

Sanjeev Joshi  
Ph.D. Student  
December, 2012 – M.S.  
Starting from August 2014

I am from Nepal, a small developing country in south Asia extremely rich in natural resources and the country of Mount Everest. I accomplished my intermediate in science from Radiant Higher Secondary School, Kanchanpur, Nepal in 2002. Then, I joined the Institute of Forestry, Pokhara, Nepal in 2003 and earned my Bachelor of Science degree in Forestry in September, 2007. Later, after working for about two years as a Research Assistant for a couple of forestry related Non-Governmental Organizations in Nepal, I started my M.S. program in forestry in August 2009 at the School of Renewable Natural Resources (RNR), Louisiana State University (LSU) with a Gilbert Fellowship Award. In December 2012, I received a Master of Science degree in forestry from the School of RNR, LSU.

In my MS thesis research, I worked on a project in Catahoula Lake (a Ramsar Wetland of International Importance) of central Louisiana where hydrologic alterations have apparently led to an expansion of tree species called water elm (*Planera aquatica*). The expansion of water elm has reduced herbaceous vegetation valuable for waterfowl and shorebirds. I used dendrochronological techniques to test hypotheses that growth rates of water elm are correlated with hydrologic regime and that expansion of water elm in the lake is a consequence of construction of a diversion canal built on the lake in 1971 that resulted in reduced hydrologic variability. In contrast to our hypothesis, tree radial growth was correlated more with climatic variables than water levels in the lake. We also found that younger trees did not regenerate under older stands, but were a result of new colonization of former non-forested habitats.

I will be joining the watershed hydrology lab at the School of RNR, LSU as a PhD student from fall 2014. My prospective project with Dr. Jun Xu involves dealing with the issues of continuous land loss in southeast coastal Louisiana which is a matter of high concern. It is aimed at providing adequate quantitative measurements of sediments which can be diverted from Mississippi-Atchafalaya Rivers to coastal Louisiana without harming the functional and ecological integrity of these rivers and their floodplain ecosystems. Being a part of this highly engaging research will allow me to learn much more about hydrological and sedimentation processes pertaining to coastal ecosystems, thus adding a new dimension in my research background till date. Due to these reasons, I am highly interested join the watershed hydrology lab soon.