

## School Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades early learning to 12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools

Public  Charter  Title I  Magnet  Private  Independent  Rural

Name of Principal: Mrs. Maggie Johnston

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Magnolia Nature School at Camp McDowell

(As it should appear on an award)

Official School Name Mailing Address: 105 Delong Rd, Nauvoo, Alabama 35578

(If address is P.O. Box, also include street address.)

County: Winston State School Code Number \*: n/a

Telephone: 205-387-1806 ext 107 Fax:

Web site/URL: <https://campmcdowell.com/educational-programs/magnolia-nature-school>

E-mail:

maggie@campmcdowell.com

\*Private Schools: If the information requested is not applicable, write N/A in the space

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



Date: 2/12/2020

(Principal's Signature)



Name of Superintendent: Reverend Cory Jones, Executive Director of Camp McDowell  
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: Camp McDowell, Alabama Episcopal Church

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Date: 2/12/2020

(Superintendent's Signature)

### Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Alabama Department of Education

Name of Nominating Authority: Mrs. Amanda H. Rylant

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Date: 2/13/2020

(Nominating Authority's Signature)

### SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2021

### Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Summary Narrative

*Magnolia Nature School at Camp McDowell, striving to be the way the rest of the world could be!*

Magnolia Nature School is a nature-based pre-K school housed on the 1140 acre campus of Camp McDowell in Winston County, Alabama. Camp McDowell is home to Magnolia Nature School, Alabama Folk School, McDowell Environmental Center and McDowell Farm School. Magnolia Nature School is host to Alabama's first nature preschool and Camp McDowell's youngest summer program. Children ages 3-6 explore the farm, forest, and streams of wonderful, wonderful Camp McDowell! Through hands-on experience and inquiry-based learning, Magnolia is a place where curiosity is welcome and there are never enough answers. Magnolia's goal is to create future stewards of the Earth. The school serves a rural, socioeconomically disadvantaged community and provides a high-quality STEAM-based education that utilizes the natural world as its classroom.

Having only been around for a little over 3 years, Magnolia Nature school has received extensive recognition for its efforts towards environmental education. In 2019, Magnolia was awarded the Environmental Education Association of Alabama (EEAA) *Best Environmental Education Program (BEEP)* award. Numerous local newspapers have written articles about the program, including the Daily Mountain Eagle and the NorthWest Alabamian. In 2018, Magnolia Nature school was awarded a three year, \$60,000 grant from The Daniel Foundation of Alabama, whose mission is to strengthen communities within Alabama through the support of effective organizations that are focused on building a healthy and well-educated population, living in a vibrant community.

Camp McDowell is making great strides towards energy independence and reducing its carbon footprint. It currently utilizes a geothermal system that helps reduce energy consumption and has three of its busiest buildings, including the Doug Carpenter building in which Magnolia eats most meals, on this system. Solar arrays provide electricity to 5 buildings on campus, which saved McDowell \$9,500 in only the first 6 months of use. The savings from the solar installation are being placed in an "Energy Independent Fund," which can only be used to expand and invest in other renewable energy installations at Camp McDowell. Another exciting addition to McDowell's energy profile is a hydroelectric system called an Archimedes screw which will soon be installed on an existing dam on the property to allow less dependence on carbon burning systems. During peak water flow, this system will provide more electricity than the entire camp uses. Camp McDowell will be one of the first facilities in North America to use this technology to produce electricity.

Magnolia Nature school takes further steps to increase energy efficiency by using LED light bulbs; solar powered streetlamps; ensuring that lights, air conditioning and heating units are off when buildings are not being used; and replacing worn out appliances with Energy Star appliances. They recently had an energy audit conducted and will be using the analysis to continue to make changes to the campus to further lessen their carbon footprint.

Camp McDowell also makes great efforts in promoting water quality and conservation. Settling ponds have been constructed on the campus to limit the damaging runoff from nearby lands that were once coal-mined. Where once the nearby streams and creeks could not support life, now they are full of healthy invertebrates. Rain catchment systems are placed around buildings and structures on the McDowell farm and will soon be placed around the Magnolia nature school building for students to use to water nearby gardens. Students often hike to nearby streams and creeks and are taught about water quality as they collect and study macroinvertebrates. Students also carry reusable water bottles throughout the day and are taught the value of protecting and preserving water sources. Camp McDowell also has a land management plan and a staff member whose primary job is land management and growing foods that can go on the over 120,000 plates that are served annually to guests at McDowell.

Magnolia Nature school students participate in Camp McDowell's recycling program for plastics, paper, cardboard, aluminum, and steel. Camp McDowell received a \$30,000 grant in 2015 from the UTO (United Thank Offering) of the Episcopal Church to build a recycling center, which has a plastics bailer and cardboard press and bailer. They also gather and sell aluminum and steel.

With the McDowell Farm School literally just outside the door of the Magnolia building, the students participate in farm chores. Any leftover fruit, vegetables, or bread from their meals or snacks are fed to the pigs or chickens at the

farm, composted in the farm compost bins, or picked up by farmers to give to their farm animals. The Farm School also has a black soldier fly composting area that can even accept meat scraps. Camp McDowell hosts and feeds large numbers of campers and visitors throughout the year. Kitchen staff also participate in recycling and reduced waste production by composting, feeding appropriate scraps to animals on the McDowell farm, or by giving scraps to local farmers to give to their farm animals. Several of the children who attend Magnolia Nature School or who have in the past, live on the Camp McDowell campus. Their families often walk or bike to school. Those that do not are encouraged to carpool.

Magnolia Nature School, as a part of Camp McDowell, takes great efforts to ensure student and environmental health and safety. Chemical pesticides are not routinely used indoors and children learn to identify and remove pests in the garden by hand, without the use of pesticides. Sunscreen is applied to all children in the morning and shade cloths are installed in the yard area to limit student's exposure to the sun. Storm and Fire emergency protocols are posted in the classroom and all teachers are CPR and first aid certified. Proper risk management is utilized by teachers in the outdoor classroom. Site assessments are conducted before children play in any space. Teachers recognize hazards and identify them for the children. If an area is deemed unsafe, then the group will not stay there. Some risk is understood by the children and acceptable. For example, when applicable, children are warned that rocks are slippery and are instructed to avoid them or walk slowly on them. Risky play is only valuable when children can easily identify it.

Teachers have safety protocols to use when children are participating in potentially risky outdoor activities, such as climbing trees, which is an excellent gross motor activity for physical development. It also boosts confidence and self-esteem, helps develop focus and concentration, promotes problem solving skills, and is a rich sensory experience. Protocols are being established for other risky activities such as trail hiking, using tools, stream wading, and for being outside in extreme temperatures. Staff members participate in mandatory safeguard training to keep staff and children safe. A camp nurse is available at all times.

Magnolia cares for all aspects of a child's physical and mental health, and believes in the well evidenced benefits of being outside. Through a partnership with Community Action Partnership of North America (Head Start), Magnolia is able to provide free health screenings, including mental health, vision, dental and speech, for all children. Children participate in activities that encourage physical development such as climbing, yoga, hiking, balancing, using balls, and playing active games. Magnolia provides breakfast, lunch and snacks, including fresh fruits and vegetables, for the students daily and follows USDA nutritional guidelines provided by the Community Action Partnership of North Alabama. Sometimes these even are harvested by the children themselves on the Farm or from the schoolyard's raised-bed gardens. Although the farm is not certified organic, all farming at McDowell is done organically and supplemental organic produce is purchased when appropriate to the budget. Magnolia has three full time teaching staff who are provided with Blue Cross health benefits.

Magnolia Nature school students spend at least 80% of the school day outside exploring the farm, streams, and trails. The children feed pigs, milk goats, and check chicken coups. They participate in planting projects and eat food from the raised bed garden that they help maintain. Students water, weed, and harvest lettuce, carrots and other produce to eat at lunch or as a snack. Children sometimes are given meat from farm animals they helped care for. The garden and the farm is used as a teaching tool to help children understand where their food comes from and the hard work and time it takes to grow vegetables. Teachers and students discuss food chains and plant life cycles. If a deer has eaten carrots from the garden, they may discuss what will happen next. Questions such as "Will anything eat the deer," "What do the plants need to survive and grow," or "What would happen to the plant if we did not pick it?" are asked to reinforce learning.

Teachers and students also participate in activities and discussions which help them understand ways in which humans use the environment and the need to conserve it. All teaching staff are given the opportunity to go through bi-annual professional learning along with McDowell Environmental Center and Farm Staff. These classes include "Down to Earth" which is about coal, what produced it, why it is harvested, and what can be done to conserve energy and reduce dependence on fossil fuels. Another offered class is called "Sustainability", a class on human environmental impacts and how to become a more sustainable community.

McDowell is a member of the Environmental Education Association of Alabama (EEAA) which is an affiliate of the North American Association for Environmental Education (NAAEE) and the Association of Nature Center Administrators (ANCA). Magnolia Nature school is a member of the Natural Start Alliance (NSA). Julie Camp, the

director of Magnolia, and Lauren Herman, one of the teachers, were invited to present at the 2019 NSA national conference about the partnership Magnolia has with Head Start. This is a quite unique partnership allowing a way to fund environmental and quality education for a population that could not traditionally afford it.

Learning through active, outdoor, experiential methods is proven to build self-confidence and stamina. During the first few weeks of each school year, the daily adventures are usually limited to closer to the small school building, but even then, students have a natural play area with sandbox and shade trees, as well as a short trail through the woods directly behind the school that they are allowed to travel and explore alone. It is about 75-100 feet long and weaves through some trees and bushes that make the children feel independent, although their teachers can see their little heads bobbing through the trees.

As the children's stamina and endurance builds, the adventures take on more and more distance. You will often find the preschoolers hiking around the 4-acre lake or hiking to some of the amazing sandstone canyons and natural shelters on Camp property. They learn about water quality as they wade into a small stream and find tiny macroinvertebrates there.

Magnolia Nature School partners with the McDowell Environmental Center to learn about local wildlife and wildlife rehabilitation. The McDowell Environmental Center staff bring in reptiles, amphibians, and birds of prey for students to learn about. They add the A to STEAM with the incorporation of arts and music. The coordinator of the Alabama Folk School teaches ukulele lessons and plays for the children's dance parties. They have pottery classes and create nature art both in the wild and in the classroom. They even make recycled paper.

The Magnolia Curriculum is an inquiry-based model which focuses on exploring nature and encouraging creativity. Children use natural objects to imagine, examine, wonder, create, and count. Teaching objectives align with the Alabama developmental standards for preschool children. Curriculum is shaped to meet these standards through activities in nature. The students are constantly using engineering practices in their building of bridges, sandcastles, forts, and other structures out of items found in nature.

Children witness adults making a living by farming, working with wildlife, and other environmentally friendly career choices. Students directly interact with adults with green careers, including farmers, members of Alabama Water Watch, and Environmental Educators at McDowell Environmental Center.

Magnolia Nature School is dedicated to developing civic knowledge and skills in its students. Children are given classroom jobs, such as sweeper, door opener, and tidying up the books. Magnolia children pick up litter from around Camp McDowell property to keep the woods and community clean. As they do this, there are lots of discussions about why they are doing it. The students also help clear and maintain trails for the camp community. Monthly planned family activities provide a sense of community. The parents are invited to bring other children and extended family members. Magnolia participated in the first annual Camp McDowell Fall Festival, an event for the community that brought in around 700 local people, many who had never been to the camp before. Magnolia Nature School participates in the local Christmas parade with a float created by parents and teachers each year.

Magnolia collects and donates clothes to children who are in need. The Camp McDowell community often comes together to assist with such needs. Recently when an appeal was sent out that one young boy had very few items of clothing appropriate for winter weather, the staff throughout the camp brought in six bags of warm clothes and was able to supply a wardrobe for the child as well as stockpile loaner clothes. The school keeps clothes to lend to children during the day, keeping them comfortable and protected from the weather. Magnolia has had many donations of weather appropriate clothing. Boggs Boots donated 13 pairs of boots for the preschool. Several people from our local area have sponsored gifts of gloves, socks, raingear, etc.

The staff of Magnolia and Camp McDowell believe that the best way to make the world a better place and positively impact future generations is through education. This mission is best exemplified through the Magnolia Nature School. These fortunate children are growing up connected to the natural world and surrounded by adults who are walking the walk each day through environmental career choices.



## Evidence of Sustainability Achievement

### Pillar I: Reduce Environmental Impact and Costs pages

**1-3**

#### Element 1A: Reduced or Eliminated Greenhouse Gas Emissions

- McDowell is making great strides towards becoming energy independent. It currently has a geothermal system that helps reduce its energy consumption and has three of its most utilized buildings on this system.
- Solar arrays have been installed which provide electricity to five buildings on campus.
  - Doug Carpenter Hall, the dining hall where Magnolia students eat, utilizes both geothermal and solar energy.
  - During the first 6 months of 2019, Camp McDowell saved \$9,500 on its power bill in the five buildings that use solar arrays.
  - All savings from solar installations are being placed in an “Energy Independent Fund” which can only be used to expand and invest in other renewable energy installations at Camp McDowell.
- A hydroelectricity system will soon be installed on an existing dam on Camp McDowell property. Two Archimedes screws are being installed that during peak water flow, will provide more electricity than the entire Camp uses! Camp McDowell will be one of the first facilities in North America to use this technology to produce electricity.
- Camp McDowell recently had an energy audit conducted for its 79 buildings and staff members are working on making them even more efficient. The audit included recording the type, size, and number of HVAC units, light bulbs, appliances, faucets, shower heads, and toilets in each building. Water flow through most faucets and shower heads was measured and the design flush capacity of the toilets was noted. Notes were taken regarding the number of windows and external doors and whether or not these elements have insulation value and/or weather stripping.
- Heating, cooling, and lights are all turned off in the Magnolia indoor classroom during non-use hours. The school day runs from 7:30am to 1:30 pm. Students are out exploring the great outdoors about 80% of that time.
- Magnolia and all of Camp McDowell uses only LED light bulbs as the older fluorescents need replacing, which will result in a significant energy savings.
- Energy Star rated appliances are purchased to replace older appliances as needed.
- The indoor classroom has many windows which provide natural light and are opened to cool the room when temperatures permit.
- Many street lights around Camp McDowell are solar powered.

#### Element 1B: Improved Water Quality, Efficiency, and Conservation

- For many years, the lands and waterways surrounding Camp McDowell were subjected to the damaging effects of coal mining. The runoff from these strip mines inflicted severe damage to the streams in the area, causing environmental conditions which were not conducive to a healthy ecosystem. The construction of settling ponds on camp property now protects McDowell streams and creeks from mining run off. The stream ecosystems have been re-established and are now full of healthy invertebrates.
- Magnolia has two high efficiency /low flow toilets and the McDowell campus will continue to replace toilets with these models as they are needed.
- The McDowell Farm has rain catchment systems/rain barrels on all barns and buildings. The plan is to install these at the Magnolia building as well to be used by the children to water the gardens nearby.
- Children are taught not to waste or pour out drinking water. Since the students carry their own reusable water bottles each day, they quickly learn the value of protecting and preserving it.

- Magnolia students hike to several creeks and streams and often refer to Heather Brook as “their stream”. There, they learn about the quality of water while collecting and studying macroinvertebrates.

### **Element 1C: Reduced Waste Production**

- Magnolia Nature school students participate in Camp McDowell’s recycling program for plastics, paper, cardboard, aluminum, and steel. Camp McDowell received a \$30,000 grant in 2015 from the UTO (United Thank Offering) of the Episcopal Church to build a recycling center, which has a plastics bailer and cardboard press and bailer. They also gather and sell aluminum and steel.
- With the McDowell Farm School literally just outside the door of the Magnolia building, the students participate in farm chores. Any leftover fruit, vegetables, or bread from their meals or snacks are fed to the pigs or chickens at the farm, composted in the farm compost bins, or picked up by farmers to give to their farm animals. The Farm School also has a black soldier fly composting area that can even accept meat scraps.
- Camp McDowell hosts and feeds large numbers of campers and visitors throughout the year. Kitchen staff also participate in recycling and reduced waste production by composting, feeding appropriate scraps to animals on the McDowell farm, or by giving scraps to local farmers to give to their farm animals.
- Though most of the school day is spent out in the woods, streams, and on the farm at Camp McDowell, Magnolia does have an indoor classroom and play yard. The play yard and indoor classroom reuses environmentally friendly, naturally found and acquired items such as hollowed tree containers, tree cookie stepping-stones, a retired canoe, and sand boxes for learning and play. They even have a hand water pump that the students use to direct water down hollow logs.

### **Element 1D: Use of Alternate Transportation**

- Magnolia does not have school buses; however, families are encouraged to carpool.
- Several of the children who attend Magnolia Nature School or who have in the past, live on theCamp McDowell campus. Their families often walk or bike to school.

<b>Pillar II: Improve the Health and Wellness of Students and Staff</b>
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<b>1-3</b>
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<b>pages</b>
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### **Element 2A: Integrated School Environment Health Program**

- Chemical pesticides are not routinely used indoors and resources which could attract pests are managed to the best of our abilities. Food is kept secured in containers.
- Children learn to identify and remove pests in the garden by hand, not using pesticides.
- Camp McDowell is a tobacco free zone except in designated areas away from children’s view and not inside buildings.
- Shade cloths are installed in the yard area as well as use of natural shade from trees to limit sun exposure.
- Sunscreen is applied to all children in the morning.
- Storm and Fire emergency protocols are posted in the classroom.
- All teachers are CPR and first aid certified to keep children safe.
- Proper risk management is utilized by teachers in the outdoor classroom. Site assessments are conducted before children play in any space. Teachers recognize hazards and identify them for the children. If an area is deemed unsafe, then the group will not stay there. Some risk is understood by the children and acceptable. An example may be that rocks may be slippery. Children are warned that the rocks are slippery and are instructed to avoid the rocks or walk slowly on them. Risky play is only valuable when children can easily identify it.
- Teachers have safety protocols to use when children are participating in potentially risky outdoor activities, such as climbing trees, which is an excellent gross motor activity for physical development. It also boosts confidence

and self-esteem, helps develop focus and concentration, promotes problem solving skills, and is a rich sensory experience.

Protocols are being established for other risky activities such as trail hiking, using tools, stream wading, and for being outside in extreme temperatures.

- Staff participate in mandatory safeguard training to keep staff and children safe.
- Magnolia Nature school is fortunate to have a camp nurse available at all times. She is an RN who lives on the Camp property.

## **Element 2B: Health and Wellness**

- Magnolia cares for all aspects of a child's physical and mental health, and believes in the well evidenced benefits of being outside.
- Through a partnership with Community Action Partnership of North America (Head Start), Magnolia is able to provide free health screenings for all children. Screenings include mental health, vision, dental, and speech.
- Children brush their teeth every afternoon.
- Children participate in activities that encourage physical development such as climbing, yoga, hiking, balancing, using balls, and playing active games. All of these are conducted in our outdoor classroom.
- Magnolia provides breakfast and lunch for the students daily and follows USDA nutritional guidelines provided by the Community Action Partnership of North Alabama.
- Magnolia provides fresh fruits and vegetables to children three times a day. Sometimes these even are harvested by the children themselves on the Farm or from the school yard's raised bed gardens. Although the farm is not certified organic, all farming at McDowell is done organically. Organic produce is purchased when appropriate to the budget.
- Magnolia has three full time teaching staff who are provided with Blue Cross health benefits.

**Pillar III: Provide Effective Environmental and Sustainability Education, Incorporating STEM, Civic Skills and Green Career Pathways** **1-3**  
**pages**

## **Element 3A: Interdisciplinary Learning about the Key Relationships between Dynamic Environmental Energy and Human Systems**

- Children spend at least 80% of the school day outside exploring the farm, streams, and trails
- Children feed pigs, milk goats, and gather eggs from the chicken coups. They participate in planting projects and eat food from the raised bed garden that they help maintain. Students water, weed and harvest lettuce, carrots and other produce to eat at lunch or as a snack. Children sometimes are given meat from farm animals they helped care for. The garden and the farm is used as a teaching tool to help children understand where their food comes from and the hard work and time it takes to grow vegetables.
- Teachers and students discuss food chains and plant life cycles. If a deer has eaten carrots from the garden, they may discuss what will happen next. Questions such as "Will anything eat the deer," "What do the plants need to survive and grow," or "What would happen to the plant if we did not pick it?" are asked to reinforce learning.
- Teachers and students also participate in activities and discussions which help them understand ways in which humans use the environment and the need to conserve it. All teaching staff are given the opportunity to go through bi-annual professional learning along with McDowell Environmental Center and Farm Staff. These classes include "Down to Earth" which is about coal, what produced it, why it is harvested, and what can be

done to conserve energy and reduce dependence on fossil fuels. Another offered class is called “Sustainability”, a class on human environmental impacts and how to become a more sustainable community.

- McDowell is a member of the Environmental Education Association of Alabama (EEAA) which is an affiliate of the North American Association for Environmental Education (NAAEE) and the Association of Nature Center Administrators (ANCA). Magnolia Nature school is a member of the Natural Start Alliance (NSA). Julie Camp, the director of Magnolia, and Lauren Herman, one of the teachers, were invited to present at the 2019 NSA national conference about the partnership Magnolia has with Head Start. This is a quite unique partnership allowing a way to fund environmental and quality education for a population that could not traditionally afford it.
- Magnolia teachers participate in peer/coworker led activities that help them organize, gain knowledge and understanding, and plan curriculum. An example of this would be going through a BEETLES ([www.beetlesproject.org](http://www.beetlesproject.org)) activity for inspiration, increased knowledge about the local environment, and to practice the activity before they complete it with the children. One employee may also research a topic to share and discuss with the other teachers during a professional development. Staff members also attend nature and education based conferences such as the EEAA and NSA conferences.

### **Element 3B: Use of the Environment and Sustainability to Develop STEM Content and Knowledge and Thinking Skills**

- Magnolia Nature School partners with the McDowell Environmental Center to learn about local wildlife and wildlife rehabilitation. The McDowell Environmental Center staff bring in reptiles, amphibians, and birds of prey for students to learn about.
- They add the A to STEAM with the incorporation of arts and music. The coordinator of the Alabama Folk School teaches ukulele lessons and plays for the children’s dance parties. They have pottery classes and create nature art both in the wild and in the classroom. They even make recycled paper.
- The Magnolia Curriculum is an inquiry based model which focuses on exploring nature and encouraging creativity. Children use natural objects to imagine, examine, wonder, create, and count. Teaching objectives align with the Alabama developmental standards for preschool children. Curriculum is shaped to meet these standards through activities in nature.
- The students are constantly using engineering practices in their building of bridges, sandcastles, forts, and other structures out of items found in nature.
- Books, many about nature or self-esteem, are read aloud to the children daily, both outdoors during class-time and indoors pre-naptime.
- Children witness adults making a living by farming, working with wildlife, and other environmentally friendly career choices.
- Students directly interact with adults with green careers, including farmers, members of Alabama Water Watch, and Environmental Educators at McDowell Environmental Center.

### **Element 3C: Development and Application of Civic Knowledge and Skills**

- Children are taught to respect and protect all life, from the tiniest insects that they find to study to the pigs and goats that are part of their daily lives.
- Magnolia children pick up litter from around Camp McDowell property to keep the woods and community clean. As they do this, there are lots of discussions about why they are doing it.
- The students help clear and maintain trails for the camp community.
- Monthly planned family activities provide a sense of community. The parents are invited to bring other children and extended family members.
- Magnolia participated in the first annual Camp McDowell Fall Festival, an event for the community that brought in around 700 local people, many who had never been to the camp before.

- Magnolia Nature School participates in the local Christmas parade with a float created by parents and teachers each year.
- Children are given classroom jobs, such as sweeper, door opener, and tidying up the books.
- Magnolia collects and donates clothes to children who are in need. The Camp McDowell community often comes together to assist with such needs. Recently when an appeal was sent out that one young boy had very few items of clothing appropriate for winter weather, the staff throughout the camp brought in six bags of warm clothes and was able to supply a wardrobe for the child as well as stockpile loaner clothes. The school keeps clothes to lend to children during the day, keeping them comfortable and protected from the weather.
- Magnolia has had many donations of weather appropriate clothing. Boggs Boots donated 13 pairs of boots for the preschool. Several people from our local area have sponsored gifts of gloves, socks, raingear, etc.
- Magnolia encourages family involvement through volunteer opportunities, community events, and organized monthly family activities.

**Photographs**

**5-10 Photos**



Magnolia Students watching a demonstration on how to recycle the paper they put in the recycling bin. This is part of Magnolia's efforts to teach children about the importance and process of recycling.



Magnolia teachers and children feeding the pigs at the farm. With the exception of meat and dairy, leftover food is collected and fed to the pigs each week to reduce waste.



Betsy and farmer Aubrey Gallegos milk Nix, the goat. Magnolia students are able to care for farm animals. They gain an understanding of where their food comes from and the hard work that goes into it. The children build relationships with people who have green careers, like Aubrey.



Chase, Ashtin, and Brody enjoy lunch. The children and their families planted this lettuce months earlier and today they got to harvest and eat it.



Magnolia students learn about raptor adaptations from an environmental educator caregiver who has dressed their teacher up with those special bird features. They will later meet live rehabilitated birds. Through activities like these, children gain respect and knowledge for wildlife from a professional with a green job.