

Logging is a major issue that I see affecting the environment through widespread deforestation. Clear-cut logging can lead to many different environmental problems that not only effect the species within the remaining forest but the surrounding areas. Habitat fragmentation is a massive contributor to the loss of biodiversity within these forests, whereas soil erosion can damage surrounding structures or spill into nearby water ways. Not to say that logging is not important; the resources gained from it are necessary for modern living but there are strategies that can be used to mitigate these losses.

Deforestation from logging can lead to many detrimental consequences on the environment. Starting at the ground level, the soil can become compacted from the movement of equipment in and out of the area. This compacted soil is more prone to erosion event which could be harmful to humans should debris collide with roads or houses. This increased sediment runoff can also harm aquatic habitats should it end up in nearby rivers and lakes. However, there is a more detrimental effect deforestation can have of the environment, and that is the loss of biodiversity. Habitat fragmentation forces different species to encounter each other which could lead to increased predation and competition. Logging changes local habitats making it uninhabitable, putting unnecessary strain on species within the

remaining forest to adjust to an environment that is no longer suited to them. " The habitat destruction caused by deforestation drives 135 plant, animal, and insect species to extinction every day. That's 50,000 species per year, lost forever. (Effects of Deforestation on Humans and The Environment, 2021)"

Logging does not have to have only negative effects; it can also be beneficial for many different reasons. Firstly, it provides valuable materials for our everyday lives, such as building materials and even fuel for certain industries. Second, it can improve the overall health of the area by removing diseased trees, effectively preventing the spread of bacteria from weakened trees to healthy ones. As well as it would open up wide patches of land that will allow different types of bushes and grasses to flourish in habitats that were once covered by larger trees. Lastly, logging could increase safety for surrounding areas. Older trees are removed from environments in which they could be blown into roads or onto powerlines and ultimately inconvenience many individuals. As well as the removal of trees can slow the spread of a fire should one occur in the area.

Regardless of the benefits of logging, sustainable logging practices need to be implemented to deal with the adverse

effects of deforestation. The first practice that could be employed is cutting lumber from plantation sites. Plantation farms would be stocked with trees based on their grow speed, yield amount, and their ability to be left alone with little oversight. On top of providing the normal outputs such as fuelwood and pulpwood, plantations could perform the same functions of a normal forest. They can stabilize the soil within the area as well as prevent excessive erosion and mitigate carbon emissions. The next technique is sometimes referred to as strip logging, in which a sixty-five foot wide path is cut into a forest and the lumber is removed from the area. "The gap is narrow enough to allow rapid plant colonization and seed dispersal across the clearing, while the soil is relatively undisturbed by the use of animal transport. The surrounding forest rapidly fills in the gap and within 20 years the strip is covered with secondary forest. (Reduced-Impact Logging, 2012)" Finally, logging companies can put together comprehensive management plans for small-scale clear-cutting layouts based on the growth rates of the trees in the area. This process mimics natural disasters like fires, allowing the species within the ecosystem to regenerate and maintain the overall environmental health.

Logging is required to obtain commodities such as lumber and fuel. It is also helpful in maintaining the local ecosystem

by removing dead trees that could infect others with disease or be the start of fires. However, the careless cutting of trees has fragmented habitats and pushed species beyond their limits leading to local extinctions. It leaves the soil dry and more prone to landslide which can damage important infrastructure as well as drain into surrounding lakes. This is not to say that logging needs to be stopped completely but rather new techniques need to be implemented in order to restore past damages.

Plantations would be a beneficial alternative that could help restore already cleared areas. On top of that woodlands could be cut in specific patterns that would allow the area to regenerate naturally.

References

Effects of Deforestation on Humans and The Environment. (2021, September 20). Retrieved from The Humane League.org:
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