

Module 8:

1. Write two different linear programming models for estimating the maximum constant reservoir release or yield Y given a fixed reservoir capacity K , and for estimating the minimum reservoir capacity K required for a fixed yield Y . Assume that there are T time periods of historical flows available. How could these models be used to define a storage capacity-yield function indicating the yield Y available from a given capacity K ?
2. Managing the quantity and quality of stormwater runoff is a common urban problem. Discuss the factors to be considered when planning storm sewer networks and detention basins, and how might simulation and/or optimization methods be used to help do this.