

Viernes 21 de mayo de 2010 a las 12.00
SEMINARIO

DEVELOPMENT AND APPLICATION OF GULLY EROSION COMPONENTS WITHIN WATERSHED MODELS

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An overview will be provided that describes gully processes in agricultural fields and at the edge of fields that contribute to the overall sediment load of a watershed. By distinguishing between sediment that is eroded from fields as sheet and rill erosion or from concentrated flows within gullies or within channels, effective conservation practices can be targeted to the appropriate source of erosion.

Current modelling capabilities are limited within US Dept of Agriculture (USDA) watershed models as a result of very little research available to fully describe gully erosion processes. A description of current and future research needs for development of gully erosion components within watershed models will be discussed, particularly for inclusion within the USDA watershed management planning tool, AnnAGNPS.



Dr Ronald L. Bingner, PhD in Agricultural Engineering (Univ. of Illinois), is Senior Researcher at USDA, ARS, Nat. Sedimentation Laboratory, in Oxford, Mississippi. His main field of specialization is on watershed processes simulation modeling and on sediment transport mechanics, riparian buffer and wetland water quality, and stream restoration. Research currently underway involves the ARS leadership for the development, in cooperation with the USDA-NRCS, of the continuous version of AGNPS, AnnAGNPS, and the channel evolution watershed model, CONCEPTS, as modules within AGNPS.