

# PEA RIDGE NATIONAL MILITARY PARK: CLIMATE FRIENDLY PARKS ACTION PLAN 2014

#### INTRODUCTION

As participants in the National Park Service (NPS) Climate Friendly Parks (CFP) program, Pea Ridge National Military Park belongs to a network of parks nationwide that are putting climate friendly behavior at the forefront of park operations and resource management. As part of this program, these parks have conducted a greenhouse gas (GHG) emission inventory, participated in a climate change and sustainability educational workshop, set climate change mitigation and GHG emission reduction goals, and integrated these actions into a park-wide Environmental Management System (EMS).



The EMS takes a systematic approach to identifying and

addressing environmental impacts at the park. It also provides a framework for tracking environmental protection and sustainability priorities and details the implementation of these actions. By integrating CFP-related actions into the park's EMS, Pea Ridge is taking an integrated approach to climate change response and sustainable management of park resources.

# **ENVIRONMENTAL POLICY & SUSTAINABILITY COMMITMENT STATEMENT**

Pea Ridge National Military Park is committed to protecting and preserving its natural, cultural, and archeological resources through environmental stewardship as mandated by the Organic Act and the park's enabling legislation. This commitment includes energy, water, solid waste, chemical use, and GHG emissions reductions (collectively called sustainability) as required by federal Executive Orders and Department of the Interior and NPS policy.

Our staff, volunteers, and contractors will be expected to follow our environmental, pollution prevention, energy reduction, and related procedures and programs. Together we will examine and conduct operations and activities in a professionally sound manner, effectively and efficiently complying with the letter, spirit, and intent of applicable environmental regulations, standards, executive orders, and policies related to sustainability. Additionally, by developing partnerships with local schools and organizations, Pea Ridge will be able to employ an army of youth volunteers to assist in our efforts to reduce the park's and the local communities' carbon footprint.

### **ACCOMPLISHMENTS**

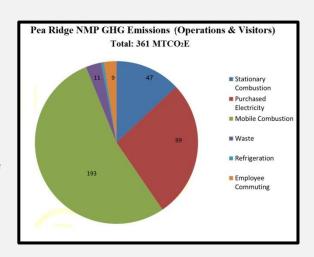
Prior to holding the CFP workshop, Pea Ridge National Military Park had already embarked on our sustainability journey, by discussing and embedding sustainability actions throughout our operations. As part of these efforts, the park has taken a number of actions which have reduced our environmental impact. For example, these sustainability actions have led to the park reducing overall GHG emissions by 10.4% over the past seven years.

Sustainability Concern	Completed Actions	
GHG Emissions	<ul> <li>Performed energy audits for all park buildings in 2010 and installed insulation in areas that were identified</li> </ul>	
	Purchased two electric cars	
	Purchased three Chevy HHR Flex Fuel E85 vehicles	
	<ul> <li>Right sized the fleet by reducing the overall number of vehicles and replacing vehicles with smaller and more fuel efficient models</li> </ul>	
	<ul> <li>Received a grant from Clean Cities National Park Initiative for a LPG pickup truck to replace a older model gas powered pickup</li> </ul>	
	Replaced 500 incandescent lights with fluorescent lights	
	In the process of replacing lighting with LED lighting	
	<ul> <li>Installed motion sensing light switches where possible throughout the park</li> </ul>	
Waste	<ul> <li>Reduced waste disposal by 50% through recycling partnerships and reuse</li> </ul>	
	Eliminated single use plastic water bottle sales in the park	
Education /	Held a Climate Friendly Parks workshop!	
Communication	Developed a monthly all staff email to encourage sustainable actions	
	<ul> <li>All Pea Ridge NMP staff have signed up for My Green Parks, a National Park Service sustainability website</li> </ul>	
	Developed a partnership with Pea Ridge School fifth grade science class	
Water	Installed low-flow toilets and motion activated sinks	
	Installed metering devise on main well	
	<ul> <li>Planted drought tolerant plants (e.g., tall blue stem in prairies within the park)</li> </ul>	

## **BASELINE GREENHOUSE GAS EMISSIONS PROFILE**

Pea Ridge National Military Park developed a greenhouse gas (GHG) inventory using the Climate Leadership in Parks (CLIP) tool.

As of 2012, 56% of the park's emissions are from park operations and 44% of the emissions are from visitors. The largest single source of GHG emissions was mobile combustion (vehicles). Looking only at the emissions from park operations, purchased electricity and emissions associated with stationary combustion represent the largest sources of GHG emissions. Having this baseline helps inform the goals and targets we have set and the actions we are taking to meet those in the future.



## **GOALS & ACTIONS**

As part of the CFP program, Pea Ridge National Military Park has developed a number of goals. To help meet these goals, the park will develop annual actions and track them through the EMS. The first year of those actions are listed out below. We will continue to chart our progress against the goals annually and to refine our actions as part of that plan through the, do, check, act process.

	GHG Emissions	Climate Change Response	Education
Goal	Reduce GHG emissions by 15% from baseline year of 2012 by 2020	Reduce energy use by 5% by 2020	Educate 100,000 visitors about climate change and sustainability practices by 2020
2014 Action Plan	<ul> <li>Reduce idling by establishing and communicating a parkwide no idling policy to park staff and visitors</li> <li>Identify areas to eliminate mowing</li> <li>Install quick charging stations for electric vehicles at the Visitor Center</li> </ul>	<ul> <li>Utilize power strips in centrally located areas within park offices</li> <li>Reduce winter temperature setting to 65 degrees F and increase summer setting to 75 degrees F</li> </ul>	<ul> <li>Create a park specific climate change message to share with every visitor coming to the park</li> <li>Develop a "Jr. Ranger Ambassador for Green Living" program with the help of the Clean Cities National Park Initiative and the Challenge Cost Share Program</li> <li>Develop a partnership with the Pea Ridge School fifth grade science class to build an outdoor greenhouse classroom</li> <li>Invite students to join the Pea Ridge NMP's "Green Team" to share sustainability information with visitors</li> <li>Create visitor center exhibits highlighting climate change impacts at the park and actions taken to mitigate climate change (via the Jr. Rangers Ambassadors for Green Living program)</li> </ul>

### **ROLES, RESPONSIBILITIES, & RESOURCES**

The "Green Team" is an interdisciplinary group of park employees that regularly monitors and updates sustainability goals for the park. At Pea Ridge, this team not only consists of an interdisciplinary group of park employees, but also has Jr. Ranger Ambassadors for Green Living team members from the Pea Ridge School fifth grade science class. This team works together to identify sustainability and climate change challenges, track progress toward achieving goals, and works with other staff to continually improve operations. Through their leadership, the park ensures that sustainability initiatives move forward and goals are accomplished.

As a part of the partnership with Pea Ridge School, Jr. Rangers visit the park throughout the school year to promote "Green Living" practices such as idle reduction, recycling, alternative fuel use as well as a number of other subjects concerning sustainable practices. In turn, park staff will visit Pea Ridge School classrooms to help students reach their own sustainable goals. The role of this team will also be to provide information guidance and other resources to promote sustainable practices within the park as well as within the local school. The responsibility of the interdisciplinary team is to identify areas where the park/school can reduce the carbon footprint and to seek funding as needed.

# **EDUCATION & COMMUNICATION**

By improving communication within Pea Ridge NMP, we are developing an environment that provides guidance and clarity while instilling ownership and support in accomplishing goals and initiatives. Pea Ridge NMP has improved communication

amongst employees through all-employee meetings, park-wide training sessions and a monthly newsletter that highlights past and upcoming sustainability events within the parks and greater region. The newsletter is emailed to all employees and posted on park websites yearly.

Additionally, the park "Green Team" has partnered with Pea Ridge School fifth grade science class to collaborate with highly motivated and successful fifth grade students to educate park visitors, students, and teachers on green living practices such as idle reduction, alternative fuel use, and recycling.



#### CONCLUSION

The elements of our EMS form the foundation of the environmental protection, climate change response, and sustainability work that we will accomplish at Pea Ridge National Military Park. We hope that visitors will check back in with us and see how we progress as our program continues to evolve!

#### **CONTACTS**

Climate Friendly Parks Program

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By identifying a greenhouse gas reduction goal, climate change response/sustainability actions, and outreach initiatives related to sustainability and climate change and sustainability topics, Pea Ridge National Military Park is an official members of the Climate Friendly Parks Program. For more information about the program, please visit the CFP website or contact the CFP team (information above).

**CFP Representative** 

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