\* What is simulation -> Imitation of the operation of a real world process or system over time. \* When simulation is the appropriate tool? → study of complex system Model can be simulated Study parameters changing inputs and effects it has on the environment. Simulate new designs or policies \* When simulation is not appropriate → Not if problem can be solved analytically or experimentally. Not if cost exceds savings Not if no data, assumptions can be modelled. Not if system is too complex