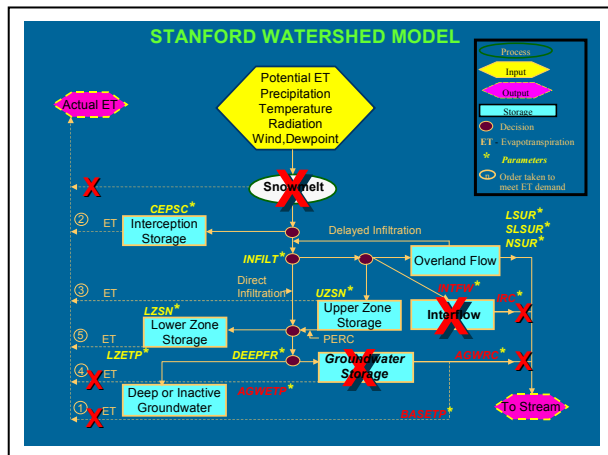
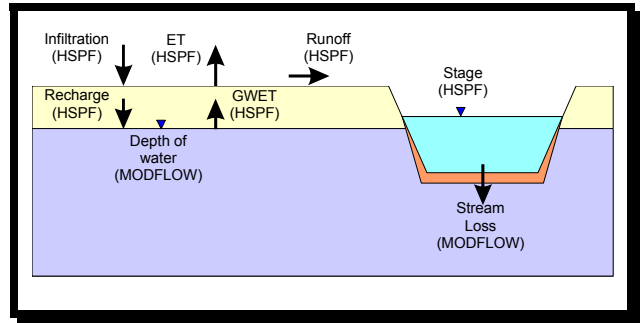


## Scientific Review of Integrated Hydrologic Model

Tampa Bay Water owns twelve groundwater supply systems. Eleven of these wellfields are operated as an integrated system giving priority to minimizing environmental impacts while cost effectively meeting demands. The eleven wellfields are managed using an integrated surface/groundwater (ISGW) hydrologic simulation model in association with an optimization program. The ISGW model consists of the groundwater model MODFLOW, the surface water model HSPF, and inter-processor programs which perform calculations of evapotranspiration, build and store data for post processing, create weekly HSPF input files, and transfer output data between the groundwater and surface water models.



The object of the study was to review scientific and technical data and methodologies used in the development of the ISGW/CNTB Model 121, and to provide comment and critique as to the adequacy and appropriateness of the model development and its application in light of the intended purposes for Tampa Bay Water's use of the model. To do this, the Team reviewed the model development, and reconfigured the model to assess whether the groundwater and/or surfacewater modules should be differently configured.

In the next phase of the study, we are working with Tampa Bay Water and the model development team to update ISGW to a new model, IHM (Integrated Hydrodynamic Model)

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