RIBASIM

Description	RIBASIM is a generic model package for simulating the behavior of river basins under various hydrological conditions. The model package is a comprehensive and flexible tool that links the hydrological water inputs at various locations with the specific water users in the basin. RIBASIM enables the user to evaluate a variety of measures related to infrastructure and operational and demand management, and to see the results in terms of water quantity and flow composition. RIBASIM can also generate flow patterns that provide a basis for detailed water quality and sedimentation analyses in river reaches and reservoirs. Demands for irrigation, public water supply, hydropower, aquaculture, and reservoir operation can be taken into account. Surface- and groundwater resources can be allocated. Minimum flow requirements and flow composition can be assessed.
Appropriate Use	Evaluation of the options and potential for development of water resources in a river basin. Assessment of infrastructure, and operational and demand management measures.
Scope	All locations, surface- and groundwater systems; national or site-specific.
Key Output	Water balance providing the basic information on the available quantity of water as well as the composition of the flow at every location and any time in the river basin. This takes into account drainage from agriculture, discharges from industry and the downstream re-use of water in the basin.
Key Input	Configuration of system (can use GIS layers for background) and component capacities and operating policies. Water demand: Spatially explicit demographic, economic, crop water requirements; current and future water demands and pollution generation. Economic data: Water use rates, capital costs, discount rate estimates. Water supply: Historical inflows at a monthly timestep; groundwater sources. Scenarios: Reservoir operating rule modifications, pollution changes and reduction goals, socioeconomic projections, water supply projections.
Ease of Use	Relatively easy to use. Requires significant data for detailed analysis.
Training Required	Moderate training/experience in resource modeling required for effective use.
Training Available	Contact Delft Hydraulics for details regarding available training (see Contacts below).
Computer Requirements	200 MHz Pentium processor; 64 Mb RAM; 400 Mb free disk space; Super VGA graphics card with matching monitor; floppy disc drive; mouse; CD-ROM drive; RIBASIM requires MICROSOFT WINDOWS 95, 98, 2000, or NT.
Documentation	Documentation available from Delft Hydraulics (see Contacts below).
Applications	RIBASIM has been applied for more than 20 years in a wide variety of projects and countries. Water management organizations worldwide use it to support their management and planning activities; Contact Delft Hydraulics for more details.
Contacts for Framework, Documentation, Technical Assistance	WL Delft Hydraulics Rotterdamseweg 185, P.O. Box 177, 2600 MH Delft, The Netherlands. Tel: +31.0.15.285.8585; Fax: +31.0.15.285.8582; e-mail: ribasim.info@wldelft.nl; website: http://www.wldelft.nl/soft/ribasim/int/index.html.
Cost	Relatively low cost to obtain model and documentation.
References	Contact Delft Hydraulics for references.