

1. Abstract of the Program

Conservation is not a new initiative in Pitt County, North Carolina, but in today's evolving community it has become more important than ever. Environmental education is a priority for the County of Pitt, because education is the key to conservation. Getting citizens outside and exposing them to hands-on activities is a great way to stimulate interest in environmental awareness and that is the objective of our Environmental Education Center. Pitt County and A Time for Science formed a collaboration of specialized professionals, to offer outreach education about the protection and conservation of our natural resources. Whether the students are young or old, we aim to make a difference in the way our citizens take care of our local resources. The Education Center is comprised of two hundred plus acres providing a platform to fuel the interest of visitors to learn more about the environment. With four ponds, intersecting creeks, wetlands, acres of forest, walking trails, and roaming wildlife, we have numerous education subjects at our finger tips. This setting offers a prime resource to anyone who is interested in learning more about the environment, the things we do to affect it, and the steps we can take to protect it.

2. The Problem / Need for the Program

Education and environmental protection are two goals that Pitt County works toward providing our citizens; luckily the two subjects go hand in hand. There is always a need to educate the public and to provide a setting that is conducive to the subject matter. While Pitt County had the employees needed to provide such training and education, finding the best setting for environmental education had become a challenge. There were few sites throughout the county that could offer all of the resources needed for an extensive environmental lesson. Classes, service groups, and curious citizens would often have to travel to a neighboring county to fulfill the need of outdoor, hands-on environmental activities. Providing this much needed resource to our citizens would not only help our own economy, but strengthen our community and allow people the convenience of experiencing the wonders that nature has to offer 'in their own backyard'.

With the drastic budget cuts schools were facing, teachers were finding it nearly impossible to take their classes on field trips to reinforce the curriculum they were teaching in the classroom. Many teachers sought out grants and various types of funding to provide these educational trips to their classes, but with time and money constraints, going outside of the county was becoming unfeasible. Providing an education center that was conveniently located and easily accessible was desperately needed in our area.

Wildlife, plants, aquatic life, and soils are only a few of the areas that comprise a successful environmental education center. Finding a site that offers some of these topics is rare, and locating a site that naturally offers the opportunity to access all of these subjects became nearly impossible. When the search began to find the future site of our Environmental Education Center it was important to find a site that already had natural habitat areas present to allow genuine representation of the resources. Altering locations to create these habitats is not always the best substitution for areas that were naturally created.

The need for an environmental education center was apparent, but being able to provide it to the community while using county monies responsibly became the first priority. This

necessity was quickly acknowledged by our county, and departments began developing plans to turn this vision into reality.

In 1999, Hurricane Floyd left a devastating scar in eastern North Carolina, resulting in some residents opting not to rebuild floodplain areas. Through the FEMA buyout program Pitt County acquired land throughout the county that had been influenced by residential development but would now remain in an idle state. The devastating event presented a silver lining, the acquired land could now be utilized to educate the public of the influence that urbanization has on our land in this rapidly evolving community.

3. Description of the Program

Learning by doing, a simple concept that has become lost in the fast paced, technologically advanced, evolving world we live in. Learning by doing, this straightforward approach to teaching is a key element that is often overlooked in today's classrooms due to the lack of time or money. Pitt County along with A Time for Science make this effective, exciting, inspiring, and fulfilling approach to education available to all interested participants.

Providing a location, facilities, resources and a supportive environment is the goal of the Environmental Education Center. An accessible outreach program allows a community to partake in all the things its county has to offer. This one-of-a kind endeavor within Pitt County is dedicated to advancing science literacy and competency as well as environmental awareness and appreciation by focusing on active participation. Engaging children and adults in fun and educational activities rekindles the interest that may have been lost in the traditional educational process.

The Education Center serves not only the residents of Pitt County but anyone who wants to experience the hands-on activities and opportunities that the Center offers. The collaboration of Pitt County and A Time for Science results in extensive programs that were developed by scientists, award winning science educators, and professionals in diverse science fields. Programs and activities are molded to fit every age and education level, giving everyone the opportunity to find a class that piques their interest.

The Education Center has been home to various math and science competitions, teacher workshops, field trips, field research, sky viewing, telescope workshops, plant identification, and habitat studies. The professionals that develop these programs are also well versed in programs such as FAST (Foundational Approaches to Science Teaching), GLOBE (Global Learning and Observations to Benefit the Environment), NASA (National Aeronautics and Space Administration), Sci-Link (Linking Scientists, Teachers & Students), ENVIROTHON, and much more.

The Pitt Soil and Water Conservation District recognized the opportunity presented by the FEMA buyout in 1999; the vacant land could easily be incorporated into its long running environmental education program and field studies. If creating an Environmental Education Center was as easy as finding a vacant lot, then the planning would have been a quick process. After years of implementing an environmental education program, the Pitt Soil and Water District knew the criteria that would need to be met to have a successful Education Center. Working with various county departments, the District

was able to begin the process of finding a suitable location to establish the Pitt County Environmental Education Center that would make this idle land significant again.

The quiet neighborhood of Contentnea Creek Estates in southern Pitt County was once the site of many homes that enjoyed the low key quality that the large wooded lots and creek side views offered. After Hurricane Floyd in 1999, the peaceful area was quickly inundated with water and would never be the same again. Homes, gardens, and yards in the low bottom area were in complete ruins. Through the FEMA buyout program, residents were given the opportunity to sell their flood prone property to Pitt County. Properties acquired by the County are to remain as open space in perpetuity.

More than ten years after the wrath of Hurricane Floyd, where there once was a peaceful quiet neighborhood, there is now a peaceful quiet area that is flourishing. Meandering streams, wetlands, wildlife, and natural vegetation did not take any time confiscating the vacant areas, quickly diminishing the impressions that were left from human impact. The natural habitats that were forming along Little Contentnea Creek made the area a perfect platform to learn about the environment, conservation, and the role human influence can play.

The Pitt Soil and Water Conservation District began to delineate the county owned land in the area with the dreams of starting an Environmental Education Center. Through a Clean Water Management Trust Fund Grant the Soil and Water District received \$25,000 to purchase a parcel of land that was still privately owned that joined the FEMA property owned by the county. Acquiring this thirty plus acres gave the Soil and Water District the starting point it needed for the Environmental Education Center. The next year involved applying for permits for a wetland study, a no rise flood study, and an environmental impact study.

The remaining residents who live at the entrance of Contentnea Creek Estates were curious at the intentions that the county had for the area. But after reaching out to the small community and explaining to them the plans that were laid out for the area, their minds were eased knowing that booming development was not in the future. Reverting the lots back to the way nature intended with minimal human impact was the ultimate goal. John and Nancy Bray, two of the residents, became extremely interested and supportive of the project, offering to help any way possible. Little did the county know what kind of help they were about to receive.

As the small Education Center began to progress, the Soil and Water District would pursue grants to aid in further establishing the Center. Through the Ayden Rotary Club, a grant was given to buy the materials needed to build an amphitheater. Other contributions came in the form of labor; service groups such as the ULSTER group accepted the task of building and installing the benches. Although, the project was not a walk in the park, the kids completed the job through teamwork and left with a feeling of accomplishment.

John and Nancy Bray, advocates not only for education but also for conservation, went above and beyond when they started to purchase land throughout Contentnea Creek Estates. What started as a piece by piece effort has resulted in the Brays owning an additional two hundred acres that contiguously flows with the county's land. The

Bray's put their land into a permanent conservation easement and joined in the efforts to transform the entire area into an Environmental Education Center. The collaboration of Pitt County and what became Bray Hollow, LLC opened new doors to the citizens of Pitt County to experience nature, giving the public a chance to "Get away without going away".

Working with public and private schools, service groups, adult groups, colleges and universities gave the Environmental Education Center a spotlight to reach more and more people throughout Pitt County and neighboring counties. As demand grew for programs and activities, the need for more experienced volunteers grew also. John and Nancy Bray (Bray Hollow, LLC) pooled resources with the Greater Greenville Community Foundation Charitable Fund and created A Time for Science. A Time for Science, as mentioned above, grouped together various knowledgeable professionals to create more programs and activities to meet the increasing demand. Building partnerships allowed the Environmental Education Center to grow and evolve into a vital instrument in Pitt County. The Education Center and the professionals dedicated to its success, demonstrate that the wellbeing and conservation of our natural environment is essential and must be appreciated, understood, and protected.

4. Use of Technology

- ~ Internet
- ~ Websites (www.pittswcd.us; www.atimeforscience.org)
- ~ GIS
- ~ GPS
- ~ Field Laboratory Equipment
- ~ Bench Level Surveying Equipment
- ~ Telescope

5. The Cost of the Program

- ~ \$25,000 Clean Water Trust Fund Management (grant)
- ~ \$10,000 Global Transpark (grant)
- ~ \$2,500 Mid-East RC&D
- ~ \$1,500 N.C. Foundation for Soil and Water
- ~ \$1,000 Pitt Soil & Water Conservation District
- ~ \$500 Ayden Rotary (grant)
- ~ \$60,000 Capital Improvement Submitted
- ~ \$1,000 Legal Fees (In-Kind)

6. The Results / Success of the Program

Success has come in many forms through the Environmental Education Center. Our objective was to provide education opportunities in our community while making a difference in the way citizens viewed our natural resources. Identifying needs in a county, fulfilling those needs, and hopefully making an impact along the way is a daunting task for anyone. But the Pitt County Environmental Education Center has proved that even when a program starts small, with a few helping hands, it can evolve

into something truly amazing, and that's where you will see differences being made. The people that have participated in the programs at the center left with a positive lasting impression, and that is what this process was about from the beginning.

The Education Center has been home to field trips for various college and high school science classes throughout Pitt County. The site provides all the necessities to experience the lessons that are being taught in the classroom. From water quality studies, habitat studies, plant identification, to soils, the resources are abundant for field research. Sue Purser, an AP Biology teacher at D.H. Conley High School has repeatedly used the Education Center for field trips and as a research site. More than 64 of her science students have participated in projects at the center to gather information about the semester's curriculum and research papers. Students now understand how significant the 'learning by doing' approach is in the environmental science world.

Service groups such as 4-H and the ULSTER group have participated in summer education programs held at the Education Center. Over twenty-four 4-H members have taken part in the "Water for Life" program that is offered in the summer to educate children on the importance that water quality, water quantity, and wildlife habitats play in our lives. The ULSTER group has continuously returned to the Education Center after its first visit. Performing service projects to build relationships through teamwork was the goal of the ULSTER group. They have built and installed an amphitheater and upgraded the walking trails at the center which benefitted not only our goal but their personal goals as well.

The increased attention A Time for Science has received in the past year has catapulted the requests for more workshops at the Center. What started with a handful of volunteers has now developed into dozens of full time volunteers with the addition of floating volunteers who are eager to not only help, but to also take part in the activities the Education Center has to offer. Summer workshops have become extremely popular for teachers, summer camps, and adults. The flexible schedule that the season offers allows many parents to take part of the programs with their children. The night time sky viewing has become a hit with parents and children and is offered multiple times throughout the month.

The programs are not only raising attention but also awareness in our community. Coverage from websites, newspapers, and local television stations have led to citizens noticing the opportunities for education at the Pitt County Environmental Education Center and the important role it plays in protecting the precious resources our community has to offer.

7. Worthiness of an Award

Pitt County along with A Time for Science has gone above and beyond to provide local citizens with an indispensable education resource. Appreciation, conservation, and preservation are the foundational lessons that need to be instilled into children and adults to prepare our community for a sustainable future.

While the concept of an open education program is not a new idea, the collaboration and teamwork that has been developed through the Environmental Education Center and A

Time for Science gives Pitt County the strength and opportunity to reach out to more individuals than if each entity were trying to educate citizens alone. This collaboration has gathered the forces needed to facilitate various education programs and giving participants a menu of topics to choose from that will fulfill the hunger of every curious mind. People who partake in the programs are often repeat customers due to the array of options that A Time for Science offers.

The success of the Environmental Education Center has left a lasting impression on Pitt County and on the volunteers that have made it happen. A Time for Science has filled the gap of education programs that were lacking in our community, and has given citizens not only the chance to learn about the environment but to also learn more about the scientists, county employees, teachers, and volunteers that make it happen. The collaboration of these knowledgeable professionals has given A Time for Science the ability to satisfy the need for environmental awareness in our area. Receiving the 2010 Achievement Award would provide recognition of all the hard working volunteers who have made this possible, but the success of our program has already been validated through the positive influence we have had in our County.