Water Quality SRG

Introduction

In Source, the term *constituents* refers to materials that are generated, transported and transformed within a catchment and affect water quality. Common examples include sediments, nutrients, salts and other dissolved solids.

Processes that act on constituents to generate, transport and transform them can be modelled in Source. These models are broadly categorised as Catchment Water Quality models and Storage and Link Water Quality models.

Catchment water quality models are classified as:

- Constituent generation models - describe how constituents are generated within a functional unit and the resulting concentrations or loads delivered to the sub-catchment link;
- Constituent filtering models - represent any transformation of constituents between generation within the FU and arrival at the link upstream of the sub-catchment link.

Storage and link water quality models include:

- Constituent routing models - describes the movement of constituents along a river channel network, including exchange of constituent fluxes between floodplains, wetlands, irrigation areas and groundwater. Constituent routing models are conservative, meaning that they do not alter the total mass of constituent stored in the system;
- Constituent processing models - describe processes that can alter the mass of a constituent in a storage or river reach (link), such as via a decay process.

Contents