

# 2018 ASABE Fellow



**Devendra Man Amatya, PE**, research hydrologist, USDA Forest Service, Cordesville, South Carolina, is being honored for significant contributions to understanding the hydrology of wetland forests and the impacts of management alternatives.

Throughout his career, Amatya has developed an extensive research portfolio that has made significant contributions to the hydrology of forests, particu-

larly runoff and evapotranspiration, on low-gradient coastal landscapes and their interactions with land use and changing climate. He has also conducted extensive research on quantifying long-term hydrology and water quality effects of silvicultural and water management practices on managed forests using monitoring and modeling approaches, the results of which include a novel strategy of planting switchgrass as a cellulosic biofuel crop within pine forests to help manage water quantity and quality on poorly drained, pine-forested watersheds throughout North Carolina. This research revealed previously undetected reversals in flow magnitude between paired catchments at the USDA Forest Service Santee Experimental Forest in coastal South Carolina, which resulted from canopy damage and subsequent changes in vegetation and evapotranspiration caused by Hurricane Hugo in 1989. The findings led to new methods for assessing hydrologic and ecological effects of extreme climatic events on these coastal forests.

A 25-year member of ASABE, Amatya has been a member and frequent contributor to ASABE technical communities, serving in several leadership positions of the Natural Resources and Environmental Systems (NRES) Hydrology Group and the NRES Drainage Group. He has served as an associate editor for the NRES publications review committee and has been a member of several Applied Science and Engineering committees. Amatya also maintains membership with the American Water Resources Association, the American Geophysical Union, and the Society of Wetland Scientists. He is an editor and serves on the editorial board for the *Journal of South Carolina Water Resources*. He is co-editor of the *Acta Scientiarum Polonorum, Formatio Circumeictus* in Poland. Amatya was also the lead editor for *Forest Hydrology: Processes, Management and Assessment*, published in 2016.

Amatya has authored or coauthored more than 220 refereed journal articles, conference proceedings, and other publications. In 2007, he was inducted as a Fellow in the American Society of Nepalese Engineers. He has received awards for his commitment and leadership as a planning committee member for the South Carolina Water Resources conference. He received an Outstanding Associate Editor award from ASABE for his work with the Soil and Water division.