ROOTED

2016 ANNUAL REPORT
AND A LOOK BACK AT THE LAST TEN YEARS
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A LETTER FROM THE CHAIRMAN AND THE PRESIDENT

1. A VOLUNTEER BOARD OF DIRECTORS that has willingly shared their time, talents and experiences to put the organization on a sound path to advance our mission. We’ve completed the transition from our inaugural Board to those who will lead us into the next decade. We offer a warm welcome to Mark Emmerson, Chairman & CFO of Sierra-Pacific Industries; and Jeff Hearn, a retired paper maker with 43 years of experience in Brazil, Canada and the U.S. industry. Additionally, our appreciation to our longest-serving Board Member, John Weaver, as he completed more than nine years of service.

2. A SMALL BUT DEDICATED STAFF that brings rich history and capacity to work with our Board and partners to do that which others can’t or won’t. Kudos to Florence Colby, Manager of Organization Support, and Alan McGregor, Vice President-Communities, as each begins the transition to part-time work and ultimately retirement.

3. FUNDING PARTNERS who have generously invested alongside the Endowment in a spirit of urgency and acceptable risk-taking to move the needle for the Continent’s forests and forest-rich communities. From the USDA Forest Service and THE SOFTWOOD LUMBER AGREEMENT of 2006 expired this past October. Ten years ago, that Agreement put a trade dispute to rest. Unfortunately, it appears that trade conflict between the USA and Canada is escalating again. As neighbors and friends do, our two nations would be better served to find a way to settle these issues. Instead of focusing on differences, we should be investing time and resources (both human and financial), collaborating to address common forest health threats and to growing markets for the products and services that our continent’s forests yield.

Against this backdrop, this year we are celebrating 10 years of advancing working forests and family-wage jobs in rural, forest-rich communities all while ultimately supporting the North American forest industry. Anniversaries are good times to reflect on both successes and opportunities for improvement as well as things for which we are thankful. In that spirit we have put together our list of the top 10 things for which we at the Endowment are most thankful (we could enumerate many more).

THE SOFTWOOD LUMBER AGREEMENT of 2006 expired this past October. Ten years ago, that Agreement put a trade dispute to rest. Unfortunately, it appears that trade conflict between the USA and Canada is escalating again. As neighbors and friends do, our two nations would be better served to find a way to settle these issues. Instead of focusing on differences, we should be investing time and resources (both human and financial), collaborating to address common forest health threats and to growing markets for the products and services that our continent’s forests yield.

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Natural Resources Conservation Service to the Department of Defense and EPA; from the Knobloch Family Foundation to Duke Energy—we couldn’t do what we do without you. Special thanks to Jim Hubbard, Deputy Chief, State & Private Forestry, upon his retirement from the Forest Service. Jim has been a tireless advocate for partnerships including a productive one with the Endowment.

4. **COLLABORATORS** such as the Conservation Fund who help shoulder the load to advance our important work. A shout-out to Tom Martin and the American Forest Foundation for their leadership in the North American Forest Partnership that is working to strengthen cross-segment collaboration in the broader forestry community.

5. **OUR GRANTEES** who share our vision for healthier forests, more robust markets and vibrant communities and add hands and feet to our work at the ground level. Thanks to each of our on-the-ground partners in five states in the Sustainable Forestry and Land Retention Program who are working to help African American forestland owners not only retain their land but also become advocates for working forests.

6. **A CADRE OF TALENTED CONSULTANTS** who’ve added special skills and helped us stretch our lean staff to aid us in getting the job done. A special thanks to Matt Krumenauer, Future Resource Strategies, Salem, OR for his leadership in Oregon Torrefaction that holds great promise to provide markets and jobs from forest restoration work on National Forests while advancing a renewable, domestic green energy product.

7. **OUR HOME COMMUNITY**, Greenville, SC, for being supportive in so many ways. Accolades to Leon Patterson, former Chairman of The Palmetto Bank, for giving us our first office.

8. **TO THOSE INNOVATORS IN THE PRIVATE SECTOR** who, along with investments from the Endowment, are working to create new forest products and forest-sector jobs of the future. Good luck to CEO Theodora Retsina and her team at American Process, Inc. and their peers as they work to unlock the potential of nanotechnology to create 21st Century products to meet global needs.

9. **VISIONARIES IN THE U.S. AND CANADIAN GOVERNMENTS** who leveraged a long-running trade dispute to create the Continent’s largest public charity dedicated to working forests. And to our friends at the Canadian Forest Service, under the leadership of Glenn Mason, who understand the importance of continuing cross-border collaboration.

10. **WE SAVE FOR LAST AMERICA’S FORESTS** as they work to clean our air and water, provide renewable products that meet so many important needs and support a broad array of fish and wildlife that enrich our lives. A tip of the hat to the fact that those forests provide safe clean drinking water for two-of-three Americans every day.
The Endowment works collaboratively with partners in the public and private sectors to advance systemic, transformative and sustainable change for the health and vitality of the nation’s working forests and forest-reliant communities.

America’s forests are sustainably managed to meet broad societal objectives such as marketable products, clean waters, wildlife habitats and other ecological services, while ensuring healthy and vibrant forest-reliant communities.

The U.S. Endowment for Forestry and Communities, Inc. is a not-for-profit public charity. It was established September 21, 2006, at the request of the governments of the United States and Canada in accordance with the terms of the 2006 Softwood Lumber Agreement between the two countries.

The Endowment operates under a “theory of change” that focuses on work in three areas: retaining and restoring healthy working forests; promoting and capturing multiple value streams; and enhancing community capacity, collaboration, and leadership. While many of our programmatic investments don’t lend themselves to simple characterization, all are closely aligned and integrate well under this theory.
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* Began service, October 2016
** Completed service, October 2016
“Until you dig a hole, you plant a tree, you water it and make it survive, you haven’t done anything. You are just talking.”

-Wangari Maathai
BUILDING WITH WOOD HAS ITS SHARE OF ADVANTAGES

and is by far the most eco-friendly choice. Still, concrete is a popular choice for the construction industry, and until this industry makes a big shift in its practices, more creative solutions must be found to ameliorate the stress that concrete makes on the environment.

Concrete is most harmful because of its production; cement accounts for up to five percent of the world’s CO₂ emissions. However, a group of scientists has found a solution. They suggest adding wood—very, very small wood. It’s called nanotechnology.

Nanotechnology is the understanding and manipulation of matter at the nanoscale, which is, according to the National Nanotechnology Initiative, “a million times smaller than the length of an ant.” Matter at the nanoscale can exhibit different properties than in its larger form; for example, it could be stronger or magnetic.

Recognizing the need for an alternative to traditional building materials, as well as a broader need for additional ways to keep America’s forests sustainable, the Endowment and the USDA Forest Service created P3Nano, a public-private partnership that would investigate the use of wood-based nanomaterial for commercial projects.

One project funded by P3Nano examined the addition of wood-based cellulosic nanocrystals in a concrete mix. The result was remarkable.

“Our lab research showed that the cellulosic nanocrystals were particularly efficient in enhancing the strength of the concrete,” explains Jason Weiss,
director of the Oregon State’s Kiewit Center for Infrastructure and Transportation Research. “What’s better, the use of the nanocrystals could also reduce CO₂ emissions, as they offset the amount of cement needed in the concrete.”

To be sure, the addition of the nanocrystals is small, but considering about 4.3 trillion tons of concrete are used around the world each year, this small addition could make a large impact.

According to Michael Goergen, Vice President-Innovation and Director of P3Nano at the Endowment, the use of nanocrystals could have other positive effects as well.

“Adding nanocrystals into the concrete mix likely reduces the amount of water needed, while increasing the amount of time you can work with the mix. Yet it still sets faster than concrete without nanomaterial. The nanocrystals also reduce the need for expensive chemicals that perform similar functions, further reducing costs.”

In the summer of 2017, P3Nano will lead a project to test the performance of cellulosic nanocrystal concrete with a bridge deck in Yreka, California.

“After this demonstration, we expect the market to begin to grow for cellulosic nanocrystals,” says Goergen.

Concrete mix is only one application of P3Nano’s work with nanotechnology. The group is also testing a replacement for fiberglass, as well as innovative food coatings. In addition, they have funded the growth of a commercial venture in Massachusetts and are currently soliciting proposals to help bring this wonder material to the market.
Currently the Skylines of New York, Chicago, and Los Angeles are drawn with nothing but concrete, glass, and steel. It’s the Endowment’s hope, though, that a new material will soon join the ranks: wood.

Called mass timber construction, it’s the environmentally-friendly alternative to building with concrete or steel, and it’s grown in popularity in Europe in the last 20 years. The construction industry in the United States is catching on, but it still has a ways to go.

“Wood construction is experiencing a renaissance for a few reasons,” explains Michael Goergen, Vice President-Innovation at the Endowment. “Not only is wood an environmentally-preferable building material, but also with wood, we can build faster on smaller footprints with less noise and disruption to neighbors. In addition, building with wood allows us ultimately to save money—obviously one of the keys to getting builders interested in this technology.”

Goergen admits that encouraging more mass timber construction won’t come without its challenges, though. The U.S. has outdated building codes, which generally do not allow mass timber buildings above six stories. Too, there is limited mass timber production capacity.

The Endowment has partnered with the Softwood Lumber Board and the American Wood Council (AWC) to address code challenges, as well as to help facilitate the growth of the industry. The AWC is already working on making changes to the building codes, and directing funding to facilitate mass timber utilization. Meanwhile, the Endowment and its partners are also working to create efficiencies in the supply chain for mass timber fabrication, delivery, and construction.

“The Endowment projects:

- Logistics
- Design and Build
- Life Cycle Analysis
- Warehousing Strategy
- Workforce Development
- Seismic Testing
The forest products industry is a leading industry in the United States, employing about one million workers and accounting for approximately four percent of the total manufacturing GDP, according to the American Forest and Paper Association (AF&PA). The product scope of this industry ranges from lumber and plywood to natural materials like cellulose fibers, which are used in textiles, papers, and diapers.

It’s easy to imagine, then, the industry’s extremely complex supply chain, as well as challenges that emerge from managing such a complicated system. Chief among these challenges is the harvesting and hauling of timber.

To confront this challenge, the Endowment brought together a variety of stakeholders to discuss ways to maximize efficiencies in timber hauling methods. Forest products sector leaders determined three areas of potential future work: trucking, general business environment, and harvesting. Of the three areas, trucking had the most potential for the group to effect change quickly.

In an attempt to alleviate the problem, the Endowment is laying the foundation for a timber hauling pilot program in the southeastern U.S. If adopted, this program will track data and test efficiencies, and then bring findings back to the larger consortium to determine next steps.

Carl Chapman, VP of Raw Material Procurement for Weyerhaeuser Company, one of the largest forest products companies in the world, elaborates: “The project has the potential to significantly improve the productivity of pulpwood and log transportation. With that productivity comes the opportunity to multiply the effectiveness of the available drivers, lower the cost of products, and improve profit margins for all supply chain participants.”
ONE GENERATION PLANTS THE TREES, AND ANOTHER GETS THE SHADE.

—Chinese proverb
SPROUTS
The Myakka River, located in southwestern Florida, winds through 58 square miles of wetlands, hammocks, prairies, and pine-lands, eventually flowing into Charlotte Harbor, an arm of the Gulf of Mexico. Twelve miles of the river are currently preserved as Myakka River State Park, protecting an array of wildlife in their natural habitats. Thanks to the Endowment’s Healthy Watersheds Consortium Grant Program, an additional 1,100 acres known as Triangle Ranch will also be preserved.

“Knowing that we had funding to cover us through the summer allowed us to focus on making this deal work.”

– Debi Osborne
Director of Land Protection
Conservation Foundation of the Gulf Coast

The location of the land is crucial,” explains Debi Osborne, Director of Land Protection at Conservation Foundation of the Gulf Coast (CFGC). “It connects 110,000 acres of previously protected land, known as ‘Myakka Island,’ with another 2,000 acres that are also protected.”

CFGC was interested in purchasing a conservation easement that would permanently protect the land, both because of its proximity to the Myakka River State Park, and also because the land included more than three miles of the Myakka River—a vital watershed for the area, containing 120 species of birds, including federal and state listed endangered and threatened species.

The Endowment’s Healthy Watersheds Consortium Grant Program, supported by the U.S. Environmental Protection Agency, focuses on accelerating the strategic protection of healthy freshwater ecosystems and their watersheds across the country. The response to the program has been overwhelming: the Endowment received 169 applications requesting more than $37 million.
They awarded nine programs with more than $1.4 million that will benefit organizations in seven states. One of these programs is the Myakka Island Conservation Corridor, which received a $156,000 gift to conserve more than 10,000 acres within the Myakka River Watershed.

“The watershed grant enabled us to use our resources more wisely,” says Osborne. “Fundraising for unrestricted funds is extremely difficult and time consuming. Knowing that we had funding to cover us through the summer allowed us to focus on making this deal work. It also gave us the staff resources to apply for big grants, using this property as a match to get additional funding for other properties along the river.”

The Myakka Conservation Corridor is only one example of several watershed projects that the Endowment’s support has helped to propel into motion, and they are optimistic that the other projects will be just as successful as the Myakka River project.

“It’s our hope that these grants will accelerate protection and improve management of watersheds across the U.S.,” says Peter Stangel, the Endowment’s Senior Vice President. “I look forward to seeing what the future holds for all of these organizations.”

In late 2016, the USDA Natural Resources Conservation Service added its weight to the program with a two-year investment of $1.5 million to grow the funding pot in 2017-2018.

/ THE ENDOWMENT FUNDED NINE INITIAL PROPOSALS FOR ITS HEALTHY WATERSHEDS CONSORTIUM GRANT PROGRAM:

- PERMANENTLY PROTECTING THE LARGEST RIVERS IN EASTERN MAINE: WASHINGTON COUNTY, MAINE
- HEALING WATERS REGIONAL LANDSCAPE INITIATIVE: CACAPON RIVER WATERSHED, WEST VIRGINIA
- MYAKKA ISLAND CONSERVATION CORRIDOR: SARASOTA AND MANATEE COUNTIES, FLORIDA
- COLORADO CONSERVATION EXCHANGE, ACCELERATING INVESTMENT IN WATERSHED HEALTH: BIG THOMPSON AND CACHE LA Poudre WATERSHEDS, COLORADO
- HEALTHY WATERSHEDS CALIFORNIA: 7 MILLION ACRES OF WATERSHEDS IN CALIFORNIA
- PROTECTING FORESTS TO PROTECT WATERSHEDS IN CALIFORNIA: FORESTED WATERSHEDS IN CALIFORNIA
- PROTECTING BLUE CREEK & THE Klamath RIVER FOR SALMON, WILDLIFE, AND PEOPLE: RURAL NORTHERN CALIFORNIA
- FRAMEWORK FOR ACQUIRING AND SUSTAINABLY MANAGING AGRICULTURAL LAND: JOHN DAY BASIN, OREGON
- ACCELERATING WATERSHED PROTECTION IN THE CENTRAL PUGET SOUND REGION: PUGET SOUND, WASHINGTON
ACCORDING TO U.S. Census Numbers, North Carolina’s Wake County grew 43.5 percent between 2000 and 2010. Currently the area is growing by an average of 64 people every day, adding 100,000 people in the last four years.

Juxtaposed with this bustling county, located close to downtown Raleigh, is a quieter plot of land—127 acres, to be exact. Comprised of bottomland hardwood forest, uplands, a lake, and a cabin, the land served as a Raleigh family’s “country place” for generations. Just recently the landowner expressed interest in donating a conservation easement on the property.

Durham’s Triangle Land Conservancy was thrilled with the offer, but it wasn’t as simple as accepting the gift.

“Even when a landowner donates everything, it still costs $20-30 thousand for all of the legal transactions,” explains Leigh Ann Hammerbacher, Associate Director of Conservation and Stewardship. That’s where the Enviva Forest Conservation Fund, administered by the Endowment, comes in. They provided the funds necessary for the transactions to take place, and now the area will be preserved for generations to come.

What does this mean for the ever-growing city adjacent to it?

“The lake and wetlands on the property help improve the water quality of the Neuse River,” explains Hammerbacher. “There are over 75,000 people who drink this water, so conserving the area is extremely important for all of our downstream neighbors.”

In addition to the Triangle Land Conservancy, the 2016 Enviva Forest Conservation Fund matching-fund grant will benefit the Nature Conservancy North Carolina Chapter, the Virginia Department of Conservation and Recreation, and the Nature Conservancy Virginia Chapter. The Endowment evaluated applications based on a number of factors, including the ecological quality of the property, potential threats to the property’s integrity, its associated conservation values, and links to other conservation areas.
“THE FIRST BURN for that first hour is very critical,” says Bruce Daucsavage, President of Ochoco Lumber Company. “There’s so much hinging on that test, so many people waiting to see what happens.”

Daucsavage is referring to a testing process occurring at Portland General Electric (PGE) this fall, in which up to 5,000 tons of wood will be torrefied in order to determine if it is a viable solution for the replacement of coal in power plants. Torrefaction, a roasting process that treats wood with high heat in the absence of oxygen, creates a more energy-dense, easily transportable product that can serve as a carbon-friendly replacement for coal.

“A number of simultaneously occurring things have led us to this point,” explains Matt Krumenauer, CEO of Oregon Torrefaction, LLC, a benefit corporation created by the Endowment, along with partners Ochoco Lumber Company and Bonneville Environmental Foundation. “The Endowment recognized torrefaction as a possible solution to forest health problems, so they invested in pushing this technology to the commercialization stage. In addition, Oregon passed a law banning coal power and increasing the renewable power requirements.”

Oregon Torrefaction identified an opportunity with PGE, one of the state’s largest and oldest businesses, who was investigating possible alternatives to coal. The Endowment suggested it could help provide torrefied wood, bringing in Ochoco Lumber Company and others to help amass the material. At the same time, Ochoco had been looking for solutions to help restore forests in the west.

“We had a lot of non-saw timber trees that needed to be thinned,” explains Daucsavage. “Otherwise you’re at risk of forest fires. The Endowment had a possible use for the resulting material, converting the biomass to torrefied wood. And with coal power ending, this fit in beautifully.”

“The project benefits everyone,” adds Krumenauer. “We’re reducing the risk of forest fires through the tree thinning. We’re increasing forest health. We’re providing a possible solution for coal replacement. And we’re creating jobs in rural communities in the process.”

The test this fall will confirm the viability of torrefied wood as a replacement for coal at the regional level.

“It’s going to be a watershed moment,” concludes Daucsavage.

/ A SOLUTION TO A BURNING QUESTION

/ UPDATE: 12/20/16

AT PRESS TIME on the annual report, we received an update on the torrefaction project. Oregon Torrefaction procured or produced approximately 5,000 tons of torrefied biomass from four facilities: two small facilities operated in Boardman, a modest supply from Airex in Quebec, and the majority from New Biomass in Mississippi.

In December, PGE performed two small test burns, using about 10 percent of the torrefied biomass pile. The first burn, while successful, identified some issues, and relatively minor modifications were made to the pulverizer. A second burn was then conducted that proved even more successful, and due to an unplanned outage of two coal-fired pulverizers during the test, biomass-fired power was even deployed for consumer use.

Despite the successful tests, however, Mother Nature temporarily put the project on hold. The Polar Vortex that hit the Pacific Northwest in mid-December created extremely low temperatures, requiring Boardman to be in full-power production. Therefore, the long-planned 100 percent torrefied biomass burn has been postponed until early 2017. Suspense is heightened, as this test will not only yield more information on biomass performance, but also will allow assessment of the success of air emissions as compared to coal firing.
“THE CREATION OF A THOUSAND FORESTS IS IN ONE ACORN.”

—Ralph Waldo Emerson
SAPLINGS
“LAND IN THESE TIMES IS GOLD,” SAYS LOUIS MANIGAULT, SR.

“God’s not making any more land.”

Manigault is an African American landowner in Berkeley County, South Carolina. He bought his family home, along with 39 acres, from his cousin and then purchased an additional 53 acres from his father. He has nine children who all worked on the land as they grew up. The family had cows, chickens, and hogs, and they grew deer corn, soybeans, sugar cane, and sweet potatoes. In addition, the family had their own garden that contained—among other things—peanuts, which the children will attest to harvesting from 4 a.m. until long after dark on Saturdays. The Manigaults’ blood and sweat were in the land, and the land was in their hearts.

Unfortunately, though, families like the Manigaults were facing the harsh reality that comes with owning that “gold”: though much work goes into the land, this doesn’t guarantee that money comes back out of it.

Enter the Endowment’s Sustainable Forestry and African American Land Retention (SFLR) program. Together with the Natural Resources Conservation Service (NRCS) and the USDA Forest Service, the group has committed more than $4 million over the next four years to fund

The SFLR program will also work to educate these families about forestry technologies and productivity, guiding them in developing income streams from their land.
programs assisting African American families in restoring and securing ownership of threatened forestland in the southern United States. The SFLR program will also work to educate these families about forestry technologies and productivity, guiding them in developing income streams from their land.

Families like the Manigaults, aided by the Center for Heirs' Property Preservation (CHPP), learned to make a long-term forest management plan with 10-15- and 30-year goals. They also learned how to lease their land for farming and hunting, and how to apply for cost-share reimbursement through the NRCS for replanting trees.

Others, like a woman who grew up on the King Plantation in Charleston, South Carolina, learned how to have a parcel of land deeded to her so she could have a home on the property left to her in a will. The woman was given a piece of land by her father; however, she was one of seven children, and the land was given to all seven “in common.” CHPP guided her in reclaiming her inheritance.

The stories are endless, and the assistance that the SFLR is giving to these landowners is priceless. This is the second round of project funding for the SFLR, the award-winning pilot program implemented in 2013-2015 in counties in South Carolina, Alabama, and North Carolina. New programs have been added in Arkansas and Georgia.

The program hasn’t been without its challenges—challenges that will continue with each new case. Families have felt slighted by the legal process, so they are hesitant to trust outside advice. Take Manigault, for instance, who wouldn’t even sit in the first few meetings with the SFLR representative.
It wasn’t until the representative convinced him that he was there to help that Manigault started working with him.

“We are learning as we go,” says Alan McGregor, Vice President-Communities for the Endowment. “At first, we defined the biggest problem as broken trust. Could we get black landowners to trust the government agencies and private forestry professionals? Now, landowners are teaching us that it is more about them getting the knowledge, relationships, and confidence they need to be successful forest owners. It is not so much about trust as it is empowerment.”

Today Manigault is a champion for the SFLR program. He receives payments for harvesting trees from his land, and he has applied for cost-share to re-forest the land. He, along with his family, now has hope that this land will remain in their family for years and future generations to come. 

The Manigaults (left to right:) Rosaiah, Louis, II, Desma Manigault-McElveen, Renida, Christine, Hester (mom) and Louis, Sr. (dad) and Emily
The biomass industry is a diverse and fragmented one,” explains Brett Hogarth, Head of Business Development for Ecostrat, a biomass wood chip supply and feedstock consulting company. “It’s an imperfect grouping of many different industries and sectors, all linked by their production or consumption of wood (waste) products for energy, but often invisible to one another and to the public.”

Ecostrat, with financial support of the Endowment, set a lofty goal: to enhance one central database for all biomass facilities in North America, giving the end user a more holistic and accurate view of the industry. This was a groundbreaking project that built on an early Endowment project; the only websites in existence featured segmented cohorts of the industry, but nothing all-encompassing.

The site, Wood2Energy.org, features a mapping tool that aggregates facility data, with separate, clickable layers that organize data by facility type, size, and operational status.

But why the need for such a site? According to Hogarth, it’s an extremely informative database for those who are working to grow the industry—developers, industry proponents, associations, policymakers, and lobby groups.

But why the need for such a site? According to Hogarth, it’s an extremely informative database for those who are working to grow the industry—developers, industry proponents, associations, policymakers, and lobby groups.

Perhaps more importantly, though, is the broader narrative that this database tells.

“The data tells many stories, both at the micro and macro scale,” says Hogarth. “You draw meaningful conclusions about market and policy conditions that allowed certain industries to grow in certain geographies, while not in others.”

Though the website is now live, the project is continually developing. Employees at Ecostrat search daily for new companies producing or consuming biomass in order to keep the site up-to-date.
GOOD TIMBER DOES NOT GROW WITH EASE; THE STRONGER THE WIND, THE STRONGER THE TREES.

–J. Willard Marriott
# Statements of Financial Activity

*For the 12 Months Ended December 31*

## Program Investment

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<th>2016*</th>
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<td>Partner Investment (public and private support)</td>
<td>$7,497,000</td>
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## Program Expenditures:

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<tbody>
<tr>
<td>Grants and contracts</td>
<td>9,274,000</td>
<td>8,341,000</td>
<td>6,458,000</td>
</tr>
<tr>
<td>Impact Investments ($15,035,000 cumulative)</td>
<td>3,500,000</td>
<td>2,613,000</td>
<td>2,750,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$12,774,000</strong></td>
<td><strong>$10,954,000</strong></td>
<td><strong>$9,208,000</strong></td>
</tr>
</tbody>
</table>

## Operation Expense

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel, general and administrative</td>
<td>$703,000</td>
<td>$655,000</td>
<td>$648,000</td>
</tr>
</tbody>
</table>

## Investment Activity

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income, realized and unrealized gains</td>
<td>$11,964,000</td>
<td>($6,805,000)</td>
<td>$17,854,000</td>
</tr>
<tr>
<td><strong>Total Increase in Net Assets</strong></td>
<td><strong>9,484,000</strong></td>
<td><strong>(11,636,000)</strong></td>
<td><strong>13,379,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Assets at Beginning of Period</td>
<td>209,217,000</td>
<td>217,853,000</td>
<td>204,474,000</td>
</tr>
<tr>
<td><strong>Net Assets at End of Period</strong></td>
<td><strong>$215,701,000</strong></td>
<td><strong>$206,217,000</strong></td>
<td><strong>$217,853,000</strong></td>
</tr>
</tbody>
</table>

## Cumulative Leverage (2007–2015)

- **Endowment Investment**: $49,096,000
- **Partner Investment**: $53,006,000
- **External Investment**: $314,246,000

**Total**: $416,348,000

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*2015 information is preliminary pending completion of year-end closing and audit procedures.*
A tree is known by its fruit.

―Saint Basil
10 YEARS
2016 MARKS 10 YEARS FOR THE U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES. TO COMMEMORATE THIS ACHIEVEMENT, WE TAKE A LOOK AT WHERE WE’VE BEEN—AND WHERE WE’RE GOING—WITH OUR EIGHT OVERARCHING INITIATIVES.

1. **Forest Investment Zones** *COMPLETED*

Launched in 2009 as a five-year initiative, the Forest Investment Zone program tested the concept that regional collaboration would increase local, forest-based economic success in distressed forested communities. The program tested three significant forest-based U.S. geographies: the Northern Forest, Central Appalachia, and the Dry Forest. Collectively, the three Zones represent about 10 percent of the nation’s forests. The Endowment committed more than $6 million ($2 million per zone).

The zones collectively raised $8.4 million from more than 100 sources to match the Endowment’s investment.

Essential to this effort was a benchmark report on the status of community forestry commissioned by the Endowment in 2008. The report identified case studies and profiles that created a typology for future use and adaptation.

2. **Asset Creation**

In today’s economy, family assets are a leading driver for prosperity. The Endowment aims to assist families with economic independence, communities with economic development, and, in turn, narrow the racial wealth gap in distressed, forest-rich rural communities. Through programs like the Sustainable Forestry and Land Retention Program, the Endowment works to leverage asset-building opportunities for families, including family-supporting jobs, forest ownership, and family entrepreneurship.

3. **Traditional Markets**

Invigorating markets for traditional forest products such as lumber and fiber is a key driver behind the Endowment’s goals. The Endowment has pioneered work to bring USDA “Research and Promotion Programs,” or check-offs, to the forest products sector.

These check-offs have become catalysts for systemic, transformative, and sustainable change. Successful check-offs to date are the Softwood Lumber Check-off, as well as the Paper and Packaging Check-off. The Endowment did experience one failed attempt at a check-off for the Hardwood Industry, but this failed attempt is an opportunity to learn more about the industry’s inner workings.

4. **Non-Traditional Markets**

Forests produce clean water for 180 million Americans—nearly two-thirds of the country. Healthy forested watersheds ultimately reduce the costs of drinking water treatment and storage, and clean water is a potential revenue source for forest owners. Thus, the primary concentration in the Non-Traditional Markets initiatives is encouraging this potential revenue source for forest owners, which is realized through the Healthy Watersheds through Healthy Forests Program.
5. **Forest Health Initiative**

Nearly 60 million acres of American forests are experiencing mortality rates far outside historical norms due to increased outbreaks of endemic and exotic pests. The Endowment has explored both traditional and cutting-edge approaches to encouraging forest health. Partnering with the USDA Forest Service and the Canadian Forest Service, the Endowment is supporting strategic, cross-border science and research to address the problem of the hundreds of millions of acres of forested land under attack on both sides of the Northern border. In addition, the Endowment is experimenting with biotechnology to address forest health challenges.

6. **Wood to Energy (W2E)**

The Wood to Energy Initiative was launched in 2008 with the aim to explore the status and field of opportunities for woody biomass as a source of markets for forest owners and renewable energy. In 2010, the Endowment partnered with the USDA Forest Service to form the Woody Biomass Joint Venture Fund, seeking to assist and assess near-term opportunities for advancing technologies from lab or research demonstrations as well as stimulating new networks and raising awareness about the biomass industry. The focus, to date, has been rapidly advancing commercialization of both technologies and markets.

7. **Innovation**

The Innovation Initiative seeks to fill knowledge gaps to advance the commercialization of forest products, creating new markets and increasing forest health. The initial project involves a public-private partnership called P3Nano, in which the group is investigating the use of wood-based nanomaterial for a wide range of commercial projects. Another is looking at the potential of mass timber construction (e.g. cross-laminated timber) as a more environmentally friendly construction material.

8. **Forest Retention**

Through the Forest Retention Initiative, the Endowment spearheaded the creation of the National Conservation Easement Database, the first comprehensive system for tracking and managing information about conservation easements. The database helps agencies, land trusts, and others plan more strategically, identify opportunities for collaboration, and advance public accountability. Currently the database contains more than 100,000 easements protecting over 20 million acres. In addition, the Endowment assists the Department of Defense with its Readiness and Environmental Protection Integration (REPI) Challenge Program, seeking to incentivize new base buffering practices that will preserve compatible land uses and conserve natural landscapes.
Carlton Owen of Greenville, SC, the President & CEO of the Endowment since its inception in 2006, has for 40 years been at the forefront of conservation innovation. A forester and wildlife biologist, Owen holds a B.S. degree in forestry and M.S. in wildlife ecology from Mississippi State University. For six years he led his consultancy, The Environmental Edge, LLC, in “bringing business and the environment together” to benefit both. He is a former Executive Director of the Sustainable Forestry Board, Inc. and Vice President - Forest Policy, Champion International Corporation. He has held positions with the American Forest Institute, American Forest Council; American Forest Foundation; Potlatch Corporation; and Mississippi Wildlife Federation. Among his achievements is “Acres for America” — a first-of-its-kind program to offset development acre-for-acre with conservation. The program linked the National Fish & Wildlife Foundation, where Owen served as Vice Chairman of the Board, with Walmart in a $35-million, ten-year commitment that has already helped conserve nearly 1,000,000 acres in the U.S. and was renewed in 2016 for another ten years. He has served on a vast array of boards, advisory councils, and commissions. He is currently a member of the Board of Directors of the Greater Greenville Parks Foundation and SynTerra Corporation. Among Owen’s many recognitions is the Order of the Palmetto, South Carolina’s highest civilian award.
In an effort to explore investments in the biomass energy sphere, the Endowment used the tool of impact investing to make relatively modest Program Related Investments (PRIs) that focused on cutting-edge wood-to-energy conversion technologies. Since then, the Endowment has invested over $6 million in bioenergy companies, logging cooperatives, a Tribal sawmill boiler upgrade, and a firewood bundling facility. Though many of these investments were high-risk, the Endowment saw a need to invest due to the projects’ locations in struggling, timber-reliant communities across the U.S. And to the Endowment, the return would be worth the risk, as the success of these technologies could allow bioenergy to be a major player in the renewable energy field while also providing a market for low-value wood.

Most recently, the Endowment provided a $3.5 million PRI to Oregon Torrefaction to jump start the production of locally-sourced torrified biomass.