015. FOBFL intends to use these funds to pay for various items necessary for completion of the trail project; contractual services, supplies and materials, and some trail infrastructure.

The proposed project involves removing existing signage from the Rock Hollow Trail and the designing and installation of new interpretive signage. Staff and students with MU's Natural Resources Program, along with staff from its College of Arts and Design will perform a thorough inventory of the trail and its features to accomplish signage content, layout, and design. The new interpretive signage along the trail will be comprised of vandal and weather resistant materials that display pertinent graphics and text (see Attachment 3). Sign installation will be accomplished by BBF staff and members of various partner organizations. Preliminary investigations conducted by MU estimate eight to ten signs are needed. It is anticipated that the signs will be landscape format and approximately 24" x 36" in size and housed and supported by aluminum/metal. The goal of the new signage is to provide a diverse educational experience for users of all ages. A variety of signage exhibiting and discussing area and project history, geological features, plant and animal communities, archeological resources, Corps missions, conservation and environmental stewardship practices, and invasive species will accomplish this goal. The project also entails rehabilitation of trail tread surfaces, including basic drainage and erosion control features, installation of a vandal resistant bench at the scenic overlook, installation of a trash container at the trailhead, and new directional signage.

Longevity / Sustainability description: The design and materials of the interpretive trail signs and trailhead sign will ensure a long lifespan for the project. The signs have all of the following resilient properties that will ensure physical integrity and quality presentation through many years of use: UV resistant, graffiti resistant, abrasion resistant, burn resistant, and shatterproof. The graphics and text of the signs would be fabricated on double sided panels using Digital High Pressure Laminate (dHPL) technology that will prevent it from delaminating, separating, cracking, or peeling throughout its projected lifespan of 20 years. Additionally, the signs have a 10-year warranty and are made in the USA. The quality and longevity of the proposed interpretive trail components is far greater than the existing wooden interpretive components and will require little to no maintenance. The vandal resistant composition of the signs would alleviate any cost and maintenance issues that could arise from signage not possessing vandal resistant characteristics. The aluminum/metal frame and posts for the signage will withstand years of use, and could even be reused to secure new panels in the future if desired. Ongoing maintenance to trail tread and drainage features throughout the trail would only require minor routine maintenance and can be completed by FOBFL and BBF. A robust and durable network of interpretive signage will allow users to achieve a desirable and educational hiking experience in nature for many future years.

Partnership Value: There are a total of ten partners committed to contributing funds, services, materials, supplies, and equipment for the project. Two partners will donate \$2,500 in supplies and materials, four partners will provide \$5,629 in volunteer services, and three partners will contribute \$11,830 in funds. Two partners will contribute \$4,669 of in-kind services including; interpretive signage design and layout, equipment supply and operation, and sign installation, and one partner will provide \$150 in food to trail construction volunteers. BBF will provide \$4,000 in salaries for labor, design, construction, and oversight. If selected to receive Handshake funding, BBF will execute \$12,500 through a purchase contract with a professional interpretive sign manufacturer. Funding will also be used to purchase directional signage, construction materials or supplies not donated, a bear-safe trash container, and a vandal resistant bench. The FOBFL Group was recently created in March of 2015 and its partnership with BBF is in its infancy. However, in this short time the FOBFL has gained an active membership that is focused on improving recreational opportunity at BBF. This project would be an excellent inaugural project for the FOBFL and all partners involved and serve as a catalyst generating similar betterment projects in the future. Additionally, it would serve as a recruiting mechanism for FOBFL and give deserved notoriety to all partners. The implementation of this project will show all involved and the community what is possible when multiple parties work in a concerted effort to accomplish a goal that will benefit all entities and the general public, and will ultimately strengthen and solidify the partnership between FOBFL and BBF.

Recreational Benefit: The project would provide recreational benefits to a wide array of users. The ease of accessibility, length, and minimal physical demand of the Rock Hollow Trail will allow individuals of all ages to have a positive and enriched recreational experience. Both novice hikers and seasoned expert hikers can navigate the trail with ease and jointly accomplish a healthy form of physical and mental exercise. Hiking on trails of this type and configuration does not require specialized or expensive gear, making it attainable recreation for anyone regardless of their financial situation. The Rock Hollow Trail also supports other recreational activities including bird watching and geocaching. The new features of the rehabilitated and modernized trail will offer all types of users a unique recreational experience that does not currently exist within the trail network at BBF. Additionally, once implemented it is likely that user volume on the trail will steadily increase since the new distinctive trailhead sign will be clearly visible from the primary access road to this area. Likewise, at least one interpretive sign will have information available to the user that is linked to major social media networks to allow the user to share their thoughts and pictures from their hiking experience. Doing so will serve as a low-intensity means to advertise the trail and its offerings and expand participation in recreational activity at BBF.

Environmental Stewardship Benefit: Hiking is an extremely popular recreational activity at the global level. It is low-impact to both environmental resources and the financial resources of participants. In many instances hiking promotes environmental stewardship. When individuals hike and observe nature firsthand it often times allows them to develop an appreciation of plants, wildlife, and various other natural resources. Once this appreciation is formed and value is realized many individuals become loyal stewards to the environment,

supporting conservation and preservation measures for nature. One of the primary goals of the trail rehabilitation and modernization project is to increase knowledge and awareness of prudent environmental stewardship practices. The multi-faceted layout of the new signage will be a diverse representation of various content and themes directly related to environmental stewardship. Allowing users to learn in a natural setting about the significance and importance of various natural resources will provide a solid foundation of environmental stewardship knowledge. Additionally, removal of invasive plant species (Autumn Olive, Japanese Stilt grass) in portions of the trail corridor will serve as a firsthand example of sound environmental stewardship. The planned trail framework and new interpretive signage will also alleviate the need for a paper brochure that currently exists with the present trail configuration, resulting in cost savings from printing and reduction of resource consumption. The fact that all signage for the project is fabricated from 100% post consumer recycled material is another notable positive. This initial rehabilitation and modernization project will undoubtedly reinforce the importance of maintaining natural and cultural resources on Federal public lands.

Communication & Education Value: Education value provided is the project's strongest asset and is the utmost benefit to the public. BBF is situated in the heart of the tri-state area that includes parts of WV, OH, and KY, within a 30-minute or less drive to over 30 public schools and a mere 10 miles from MU, the second largest university in WV. Project staff receives multiple requests annually from various schools to lead interpretive hikes on the trail. Likewise, the trail is regularly accessed by classes from MU to assist with classroom instruction. Attachment 4 contains photos from a recent interpretive hike led by project staff and two professors for over 25 MU students. The new signage along with the planned trail upgrades will facilitate school group tours conducted by project staff on the trail. However, design and content of the new trail signage will allow individuals to successfully complete self-guided tours of the trail. It is anticipated that user demand and interpretive hike requests from school groups will increase with this project, ultimately expanding learning opportunities for a greater number of students. Information and graphics displayed on the signage will be presented in a manner that is comprehensible to hikers of all ages and education levels, ensuring all can gain knowledge of significant historical, biological, archeological, and geologic resources. The diverse content of subject matter presented on the interpretive signage will provide a well rounded assortment of educational material, while also providing insight into the Corps' missions and role in management of natural resources. In addition to possessing significant educational benefit, the project will serve as an improved, noteworthy recreation and environmental stewardship asset for the visiting public at BBF.

Innovativeness: This planned trail rehabilitation and modernization project will not only be the first of its kind at BBF, but will be the first in the county, Wayne County, WV. There are presently no interpretive hiking trails within Wayne County that offer the magnitude of educational content and complementing graphic displays that will exist with this project. Once implemented, the project will serve the public and schools throughout the tri-state area as an excellent educational resource for many years, with opportunities for expansion. Partners will be recognized on the trailhead sign for their contributions to the project. Information links to relevant USACE web content concerning the agency's various missions will be captured on signage upon the trail to give hikers an opportunity to further explore the Corps. A link to the FOBFL Face book © page will also be displayed on trail signage to allow users to explore what the non-profit organization is about, share experiences and post pictures from trail hikes, and serve as cost-free advertising for recreational opportunity offered by the Corps. At the present social media is a tool used by millions and interfacing the trail with such outlets will undoubtedly raise awareness and attract additional users. This approach will provide a direct informational portal to all parties that collectively worked together to make the project possible and successful.

Concluding statement: Beech Fork Lake and its partners sincerely appreciate any consideration to receive Handshake Partnership Program funding to allow for the successful completion of the proposed trail improvement project. If selected to receive Handshake Partnership Program funding, BBF could expend funds and complete the project within the allotted one-year timeframe. In the event BBF and its partners do not receive Handshake Partnership Program funding the team will have a solid trail layout and design completed, ready for implementation once funds are secured in the future.

Challenge Partnership Financial Work Sheet

Corps Project Name: Beech Fork Lake

Work Project Title: Rock Hollow Interpretive Trail Rehabilitation & Modernization Project

POC Name: Charles E. Mathis

Address: 3784 Beech Fork Road City: Lavalette State: WV Zip Code: 25535

Telephone: 304 - 525 - 4831 x4833

Location of Project: Adjacent to project Visitor Center, Above Dam Recreation Area, and Below Dam Recreation Area

Partner Organization 1: Friends of Beech Fork Lake

POC Name: Dan Stevenson

Address: 115 Shamrock Drive City: Lavalette State: WV Zip Code: 25535

Telephone: 304 - 525 - 9553

Partner Organization 2: Marshall University

POC Name: Dr. David Graefe

Address: One John Marshall Drive City: Huntington State: WV Zip Code: 25755

Telephone: 304 - 696 - 2608

Partner Organization 3: Kenny Queen Ace Hardware

POC Name: Kent Queen

Address: 4350 5th Street Road City: Huntington State: WV Zip Code: 25701

Telephone: 304 - 523 - 2331

Partner Organization 4: Huntington Sand & Gravel

POC Name: Tommy Damron

Address: 4002 5th Street Road City: Huntington State: WV Zip Code: 25701

Telephone: 304 - 525 - 5095

Partner Organization 5: Nelson's Excavating

POC Name: Donald Nelson

Address: 5630 WV-152 City: Lavalette State: WV Zip Code: 25535

Telephone: 304 - 522 - 2475

Partner Organization 6: WV Division of Natural Resources

POC Name: Nick Glotfelty

Address: 1163 Wildlife Road City: Point Pleasant State: WV Zip Code: 25550

Telephone: 304 - 675 - 0871

Partner Organization 7: WV Division of Forestry

POC Name: Matt Cook

Address: P.O. Box 189 City: Milton State: WV Zip Code: 25541

Telephone: 304 - 743 - 6186

Partner Organization 8: Great Outdoors Marine

POC Name: Phil Daniel

Address: 4611 WV-152

City: Lavalette

State: WV Zip Code: 25535

Telephone: 304 - 525 - 4556

Partner Organization 9: Pioneer Used Auto & RV Sales

POC Name: Junior Ramey

Address: 4544 Old US Highway 52

City: Lavalette

State: WV Zip Code: 25535

Telephone: 304 - 522 - 6999

Partner Organization 10: Gino's Pizza of Lavalette

POC Name: Teresa Corn

Address: 4675 WV-152

City: Lavalette

State: WV Zip Code: 25535

Telephone: 304 - 529 - 1818

Partner Organization 11:

POC Name:

Address:

City:

State:

Zip Code:

Telephone: - - x

Partner Organization 12:

POC Name:

Address:

City:

State:

Zip Code:

Telephone: - - x

Partner Organization 13:

POC Name:

Address:

City:

State:

Zip Code:

Telephone: - - x

Partner Organization 14:

POC Name:

Address:

City:

State:

Zip Code:

Telephone: - - x

Partner Organization 15:

POC Name:

Address:

City:

State:

Zip Code:

Telephone: - - x

Double click on spreadsheet to access data entry fields and to enter Partner names:

	Local Corps Office	Handshake Funds	FOBFL	Marshall University	Queen Ace Hardware	Huntington Sand/Gravel
Salaries	\$4,000	N/A	\$0	\$0	\$0	\$0
Travel	\$0	N/A	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$17,000	\$0	\$0	\$500	\$2,000
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	N/A	N/A	\$11,430	\$0	\$0	\$0
Personal Property	N/A	N/A	\$0	\$0	\$0	\$0
Volunteer	N/A	N/A	\$2,307	\$1,476	\$0	\$0
In-Kind Services	N/A	N/A	\$0	\$2,669	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$4,000	\$17,000	\$13,737	\$4,145	\$500	\$2,000
Share of Total Cost	8.7%	37.1%	30.0%	9.1%	1.1%	4.4%

	Nelson's Excavating	WVDNR	WV Forestry	Great Outdoors	Pioneer Auto	Gino's Pizza
Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Use	\$2,000	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$0	\$200	\$200	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$923	\$923	\$0	\$0	\$0
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$2,000	\$923	\$923	\$200	\$200	\$150
Share of Total Cost	4.4%	2.0%	2.0%	0.4%	0.4%	0.003276719

	Partner 11	Partner 12	Partner 13	Partner 14	Partner 15	Total
Salaries	\$0	\$0	\$0	\$0	\$0	\$4,000
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$19,500
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$2,000
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$11,830
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$5,629
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$2,669
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$150
Total	\$0	\$0	\$0	\$0	\$0	\$45,778
Share of Total Cost	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Explanations:

- Volunteer hourly rates based on FY15 rate of \$23.07 an hour,
- Cost figures for signage and other key trail features were obtained by researching several manufacturers and obtaining quotes
- Members of FOBFL will provide volunteer labor for planning, design, and construction efforts
- A professor and several students from MU's Natural Resource Management Program will provide volunteer labor
- WVDNR and WV Division of Forestry personnel will also provide volunteer services in trail design and construction
- Gino's Pizza will provide \$150.00 worth of food to construction volunteers and is notated as other in the cost worksheet above
- Nelson's Excavation will provide equipment to perform trail work and Huntington Sand & Gravel will donate \$2,000 in gravel and materials for trail construction
- MU's waiver of their 45% overhead rate has been captured as in-kind services on the cost worksheet
- FOBFL contributions have been listed under "Funds" contributed and the total also accounts for the \$500 cash matching fund for the \$5,000 Governor's Grant

Attachment 1:



Attachment 2:

12. A Tree Falls

Fallen logs and other dead vegetation are important in building the soil. Decaying material returns organic matter to the soil, helping to hold moisture and providing the nutrients that enable other vegetation to grow. Look closely at this decayed log. How is the soil around it different from other soils nearby?

13. View Point

From this vantage point you can see Beech Fork Lake, the dam, marina and visitor center. Resource management at Beech Fork is an example of how man can alter his environment to benefit people, wildlife and the forest.

14. The Right Spot

Many factors influence which species of trees will grow best on a particular site. Some of these are climate, soil type, aspect (the direction a slope faces), and slope position (ridge, cove or bottom). If you look down into this cove, you will notice an abundance of American beeches, which prefer the moist soils common in coves and on northeastern slopes. Immediately around you, however, white and chestnut oaks are predominant. These are better adapted to grow on drier soils found on ridge tops and southwestern slopes.

15. Log-Rhythms

If you look closely, you can see that the path follows what might have been an old logging trail. Over the years most of these forests were logged for timber. Skid trails crisscross the hills as reminders of the time when men have dragged huge logs out of the woods to the local lumber mill.

16. Seedlings, Suckers and Sprouts

By now you can see that the forest is a dynamic community. It grows, matures and dies and young trees continually appear to replace the old. New trees may arise from seeds, stump sprouts or root suckers. Some trees such as these Virginia pines grow from wind-blown seeds from nearby stands. Seeds of other trees like sandcherry and wild cherry may have been brought in by birds. As the forest matures, acorns and hickory nuts, perhaps buried by squirrels, may also sprout. Neighboring beeches will contribute to the new growth by sending up root suckers. When the forest is harvested, stump sprouts from oaks and maples will initiate regeneration of the next stand.

17. Discover something!

The forest is an ever-changing place. Many factors affect its growth and composition, some of which can be seen along this trail. The soil is of moderate difficulty and proper footwear should be worn. Take your time as you walk, there is much to see and hear. Maybe you'll discover something new today.

18. Place Invaders

Men have had a major influence on the forest. When this area was settled, he cleared land for fields. If these fields are abandoned, a natural succession takes place and these clearings eventually return to woodlands. Redstart, sumac, Virginia pine and blackberries are some of the first species to invade an abandoned field.

19. Wire Ahead

The remains of this barbed wire fence further indicate the effect of man on the land. Throughout this area farmers fenced their land, both in and out of the woods, to graze cattle. Grazing disrupted the natural process of succession in the forest by destroying understorey plants, including the young trees that would have been the next generation's timber.

20. Trees With a Twist

Here you can see an unusual example of competition. A sycamore and a beech grew too closely to one another. Normally one would have crowded the other out, but these have intertwined their trunks as they grew against each other. This is just one of many interesting features along the trail. Remember to keep your eyes and ears open and perhaps you'll find some others.

21. Branches and Branches

This stream has a strong influence on the species found around it. Soil and nutrients washed from higher slopes are deposited along the stream bank making richer, deeper soils. This favors such trees as American beech and yellow poplar, which do not grow as well on the higher, drier slopes.

22. Fire!

Fire has played a major role in the forest. As recently as 1964, this cove was repeatedly burned over. This charred stump is typical of what many expect to see after a forest fire. While some trees were killed outright, many others will take years to die. We will see some of these trees further along the trail. Regardless of how immediately visible the effects are, uncontrolled wildfire is generally a destructive force in the forest.

23. The Understory Story

The understory, or the network of plants that grow under the main tree canopy, is an important part of the forest community. Seedlings growing here will one day replace the dominant trees you now see. Shrubs and small trees, such as sassafras and dogwood, provide food and shelter for wildlife, as do ferns, mosses, wildflowers and other small plants. The understory vegetation also protects the forest floor from erosion. Dead leaves and debris collect around these plants intercepting rainfall and reducing runoff, while their roots hold the soil and improve its air and water holding capacity.

24. Your Slip is Showing

If you look up the hill, you will notice that many of the trees are leaning or have fallen over. This is the result of a slip. Slips occur when a permeable layer of soil on a slope lies over a second layer of less permeable material. Water, moving between the two layers, weakens the bond between them, and the top layer will "slip" down the slope. Just beyond the next stop you can see the scars, or the break in the ground, indicating the top of this slip.

25. Here Comes the Sun

Here a mighty beech has fallen, leaving a large opening that allows more sunlight to reach the forest floor. With the extra light ground

26. Vegetation will prosper. Small trees will grow faster and eventually two or three of them will fill the gap. Look through the center of this tree. The rotting hole, which weakened the tree, also provided numerous homes for a variety of wildlife.

27. Weathering Heights

Forest soils develop from the weathering and consolidation of a variety of mineral and organic materials. In this area the soil originates primarily from indurated or hard-packed clay, sandstone, siltstone and shale. Many forces, including running water, freezing and thawing, wind, chemical reactions and plant growth, work on these materials to break them down into the smaller particles that form soil. Here you can see the effect of water on the sandstone. Pick up a small piece of stone and rub it between your fingers. What does it feel like? What kinds of soils would you expect to form from weathered pieces of this rock?

28. On the Rocks

Plants are a major force in the weathering of rocks. Primitive plants, such as lichens, grow on the surface of rocks, depriving minerals, holding moisture and collecting particles of mineral material. As this material collects, mosses, ferns and other plants begin to grow. Slowly the soil is built up until there is enough to support larger plants, such as trees. As they grow, their roots push into cracks, helping to break the rock apart.

29. Fires and Dens

Previously we said that it can take a long time for a tree to die as a result of a fire. This beech was fire-scarred many years ago. It fell the tree open to attack by insects and fungi which have destroyed the inside of the tree. Although it now serves wildlife as a den tree, such fire-scarred trees have had most of their potential value as timber.

Rock Hollow Trail

Beech Fork Lake
West Virginia

Key
Trail
Creek
1+ Station

Match post number with map and text.
Walking time: 30 minutes.

US Army Corps of Engineers
Huntington District

Dogwood

Staghorn Sumac

American Beech

White Oak

Virginia Pine

100' 0 100'

Visitor Center

9
8
7
6
5
4
3
2
1
15
14
13
12
11
10
16

You Are Here

200'

N

9 of 10

Attachment 3:



Attachment 4:

