**Ecosystem Type: RIVERS AND STREAMS**

**Category: Climate Stabilization**

1. **Materials**

***Supplier*** – not applicable

***Driver*** – not applicable

***Demander*** – not applicable

1. **Nutrition**

***Supplier*** – not applicable

***Driver*** -not applicable

***Demander*** - not applicable

1. **Energy**

***Supplier*** – not applicable

***Driver*** – not applicable

***Demander*** – not applicable

1. **Mediation of Waste, Toxics, and Other Nuisances**

***Supplier*** – not applicable

***Driver*** – not applicable

***Demander*** – not applicable

1. **Mediation of Flows**

***Supplier*** – not applicable

***Driver*** – not applicable

***Demander*** – not applicable

1. **Maintenance of Physical, Chemical, and Biological Indicators**

***Supplier*** – not applicable

***Driver*** – Streams and rivers have the ability to cool the nearby microclimates (Olson et al., 2007) and mediate nutrients (Hall, Bernhardt, and Likens, 2002) that may have an effect on climate change. Increased flooding due to increased impervious areas in a watershed will decrease the storage time these ecosystems retain nutrients (Hall, Bernhardt, and Likens, 2002).

***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

**Sources:**

Hall, R. Jr. O., Bernhardt, E.S., and Likens, G.E. (2002) Relating nutrient uptake with transient storage in forested mountain streams. *Limnology and Oceanography, 47*(1), 255-265. DOI: 10.4319/lo.2002.47.1.0255. [abstract only]

Olson, D.H. et al. (2007) Biodiversity management approaches for stream-riparian areas: Perspectives for Pacific Northwest headwater forests, microclimates, and amphibians. *Forest Ecology and Management, 246*(1), 81-107. <https://doi.org/10.1016/j.foreco.2007.03.053>. [abstract only]