**Ecosystem Type: FORESTS**

**Category: Clean Air**

1. **Materials**

*Supplier –* Forests remove air pollutants such as nitrogen, sulfur, carbon and ozone (Magill et al. 1997; Nowak et al. 2006).

*Driver –* Not applicable

*Demander –* Not applicable

1. **Nutrition**

*Supplier –* Not applicable

*Driver –* Not applicable

*Demander –* Not applicable

1. **Energy**

*Supplier –* Forests can reduce ambient air temperatures during hot days (Akbari et al. 2001) and decrease ozone levels (Cardelino and Chameides, 1990; Taha, 1996; Nowak et al. 2000; Nowak 2006).

*Driver –* Not applicable

*Demander –* Not applicable

1. **Mediation of waste, toxics, and other nuisances**

*Supplier –* Forests provide energy to other ecosystems for material, waste and toxics cycling and also clean some of the waste generated by other ecosystems (Ferretti et al. 2009; Allen 2009). Trees remove air pollution by the capturing particulate matter on leaf and plant surfaces, and by absorbing gaseous pollutants (Nowak et al. 2014).

*Driver –* Not applicable

*Demander –* Not applicable

1. **Mediation of flows**

*Supplier –* Forests regulate water balance and river flow to downslope areas (Foley et al. 2007), and the lack of forests (through deforestation) can cause changes in evapotranspiration, canopy interception, surface runoff, and groundwater recharge (Meher-Homhi, 1992; Costa and Foley 1997; Williams and Malek 1997). Proper and healthy water flows contribute to removing pollutants from the air, such as carbon and nitrogen (Montieth et al. 2007).

*Driver –* Not applicable

*Demander –* Not applicable

1. **Maintenance of physical, chemical, and biological indicators**

*Supplier –* Forests play an important role in maintaining environmental conditions in and out of the forest that directly impact clean air by sequestering carbon and other greenhouse gases and maintaining biodiversity (Mori et al. 2016; Edwards et al. 2014)

*Driver –* Not applicable

*Demander –* Not applicable

1. **Spiritual, symbolic, religious, and social experiences**

*Supplier –* Not applicable

*Driver –* Not applicable

*Demander –* Not applicable

1. **Physical and intellectual interactions w/ biota, ecosystems, and land/seascapes**

*Supplier –* Not applicable

*Driver –* Not applicable

*Demander –* Not applicable

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