Synopsis:

Efficient Industrial Water Use - Reduce, Reuse, Recycle!
A large pulp and paper mill such as Sappi in Cloquet uses large amounts of water each day. Millions of gallons of water are brought into the mill from the St. Louis River and Lake Superior, but where does all of this water go? The answer: almost 97% of the water is returned to the River! Reducing the water usage at Sappi has been a working project for almost the last decade. From 2005-2013 Sappi has worked to reduce its specific water use by > 25%. Sappi is proud of the water efficiency that has been achieved, and is continuing to work toward further reduction.

Reference Material Links:
AF&PA recycling website: http://www.paperrecycles.org/
DNR: http://www.dnr.state.mn.us/watersheds/index.html
MPCA, Living Green-Educators: www.pca.state.mn.us/index.php/living-green/living-green-educators/educators.html
Sappi North America: http://www.na.sappi.com/home,

Vocabulary List:
Clarification – process of cleaning water by allowing solids to settle out with aid of chemicals
Coagulant – chemical that aids settling by making small particles stick together
Consumption – water not returned directly to river (water in paper and evaporation)
Ecosystem – a biological environment consisting of all living organisms in an area
Efficiency – amount of water necessary to make paper
Effluent – treated water returned to the river everyday by WLSSD
Flocculant – settling aid added after coagulant to form even larger particles
Influent – water drawn into the mill everyday
Reduction – making more paper with less water
Sustainability – balancing water use (and other environmental resources) with production
Watershed – the area that is drained by a given channel or network or streams