

CAPITOL COMMENTS



Steven Williams, Ph.D.
PROFESSIONAL MEMBER
Boone and Crockett Club
PRESIDENT
Wildlife Management
Institute

Nonrenewable Lessons Learned

The major snowstorms that ravaged the Mid-Atlantic states early this year may have smothered the congressional debate on climate change legislation for now; however, they did not dampen the discussion of the climate-friendly, renewable energy

development issue that is inextricably tied to climate change. Although conservationists have applauded the focus on renewable energy, we may want to step back and consider the possible ramifications to our other renewable resources: fish, wildlife, and their habitat.

Before anyone accuses me of being an environmental doomsayer, I want to set the record straight. My personal carbon footprint is probably just short of Bigfoot's. I drive four-wheel drive diesel and gas pickup trucks; I heat my office with a wood stove and my house with propane; and I am not averse to turning on the air conditioner when the Pennsylvania summer heat and humidity feels like an Amazon jungle. Rather, I embrace both renewable and nonrenewable energy sources, especially if the development of these resources adheres to some simple principles, which in fact, have been codified in state and federal legislation.

"Avoid, minimize, and mitigate" are measures that natural resource agencies are expected to consider and require when permitting various state and federal projects. Although simple in concept, their application for energy development projects often leads to intense controversy. Avoiding environmental impacts in project development may simply mean adjusting a project boundary to avoid impacts to fish and wildlife. It may also

mean missing an opportunity to develop economical energy resources. Minimizing the impact to fish and wildlife often entails adjustments in process, technology, or work schedules so that fish and wildlife are less affected by development projects. Mitigation, whether it occurs on or off the project site, is intended to provide resource protection or enhancement of equal or greater value than that affected by the project.

The track record for the application of these principles is mixed when it comes to development of nonrenewable energy. There are some good examples and some abysmal examples where fish and wildlife resources have simply taken a backseat to the desire to extract energy from the landscape. However, the push for increased renewable energy, which has generally (and loudly) been endorsed by environmental groups, does not come without its own set of impacts. Some are known and some are yet unknown. In particular, the large geographic scale of solar and wind energy projects was not much of an issue a decade ago and therefore was largely unstudied.

Today, solar projects are on the drawing boards, ready for permitting, that dwarf current energy development projects. In California alone, the Bureau of Land Management has reviewed nearly a dozen solar projects, one of which entails 30,000 solar dishes on more than 6,100 acres of land. According to the February 18, 2010, issue of *Land Letter*, a single wind power project in Wyoming proposes to erect 240 turbines across 13,165 acres of federal, state, and private land. These proposed projects can be found throughout the nation. The administration is encouraging renewable energy development using grant funds and by expediting the permitting process. This activity makes sense in light of the current state of the economy, the need for jobs, the need for

energy, and the desire to reduce carbon emissions. However, we should not lose sight of the successes and failures associated with our more than 150-year history of the development of nonrenewable energy sources. We have knowledge of how to "avoid, minimize, and mitigate" impacts. The question is, will we apply that knowledge to renewable energy development?

Of course we should not overlook the other resources that may be affected by this type of energy development. The referenced California solar project is estimated to consume 10.4 million gallons of water each year to maintain the efficiency of the solar panels. According to the same *Land Letter* issue above, a novel solution has been proffered to meet this water demand by pumping treated wastewater 11.8 miles through an underground pipeline. When considering the actual footprint of solar and wind power energy production, we should also include the areas associated with energy transmission and distribution facilities. My guess is that this infrastructure will hop-scotch across the landscape from public land to public land. The cumulative impacts of hundreds of these projects will be considerable with respect to fish and wildlife habitat, our enjoyment of panoramic vistas, and our ability and opportunity to enjoy hunting in wide, unspoiled places.

I believe all of us conclude that our nation needs more and diversified energy sources. As wildlife conservationists and hunters, we should demand that our resources, the ones that we are entrusted to pass on to future generations, should be conserved by avoiding impacts where we can, minimizing the impacts that are unavoidable, and mitigating these impacts so that other areas are secured from future development or enhanced to provide better, more productive habitat for fish and wildlife resources. ■