



FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES  
COMMISSIONER ADAM H. PUTNAM

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November 22, 2017

Ms. Allie Bury  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

(Via Email) [Allie.Bury@mail.house.gov](mailto:Allie.Bury@mail.house.gov)

Re: Responses to Questions for the Record on "Air Quality Impacts of Wildfires" Hearing

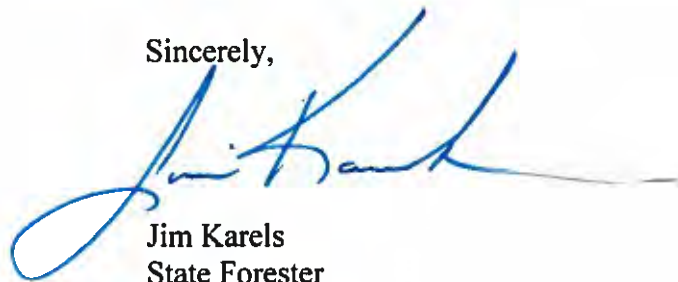
Ms. Bury:

My responses to your questions contained in your letter dated November 9, 2017 are attached.

It is my understanding these are Questions for the Record following the October 4 hearing entitled "Air Quality Impacts of Wildfires: Perspectives of Key Stakeholder", for which I was a witness.

I appreciate the opportunity to testify at the hearing, as well as to provide the attached follow-up responses. Please feel free to reach out if you have any additional questions or information needs in the future.

Sincerely,



Jim Karels  
State Forester

Attachments

**Responses to Questions for the Record for Jim Karels, Florida State Forester**

**Hearing: Air Quality Impacts of Wildfires: Perspectives of Key Stakeholders (Oct 4, 2017)**

**Questions from The Honorable John Shimkus**

- 1. Could you talk about your relationship as a Forestry agency with the regulatory environmental agency in Florida and how you carry out your state's prescribed burning program?**
  - a. How does your prescribed burning program fit within state regulations?**
  - b. How do prescribed burns help the environment?**
  - c. Do you believe the Clean Air Act would be more effective if it were to provide flexibility for the use of ecologically beneficial prescribed burns?**
  - d. Would any of the other witnesses care to comment on prescribed burns and air quality considerations?**

In Florida, the Florida Forest Service has statutory responsibility for the implementation of the state's outdoor burning program and works closely with the Florida Department of Environmental Protection's Division of Air Resource Management, who has air quality responsibilities. A long standing agreement between the two agencies has helped define roles and responsibilities of each agency and built a strong partnership that has been instrumental in the development of one of the most respected prescribed fire programs in the country. In addition to annual sit-down meetings with DEP Air, this year we also attended regional air quality meetings which included forestry and air agencies from States across the Southeast.

The Florida Forest Service and the Department of Environmental Protection worked together to develop Florida's first Smoke Management Plan which was approved by EPA in 1999. A revised Smoke Management Plan was approved again in 2014. Annually the Florida Forest Service issues on average about 85,000 open burn authorizations in Florida. Each authorization goes through a smoke screening process outlined in the Smoke Management Plan before it is approved.

Prescribed fire benefits the environment through two primary mechanisms. First, fire has a natural role in nearly all forest ecosystems, and prescribed fire allows for that role to be played under managed conditions. A healthy forest needs to maintain a regular fire return interval to thin out some of the trees to help the remaining ones grow, to provide wildlife habitat for species that have evolved under regular fire occurrence, and even to release a seed source for the next generation of tree growth.

Second, the use of prescribed fire reduces the likelihood of a catastrophic wildfire, and the environmental damage that would come with it, in the future. One of the keys to prescribed fire for hazardous fuels management is that it is done in seasons and under conditions where fire managers have the ability to control fire location, spread, intensity, and many other parameters.

Weather forecasting and state-of-the-art smoke modeling software allow for fire managers to tailor ignition locations and times to meet smoke management objectives. Fire managers work to manage a minimal amount of smoke now in avoidance of the potential for a much greater amount and the associated environmental and human health consequences in the future.

The use of prescribed fire is a necessity on the forested landscape, and the regulations around Clean Air Act implementation need to recognize this reality. The beneficial impact of managed prescribed fire on air quality emissions has been recognized by the US Environmental Protection Agency (EPA) in its Clean Air Act rulemaking over the past two years. In both the updating of the National Ambient Air Quality Standard (NAAQS) for PM 2.5 (81 CFR 164, pg. 58010) and the updating of the Exceptional Events Rule (81 CFR 191, pg. 68216), the EPA clearly documents the role of wildfire as an emissions source and the relevance of prescribed fire use and fuels management to reduce the risk of catastrophic wildfire. It is becoming increasingly evident through science and experience that without prescribed fire and the small amount of managed smoke that comes with it, we are perpetuating the conditions that generate catastrophic air quality issues and put communities and individuals at risk.

- 2. In comments to the EPA on its proposed revisions to the Exceptional Events Rule, the Western States Air Resources Council (WESTAR) stated: “Ideally, EPA should work with state and federal fire-reporting agencies to develop a database of daily emissions for each significant wildfire. Such a database would provide states the opportunity to share updated emissions information and thus decrease the resources needed to develop exceptional event demonstrations.”**
  - a. Is this reporting and collecting of emissions data happening?**
  - b. If not, should it be?**
  - c. In your opinion, what would be the impact on air quality if such a database were utilized?**

I am not aware of any efforts by the EPA to comprehensively collect and report the type of data described in this question. Currently, each state has its own burn program, and manages and tracks burn days and emissions from both prescribed and wildfire in different ways. These programs have been developed at the state-level based on state-specific ecological and social goals, and are locally successful due to that diversity. If the EPA were to develop a comprehensive nationwide database, it would be essential that it did not duplicate or increase workload for state agencies, or require program changes of states that eliminated successful state-specific attributes already in place. I agree that it would be a positive outcome to reduce the reporting burden for exceptional events, and to institutionalize at the EPA the recognition of fire emissions as exceptional events. If the process were streamlined such that more prescribed fires were allowed to be put on the landscape, I believe there would be a long-term benefit to air quality through reduced emissions from unplanned wildfire.

**3. Over the last three decades, the amount of timber harvested from federal lands has declined significantly while the number and extent of fires on these lands has increased significantly. Is this a coincidence or does thinning of forests actually reduce the risk of wildfire?**

There are a number of factors influencing the upturn in devastating wildfires on federal land, including increased development in the wildland urban interface (WUI), drought conditions, and insect and disease infestations, but certainly a lack of active forest management is among the most significant. There is clear and incontrovertible evidence that actively managed forests are significantly more resilient to the impacts of wildfire than those that receive no management. When fire sweeps through a managed forest, in many cases, it can have beneficial impacts. For example, in managed pine stands, fires burn the smaller trees and shrubs and prepare the ground for seed from the larger trees. In addition, protection of communities and firefighter safety is enhanced as these areas can provide safer areas from which firefighters can control oncoming wildfires. It is not a coincidence that reduced timber harvest leading to buildup of hazardous fuels has generated larger and more dangerous wildfires on federal lands.