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Comments submitted to the NJDEP concerning Sparta Mountain Wildlife Management Area (Sparta Mt.) Forest Stewardship Plan

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Part One: Irreparable Damage to Sparta Mountain Wildlife Management Area

The New Jersey Sierra Club is opposed to the revisions in the Sparta Mountain Wildlife Management Area (Sparta Mt.) Forest Stewardship Plan. The Highlands Act was enacted to protect the canopy forest and the water supply for half of New Jersey's residents. This plan will destroy the environmental integrity of this forested site, whose canopy helps maintain our clean drinking water. We believe this plan will open up the Sparta Mountain to commercial logging and destroy its critical natural resources. Logging will also cause erosion of the soil, increase runoff, flooding, and non-point source pollution. It will even harm the trout streams and could kill the trout. This plan will destroy critical natural resources, violate the objectives and goals of the Highlands Act, and go against the Regional Master Plan (RMP).

We believe that the DEP's proposal is not a forest stewardship plan, it is a plan to bring in commercial forestry that will have serious impacts to Sparta Mountain. The Highlands Water Protection and Planning Act was signed into law in 2004 to preserve open space and protect the state's water supply. The Highlands Act was enacted to keep the contiguous canopy forest in place and is critically tied to protect our water. This land is in the Highlands Forest Preservation Area, which is considered the most important environmental sensitive sites in New Jersey. This plan will destroy the environmental integrity of this forested greenway. According to the Highlands RMP, the biggest threat to the region is the alteration of habitat and fragmentation. The Highlands RMP is also particularly concerned about maintaining the forest's edge, but this plan will actually increase fragmentation. This proposed Forest Stewardship Plan for Sparta Mountain will increase fragmentation by clear cutting the forest and lead to water pollution.

Clear-cutting will impact the area 300 ft. inland from the cut. That means if there are only 2 acres of cut, it will actually increase the amount of area impacted to 6 acres. This will not only change the soil composition by opening the forest floor to more sunlight and impact wildlife habitat, but it will open up the entire area for invasive species and deer over-population. These oak trees have taken 120 years to grow and this will not trim trees in the area, but take down the most expensive trees for re-sale, causing the most damage possible. This plan is exempted from soil conservation plan in the Natural Resources and Conservation Service, which is problematic because there will be run-off and siltation coming off the site. We have seen irreparable damage

in forests after the project has ceased from logging practices that bring in heavy machinery like trucks creating ruts and gullies.

Sparta Mountain should not be turned into a field for bird habitat and other vaguely defined “stewardship” practices. In this plan, stewardship is really just another word for logging and clear-cutting the forest. This is most concerning because of its impact to category 1 streams, water quality, and trout, which are endangered. This plan will destroy an important forest in the Highlands Region and get rid of its protections. Logging operations will lead to more erosion and stormwater runoff impacting pristine streams, reservoirs and aquatic ecosystems. Destroying the canopy forest will lead to a loss of biodiversity. Invasive species infestations would require herbicide use which could impact sensitive streams and areas above reservoirs and water supply intakes.

Part Two: Impact to Drinking Water and Pristine Trout Streams

Sparta Mountain’s canopy is highly connected to maintaining our clean drinking water and removing it will cause great long-term ecological damage. The Mountain is part of the Highlands Protection Area, an environmentally sensitive area that holds the water supply for 5.5 million people. The Mountain’s canopy is important environmentally to protect high quality streams and wetlands. When it rains, the forest helps to break down rain drops so that the waters soak in the region’s soft soils. This helps re-charge the Highlands aquifers and without the forest it will deplete the groundwater. Without the canopy, it will cause erosion of the soil, increasing runoff, flooding, and non-point source pollution.

The Highlands Act and DEP Highlands regulations establish 300 ft. for buffers for all waters in the preservation area. In addition, NJDEP designated Category One (C1) waters are protected by 300 ft. for buffers. C1 streams’ status that says there shall be no measurable and calculable change in water quality. However, this plan will remove important 300 ft. buffers near streams that protect high quality waterways and critical headwater areas. The Freshwater Wetlands Protection Act requires 150 ft. buffers (transition area) for exceptional value wetlands. These buffers were based on science and protection of water quality from soil and vegetative disturbance, but logging in Sparta Mountain would be exempt from all that.

Logging operations threaten natural resources, especially nearby streams. Hiking trails will be turned into logging roads, staging areas will be clear cut, skidders, ruts and other equipment will run through streams and wetlands. Under this plan, there is no requirement for stormwater runoff, which will impact pristine streams, reservoirs and aquatic ecosystems. We believe logging has a severe impact to sensitive cold water trout streams by increasing sediments and stream temperature.

Since the DEP Forest Stewardship Plan does not protect C1 streams, this plan will lead to pollution in the Russia Brook, which is a DEP designated trout production C1 stream. Based on a [study by the United States Geological Survey](#), increases in sediment and temperature result in toxic effects of increased stream concentrations of nitrate and aluminum from logging runoff. The USGS also found that clear cuts caused 100% mortality of trout:

“Clearcutting caused a large release of nitrate (NO₃⁻) from watershed soils and a concurrent release of inorganic monomeric aluminum (Alim), which is toxic to some aquatic biota. The increased soil NO₃⁻ concentrations measured after the harvest could be completely accounted for by the decrease in nitrogen (N) uptake by watershed trees, rather than an increase in N mineralization and nitrification. The large increase in stream water NO₃⁻ and Alim concentrations caused 100-percent mortality of caged brook trout (*Salvelinus fontinalis*) during the first year after the clearcut and adversely affected macroinvertebrate communities for 2 years after the harvest.”

“The amount of tree biomass that can be removed without causing a sharp increase in stream-water NO₃⁻ and Alim stream-water concentrations is unknown, but probably depends on the history of forest-disturbance and acid deposition and the level of soil acidification. Results of this study indicate that macroinvertebrate and brook trout communities were sensitive to clearcutting and that deer browsing may affect water quality by suppressing forest regeneration and nutrient uptake. Further studies of selective harvests could identify the harvesting threshold below which changes in water quality and soil chemistry are minimized, and nutrient retention is maximized, thus reducing the damage that logging can inflict on stream and aquatic communities.”

USGS found that clear-cutting also impacted other fish species:

“Therefore, the toxic conditions produced by the clearcut would probably have killed other fish species that may have been present, such as slimy sculpin (*Cottus cognatus*), and the brook-trout mortality reported here may represent only some of the detrimental effects that clearcutting could have on fish communities and the downstream ecosystem.”

USGS found that current science and data are not adequate to establish a threshold below which logging will not harm sensitive and high quality water resources:

“Further research is needed to define the harvesting threshold below which soil nutrient loss is minimized to limit the adverse effects of logging on stream-water quality and aquatic biota.”

We believe the USGS research clearly shows DEP’s forestry practices are inadequate and must be halted until DEP considered ecosystem health, including “existing water quality” and a rigorous program to monitor these conditions as well as the cumulative impacts of logging on Highlands forests and water resources.

Part Three: Destruction of Public Access and Lack of Enforcement

The New Jersey chapter of the Sierra Club worked to save this property from development and turn it into a state owned Wildlife Management Area. This park is held in the public trust and treasured by thousands of state residents that visit each year. Our chapter has over 80,000 members and supporters who enjoy outdoor recreation, including the hikes and trails in Sparta Mountain. We are concerned that this proposal will interfere with our right to use our public land and close off large portions of the Mountain to the public. We believe this proposal is part of the Christie Administration’s attempt to privatize our parks. Logging will limit public access and destroy natural resources that should be enjoyed by all of us. We are concerned this will lead to

worse quality for public services and payments for access that was once free. Additionally, forest stewardship, i.e. logging practices are only allowed on private lands, not public.

Our state parks are heavily used and enjoyed with thousands of visitors each weekend hiking, hunting, fishing, and more and under this plan we are concerned trail access will be restricted and hiking trails could be used for logging roads. These lands were preserved so that their incredible beauty and abundant natural resources could be enjoyed today and by future generations. Parks have been the one thing that the government has done right and that people have enjoyed for years. However, with this plan we will be destroying the Sparta Mountain and giving our forests away for pennies on the dollar.

By not having any rules or enforcement in place for commercial loggers, this plan does not include adequate protections for natural resources. There is no penalty if they clear cut important forest canopy, clear cut, run skidders through streams and do a lot of damage because there is no mechanism for enforcement. If they do more damage, take more trees, or cause ongoing environmental damage like widening logging roads and adding staging equipment, they are still not responsible for the negative environmental impacts. Even more troubling is there is no guarantee that private interests like loggers will restore the land. In the past, we have seen logging in environmentally sensitive areas causing streams to run brown for years later and the runoff cannot be controlled.

Governor Christie conditionally vetoed (CV) a bill passed by the Legislature that would have authorized a DEP program of “Forest Stewardship” for public lands. In his veto statement, he said DEP should not give its authority to a non-governmental third party, which is also why we opposed it. If there is a violation, there is no enforcement nor transparency, or accountable for their violation.

Part Four: Sell Out of Public Lands that Threatens Biodiversity under the Disguise of Bird Habitat

Sparta Mt. environmentally sensitive areas should be protected to preserve the state’s biodiversity, not clear-cut under the excuse of bird habitat. One of the species that the Highlands currently protects is the neo-tropical song birds. There are 75 different species of these birds that would be impacted by the Sparta Mt. plan. These include endangered species like the Northern Harrier, Pied-billed Grebe, Black Rail, and the Upland Sandpiper. These birds require a deep forest at least 300 ft. of undisturbed habitat to protect their nests from other species. These birds are not only losing habitat here, but also in South America where they come from. If forests are clear-cut, and fields are created for other species, it will impact those birds. This proposal would threaten the WMA’s biodiversity including the federally-threatened Northern Long-Eared Bat and federally-endangered Indiana Bat.

Opening up the canopy will even allow invasive species to take over. This plan will impact already threatened and endangered species habitat. It proposal does not address controlling invasive species, deer overgrazing, and maintaining the forest canopy, which are critical components of good forest management plan to maintain a native, diverse, and healthy forest ecosystem.

In the past, the state has received \$75 per tree for oaks that sold on the market for over \$2000. This is a horrible sell-out to our forests and water resources for private logging companies. In 2014, the legislature had proposed a plan to log our forests and open our state parks up to commercial logging operations. The Office of Legislative Services estimated the program would cost \$2.7 million to implement. Loggers would have to take \$2.7 million worth of trees out of our forests just to cover those costs and additional revenue would go to the General Fund. There is certainly no economic benefit to logging, especially when you look at the costs to environmental impacts like pollution, loss of habitat, and invasive species.

We are concerned that the revisions in the Sparta Mountain is about money, not land stewardship. Stewardship is defined vaguely in this plan and often used for logging and other things that undermine the protection of natural resources in our parks. We are concerned that with this plan we will be trading an oak forest for bird habitat. For example, the New Jersey Division of Fish and Wildlife has cut down trees to create grass habitat in the past. There are plenty of alternative sites to create Golden-Winged Warbler and other species habitat, including along power lines and gas pipeline right-of-ways, former farm fields, sandpits, quarries, and parking lots. That means this plan could be clear-cutting to create habitat for invasive species. Further, the Golden-Winged Garbler is moving more north as a result of climate change so this plan would not even sustain this population.

Part Five: Closed Stakeholder Process and Change in High Conservation Value Designation

The public and a large list of stakeholders must be involved from the beginning of the process of revisions to the Sparta Mountain. However, the stakeholders included in the comment and development on this plan were those that have vested interest in the project like the NJ Audubon Society and the Ruffed Grouse Society of Pennsylvania. We are concerned that NJ Audubon does not promote an appropriate forest stewardship model because there is no accountability in this or other NJ Audubon supported plans. We are also troubled that other environmental groups and watershed associations were not included in the stakeholder process. Without inclusion, this is more of a closed-door stakeholder process. These open spaces belong to all of us and we should not diminish the protections we have put in place at the Sparta Mountain under the disguise of so-called “stewardship.”

Another area of concern is that the original assessment that stated Sparta Mountain Wildlife Management Area had High Conservation Value Forest has been modified. This is troubling because we believe stakeholder input was a closed door process. In 2013, the forest didn't change, but mysteriously FSC removed its designation, while adjacent privately managed NJA Sparta Mountain Preserve retained it. The change in designation was critical in determining if large trees could be logged. The (see the top of page 4 of the Forest Management Audit here: <http://fsc.force.com/servlet/servlet.FileDownload?file=00P4000000DX5LzEAI>).

“The prior classification was based on landscape habitat suitability models and not on actual presence/absence data species and ecosystems that would contribute to HCVF classification. This decision was based on stakeholder input and field surveys by NJA confirming that the species predicted by the models did not occur or if present they were not likely to be there in sufficient numbers to indicate HCVF status. See Appendix I.”

The status was changed by so-called stakeholder meeting, but we don't know who was in attendance and the rationale. FSC is a private organization and never released the information and they are not subject to public records information requests. Also, NJ Audubon is the only group in New Jersey that are a FSC certified organization so therefore they have a monopoly since they are the only organization that can do FSC projects. We believe that they changed this characterization not based on any facts and ignore the environmental sensitivity of the site, so they can allow this property to be logged. An additional concern is FSC is a private nongovernmental group that are too cozy with the timber industry and DEP should investigate this designation change.

Jeff Tittel, the Director of the New Jersey Sierra Club was given the award of NJ Audubon Conservationist of the Year in 1994, but since then Audubon has totally diverted from its mission to protect this forest. He worked with them for decades, but in the last five years they've switched their mission from preservation. NJ Audubon had even conducted their own studies previously that cited undisturbed habitat for interior forest species, was critically important for many neo-tropical migratory birds. At the "State of the State Forest" in 2002, Eric Stiles, current President of NJ Audubon, made the following statement:

"Forest wildlife diversity depends on large contiguous forest patches, connections to other habitats, structurally complex vegetation, intact seasonal wetlands, and the presence of native vegetation. Disruption of any of these components can dramatically reduce wildlife diversity."

Stiles was primarily responsible for forest metrics, including the *Impacts of Ecosystem Degradation on Forest Wildlife Diversity*. He strongly advocated the position that the primary forest management objectives were to: preserve the few remaining large blocks of intact contiguous forest, stop fragmentation and disturbance, especially on steep slopes, maximize canopy cover, preserve existing vegetation, especially riparian and wetlands, minimize creation of new forest edge, protect habitat of scores of species of threatened interior forest birds, and prevent sunlight from the forest floor which fueled invasive species and deer browse. However, in the last few years they have completely diverting from their analysis to protect the contiguous forest of the Highlands.

In the guise of stewardship, this is really commercial logging and are entirely inappropriate on our public lands, especially those that are critically important to half the state's drinking water. The Highlands are not like the grasslands or Meadowlands; it's where we fish, swim, hike, and breathe. They are like our Yellowstone and Yosemite, except they are more important because you can't bike from Montclair to Yellowstone and millions of people don't depend on its drinking water. Sparta Mountain must be preserved so that its natural resources can be enjoyed today and by future generations. We cannot turn Sparta Mountain over to commercial logging operations. We urge you to protect Sparta Mountain, our water resources, biodiversity, and withdraw this environmentally destructive plan.