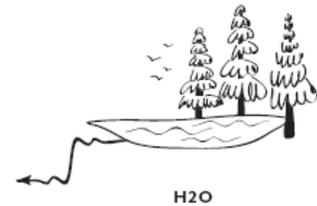


ENVIRONMENTAL FOOTPRINT COMPARISON TOOL

A tool for understanding environmental decisions related to the pulp and paper industry



EFFECTS OF NON-WOOD FIBER USE ON WATER USE

Relative Irrigation Needs

Because wood fiber is cultivated over a lengthy rotation, productivity is relatively unaffected by seasonal or annual variations in rainfall. There have been evaluations of very intensive high-yield silviculture where drip irrigation and fertilization have been employed. This is not common silvicultural practice, however.

Intensively grown agricultural fiber crops are less tolerant and more demanding in their water requirements. Kenaf, for instance, requires approximately five inches of water per month. To ensure a reliable fiber supply, irrigation capacity would likely have to be available to compensate for precipitation shortfalls (Bowyer et al. 2004).

Reference

Bowyer, J., J. Howe, P. Guillery, and K. Fernholz. 2004. *Tree-free paper—When is it good for the environment?* White Bear Lake, MN: Dovetail Partners, Inc.
<http://www.dovetailinc.org/files/DovetailTreeFreePap9204.pdf>