Heirloom or Legacy Models

Previous to any attempt to do collaborative modeling, someone may have built a model related to the region and problems challenging the collaborative modeling team. In many cases these "legacy" models will be black boxes requiring specialized modeling skills, and the modelers with those skills may have incentives for challenging the collaborative modeling process. First, they may perceive the collaborative model as a replacement for their model and their skills (and this may be true). Second, their design perspective may be centered on the requirements of their specific model rather than on the issues that will be modeled. For example, a water quality modeler might insist that the model requires short time step data (which is necessary to calculate mixing and biological processes; but not typically for planning issues such as determining if population growth and climate change will reduce dissolved oxygen concentrations below the trout survival threshold). Third, they may argue that there is no need to "redo" what has already been done—which is true if the legacy model directly supports all the group's needs, but may not be true if it does not. All of this said, legacy or specialized models are often a necessary part of collaborative modeling because they provide important functional relationships (in this case, perhaps, dissolved oxygen minima as functions of flow, return rates and temperature increase).

revised 18 Feb 2011