



USDA Forest Service National Forest System Discussion Paper

Date: December 2, 2009

Issue: Obligations under Executive Order 13514 related to green house gas emissions from federal land management practices

Background: Executive Order 13514 -- Federal Leadership in Environmental, Energy and Economic Performance -- focuses on improving energy efficiency, water use, waste streams and related environmental footprint parameters associated with federal buildings, motor vehicle fleets and federal contractors/ permit holders.¹ The Executive Order requires agencies to meet a number of goals:

- 26% improvement in water efficiency by 2020;
- 50% of construction, recycling and waste materials will be diverted from landfills by 2015;
- 95% of applicable contracts will meet sustainability requirements;
- Implementation of the 2030 net-zero-energy building requirement;
- Implementation of the storm water provisions of the Energy Independence and Security Act of 2007, section 438; and
- Development of guidance for sustainable federal building locations in alignment with the Livability Principles put forward by the Department of Housing and Urban Development, the Department of Transportation, and the Environmental Protection Agency.²

Section 1 of the EO lays out policy and Section 2 goals. Sections 3-8 address responsibility for implementation and governance. Section 9 provides “Recommendations for Greenhouse Gas Accounting and Reporting.” Sections 10-16 provide guidance on facility location, transportation logistics, fleet management, contractor emissions, storm water management, regional coordination, and agency roles. The remaining sections include definitions, limitations and exemptions.

The only mention of federal lands is in Section 9, which covers GHG accounting and reporting and states that within 180 days the Department of Energy, in conjunction with other agencies, will recommend greenhouse gas reporting and accounting procedures that: 1) quantify and account for GHG emissions from Scope 1, 2 and 3 sources³; 2) consider past federal efforts to reduce GHG emissions, and 3) “consider and account for sequestration and emissions of greenhouse gases resulting from Federal land management practices.” Section 9 further states

¹ The EO can be viewed at: <http://edocket.access.gpo.gov/2009/pdf/E9-24518.pdf>

² See: <http://www.greenbuildinglawupdate.com/2009/10/articles/codes-and-regulations/executive-order-will-require-more-federal-green-building/>

³ Scope 1: direct greenhouse gas emissions from sources that are owned or controlled by the Federal agency; Scope 2: direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency; and Scope 3: greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities such as vendor supply chains, delivery services, and employee travel and commuting;

that within one year, agencies should be consistently reporting on the requirements of the section.

Discussion: The provision in Section 9 related to federal lands seems an anomaly when viewed in the context of the EO as a whole, which deals with reducing the environmental footprint of federal facilities and fleets. It is important to note that the Executive Order requires a procedure for reporting greenhouse gas sequestration and emissions (not just carbon) from land management practices. A "land management practice" is what a federal agency does to manage vegetation to achieve a desirable objective, for example. It is a purposeful action.

The EO does not establish or require any goals for the reduction of such land-based emissions. Neither does it seem to require an accounting of total carbon stocks or emissions or other GHG emissions from federal lands. There are a number of ways to meet this requirement using currently available models and data.

One option would be to develop a list of typical land management practices used by the land management agencies (prescribed burning, thinning, tree planting, grazing, etc) and use existing data and/or the FVS carbon calculator or other modeling approaches and the existing scientific literature to describe and report the range of carbon and other GHG effects of these practices in different regions of the country. This information could be updated annually, based on the federal land area treated by such practices in that year.

Since the Forest Service already reports on the carbon stocks and emissions from forests, we may decide that it is desirable to report such information related to federal lands at some scale as part of what we do under the EO, even though it does not appear to be required. One potential benefit of providing such figures would be to compare the difference between the GHG fluxes created from natural events/processes and those generated by land management activities.

Recommendation: The land management agencies should identify ways to accomplish the requirements of the EO using existing models and data. Reporting should be completed by a small team (i.e. does not require the participation of managers at the district or forest level).