Ordering - SRG

Ordering refers to the system of accumulating individual water demands in a regulated water resource system to determine the volume of water required to be released from water storages at any given time, to ensure delivery of water to all downstream demands. Most water resource systems have a number of competing uses generating demand for water delivery such as irrigation, environment, urban water supply or hydropower, and have developed a collection of management rules to determine how water is shared amongst these demands. Ordering represents these uses and management rules in determining releases from water storages. The accumulation of demands in ordering occurs at the ownership level in Source. Demands are also generally, and are located at varying distances from water storages, so ordering accounts for the different lengths of time it will take releases from the water storage to arrive at each individual demand. In many water resource systems it is possible that individual water demands may be met from multiple storages along multiple flow paths, so ordering needs to deal with this complexity. Source has two solutions for ordering: Rules-based ordering and Network Linear Programming (NetLP), which are explained in more detail in Rules-Based Ordering - SRG and NetLP - SRG respectively.