



April 18, 2016

Christopher Carlson, PhD
Acting Mitigation Coordinator
USDA Forest Service
1400 Independence Ave., SW
Washington, DC 20250-1106

RE: National Hydropower Association Comments on Forest Service White Paper, *Seeking Recommendations in Formulating Agency Policy on Mitigating Adverse Impacts on National Forest and Grasslands*

Mr. Carlson:

On April 6, in response to Executive Order 13604 and a Presidential Memorandum on mitigation,¹ the Forest Service released a White Paper entitled *Seeking Recommendations in Formulating Agency Policy on Mitigating Adverse Impacts on National Forest and Grasslands* (White Paper), and requested comments that will be used in developing a new Forest Service mitigation regulation. The National Hydropower Association (NHA)² appreciates the opportunity to provide feedback, and we submit the following comments and recommendations for your consideration.

I. The Benefits of Hydropower

Hydropower is the largest source of renewable energy in the United States and has been generating renewable, carbon-free, energy for over a century. This generation helps the U.S. avoid nearly 200 million metric tons of CO₂ every year – the equivalent of over 42 million passenger cars. Further, hydropower is the most flexible and adaptable renewable energy resource available. It provides baseload power, 98% of the U.S.'s energy storage, and provides a solution to the challenges of integrating large amounts of variable generation, like wind and solar, thus enabling their widespread deployment.

In terms of addressing the challenges of climate change, no other renewable energy resource has done more. In addition to the clean and renewable energy it generates, and the grid stability it provides, hydropower and its associated infrastructure is playing a crucial role in building resilience to climate change

¹ Executive Order 13604, *Improving Performance of Federal Permitting and Review of Infrastructure Projects* (March 2012); Presidential Memorandum, *Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment* (November 3, 2015).

² NHA is a national non-profit association dedicated to advancing the interests of the North American hydropower industry, including conventional, pumped storage, and new marine and hydrokinetic technologies. NHA's membership consists of over 220 organizations, including consumer-owned utilities, investor-owned utilities, independent power producers, project developers, equipment manufacturers, environmental and engineering consultants, and attorneys.

through irrigation, flood control, and water storage which minimizes the impact of droughts and forest fires, and other adverse effects.

These are important benefits that the Administration is equally concerned about, demonstrated through the President's Climate Action Plan³ and a recent Presidential Memorandum entitled *Building National Capabilities for Long-Term Drought Resilience*,⁴ and accompanying federal action plan on drought.⁵ As such, NHA recommends the Forest Service incorporate hydropower's benefits and goods and services provided to the public in any mitigation policies moving forward.

II. Response to Forest Service White Paper

The White Paper identified several key questions to help frame the Forest Service's policy, we address these in turn.

1. Within existing law, regulation, and policy, what mechanisms and guidelines are needed to effectively avoid, minimize, and compensate for adverse impacts to National Forest System lands and their functions, values, and services in the completion of a project?

The Federal Power Act (FPA) provides a well-established framework for the mitigation of impacts of hydropower projects on National Forest lands. Any Forest Service policies on mitigation must recognize and be consistent with FPA mandates. While the development of a standardized mitigation process may be appropriate for some resources, a one-size-fits-all approach is not appropriate for hydropower projects, which are necessarily site specific. Further, the principle to establish a "no net loss" or "net benefit" mitigation standard is fundamentally inconsistent with the FPA, which requires a balancing of project benefits and impacts.

For hydroelectric projects subject to licensing by the Federal Energy Regulatory Commission (FERC), including projects located on National Forest lands, the FPA provides statutory standards and guidelines for mitigating environmental impacts. Section 10(a) of the FPA requires FERC to condition licenses so that the project "will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit" of a variety of uses, including power development, the adequate

³ Available at: <https://www.whitehouse.gov/the-press-office/2013/06/25/fact-sheet-president-obama-s-climate-action-plan>

⁴ Available at: <https://www.whitehouse.gov/the-press-office/2016/03/21/presidential-memorandum-building-national-capabilities-long-term-drought>

⁵ Available at: https://www.whitehouse.gov/sites/default/files/docs/drought_resilience_action_plan_2016_final.pdf

protection, mitigation, and enhancement of fish and wildlife, irrigation, flood control, water supply, and recreational and other purposes. FPA section 10(j) requires FERC to give deference to fish and wildlife protection, mitigation and enhancement measures recommended by federal and state fish and wildlife agencies.

Under section 4(e) of the FPA, for projects located on National Forest lands and other federally reserved lands, FERC may issue a license only after finding that the license will not interfere or be inconsistent with the purpose for which the reservation was created or acquired. Further, having made a finding of consistency, FERC must issue the license subject to and containing such conditions as the federal land management agency deems necessary for the adequate protection and utilization of the reservation. Thus, for a project on National Forest lands, the Forest Service may issue conditions which then become mandatory on the license. Under FPA section 33(a), a license applicant may propose an alternative condition which costs less or results in improved power production, but the Forest Service is obligated to accept that alternative only if it provides for the adequate protection and utilization of the reservation.

The FPA further specifies the criteria the Forest Service must weigh in setting 4(e) conditions. Section 33(a) requires the Forest Service to give “equal consideration to the effects of the condition adopted and alternatives not accepted on energy supply, distribution, cost, and use; flood control; navigation; water supply; and air quality (in addition to the preservation of other aspects of environmental quality).” Thus, similar to FERC’s mandate to balance a range of power and non-power considerations in setting license conditions under section 10(a), the Forest Service must similarly balance these factors in setting 4(e) conditions.

New hydroelectric projects on National Forest lands, in addition to receiving a FERC license, must also obtain a special use authorization from the Forest Service under the Federal Land Policy and Management Act (FLPMA). The Forest Service may issue those permits subject to appropriate conditions to protect environmental resources, public safety, and other aspects of the public interest.

The November 2015 Presidential Memorandum entitled “Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment” directs federal agencies including the Department of Agriculture to apply a number of mitigation principles “to the extent appropriate and practicable.” Among those principles is: “Agencies’ mitigation policies should establish a net benefit goal or, at a minimum, a no net loss goal for natural resources the agency manages that are important, scarce,

or sensitive, or wherever doing so is consistent with agency mission and established natural resource objectives.” The Presidential Memorandum also states that it “complements and is not intended to supersede existing laws and policies.”

NHA agrees that the policies promoted in the Presidential Memorandum must be applied consistently with the Forest Service’s statutory mandates. As to hydroelectric projects subject to FERC licensing, this means in particular the statutory standards and criteria of the FPA must govern. As explained above, the FPA requires FERC to impose appropriate conditions for the protection of fish, wildlife and other environmental resources and provides the Forest Service with mandatory authority to impose conditions to protect the National Forests. However, the FPA does not impose a “no net loss” or “net benefit” standard for environmental protection – and indeed, such a standard would not be consistent with the requirement in FPA section 33(a) that the Forest Service give equal consideration to energy supply, flood control, water supply, air quality, and similar factors when setting 4(e) conditions. The FPA does not require that every environmental impact of a project be mitigated or avoided – but rather, the environmental impacts must be balanced against the benefits of hydroelectric development, such as clean, renewable, emissions-free electric power.

Similarly, section 101(b) of the National Environmental Policy Act imposes a governmental responsibility to “attain the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable or unintended consequences.” The Presidential Memorandum emphasizes the need to protect or mitigate for impacts to resources that are “important, scarce, or sensitive.” The converse of that suggests impacts to resources that are not important, scarce, or sensitive, when such impacts are caused by “the widest range of beneficial uses of the environment,” should not trigger a “no net loss” or “net benefit” approach.

Considering the FPA’s requirements and NEPA’s guidance, NHA believes the existing framework provides the appropriate mechanisms to mitigate the impacts of hydroelectric projects on National Forest lands.

2. What opportunities exist to incorporate design standards or other mechanisms into project planning so that adverse impacts are avoided or minimized so that compensatory mitigation is rarely necessary?

Hydroelectric project designs are site specific. One-size-fits-all design standards to minimize or avoid project impacts rarely apply. Where impacts can be minimized or avoided at a particular project site – for example, through siting of a project upstream of anadromous fish runs, or the addition of fish screens to prevent fish entrainment – best industry practices typically mean developers will do so whenever feasible. If impacts cannot be avoided, then those impacts must be weighed against project benefits; and reasonable compensatory mitigation may be appropriate. License applicants are required by FERC’s regulations to consult closely with federal and state resource and land management agencies including the Forest Service when designing their projects, studying project impacts, and determining cost-effective mitigation measures.

3. What opportunities exist to incorporate a standardized, consistent approach to mitigation into the Agency’s existing processes (NEPA, land management planning, Special Uses, other permitting processes)?

As discussed above, the standards governing FERC-licensed hydroelectric projects are unique and may not be able to be standardized with Forest Service policies with regard to other planning and permitting processes. However, the hydroelectric industry is interested in working with the Forest Service to establish more consistent and efficient approaches to hydroelectric licensing among the Forest Service Regions, and in the forest management planning process to allow for the sustainable development of hydropower.

4. What opportunities exist to incorporate mitigation approaches into landscape-scale restoration, vegetation management, and watershed restoration?

FERC hydroelectric licensees are required to mitigate for the impacts of their projects under the standards set forth in the FPA and thus required mitigation plans tend to be site specific. However, where FERC is licensing multiple projects in a river basin at the same time, opportunities may arise for addressing resources in a coordinated fashion on a landscape or watershed scale.

For additional insight related to landscape or watershed-scale assessments, the Forest Service should consult with the U.S. Army Corps of Engineers, Department of Energy, and the Department of Interior on the implementation of the Memorandum of Understanding (MOU) for Hydropower *Sustainable Hydropower Action Plan (Phase II)*,⁶ which includes a Basin Scale Hydropower and Environmental

⁶ Available at: <http://energy.gov/eere/water/downloads/hydropower-memorandum-understanding>

Opportunity Assessment Initiative. Under the MOU, the Forest Service is also a member of the Federal Inland Hydropower Working Group, which could be used as an additional opportunity to explore new approaches to mitigation.

5. How can mitigation practices lead to more sustainable contributions of the goods and services provided to the public?

As a renewable energy resource, hydroelectric projects by their very nature are a sustainable use of the National Forests. Mitigation practices will lead to additional sustainable contributions in the public interest if they encourage responsible hydroelectric development without imposing mitigation standards that result in uneconomic projects or otherwise preclude development.

6. How could we best incorporate the identification of potential resource restoration areas into our planning processes?

NHA does not object to the concept of identifying resource restoration areas in Forest planning as long as Forest plans do not attempt to preclude renewable energy development by identifying *a priori* “protected areas” such as sites the Forest Service has classified as “potentially eligible” for National Wild and Scenic River status before an actual eligibility determination has been made.

7. How might the Agency best identify opportunities on NFS lands for off-site compensatory mitigation from activities on non-NFS lands? Are there off-NFS private or public projects that should not be mitigated for on NFS lands?

In general, NHA would be concerned if the Forest Service set aside National Forests as mitigation banks for projects on non-Forest lands. FERC requires that license applicants mitigate for project effects within the boundaries of their projects; FERC does not favor off-site mitigation and such mitigation does not carry any weight in FERC’s public interest considerations of a license application under the FPA. However, license applicants have entered into agreements with the Forest Service for off-site mitigation where such mitigation provided greater environmental benefits at a lesser cost than onsite mitigation. The FERC licensing process does not preclude the applicant and Forest Service from agreeing to creative approaches to mitigation.

8. What role can Research and Development play to support the use of best available science and application of sound methods and protocols?

Research and Development plays an important role in mitigation, and NHA encourages the Forest Service to work with other agencies, like the Department of Energy in developing potential R&D mitigation initiatives. Further, National Forest lands could play an important role in providing demonstration sites for technology advancements and improvements, where appropriate. Technological advancements can reduce overall project impacts, therefore reducing the amount of mitigation required.

As a general matter, the FERC process requires license applicants to fund and carry out the necessary studies to support their applications. Studies are site specific as necessary but also rely on the existing scientific literature developed by resource agencies, academia, and other third parties, where applicable. Therefore, to the extent that research and development results in information, methods, or protocols that can be applied to individual hydropower project considerations, it certainly has a role in such mitigation considerations. However, NHA believes licensees should not be required to fund studies unrelated to project proposals.

9. What role can State and Private Forestry play to help partners in developing new approaches to mitigation of adverse impacts?

NHA does not have any detailed comments on this question at this time. We encourage all stakeholders with an interest to be as engaged as possible in developing new approaches to mitigation.

10. Are potential large-scale compensatory mitigation actions acceptable if there is a considerable delay in the delivery of goods and services as a result of mitigation action?

NHA is not sure of the intent of this question. The FERC process contains rigorous schedules and deadlines and thus does not favor long delays where avoidable. Delay in the development of new projects often can be fatal to project development, preventing the addition of clean, renewable, emissions-free hydropower to the nation's energy mix. Since mitigation generally will be funded out of project revenues, there is a mutual interest in avoiding delay. For the same reason, upfront compensatory mitigation is generally not feasible.

11. After all appropriate and practicable avoidance, minimization, and restoration measures have been applied, and compensatory mitigation is identified as necessary for proponent-driven projects, how might we best complete the decisionmaking process in an expedited and effective way?

FERC's policy is to encourage hydroelectric licensing settlements. Applicants as a general rule welcome the opportunity to discuss resolution of mitigation issues with the Forest Service and other stakeholders. Negotiated outcomes generally benefit all parties.

12. How should we communicate mitigation principles and methods to Agency leadership, specialists and stakeholders?

Communications could involve appropriate changes to the Forest Service Manual and Hydroelectric Handbook. It also could involve Forest Service outreach at industry meetings and conferences, and communications during the FERC agency consultation process for specific projects.

13. How could the Forest Service encourage cooperation among governmental and private entities regarding mitigation opportunities?

For hydropower development, the FERC licensing process encourages and provides a forum for such cooperation among all stakeholders, including licensees.

III. Conclusion

NHA appreciates the opportunity to provide comments on the White Paper as many hydropower licenses and proposed new development include National Forest lands. We look forward to working with the Forest Service in the development of a new mitigation framework and regulations.

Respectfully submitted,



Linda Church Ciocci, Executive Director