

Estimate of monthly available storage required.
 Utilization of flood flow.
 Qualifications of deduced ratios.
 Influence of storage upon continuous supply.
 Artificial gathering areas.

SPRINGS AND WELLS.

Subterranean waters.
 Porosity of earths and rocks.
 Causes of percolations
 Subterranean reservoirs.
 Overflowing wells.
 American artesian wells.
 Supplying capacity of wells and springs.

IMPURITIES OF WATER.

Composition of water.
 Solutions in water.
 Mineral impurities.
 Organic impurities.
 Tables of analysis of potable waters.
 Deep well and surface impurities.
 Vegetal organic impurities.
 Vegetal organisms in water pipes.
 Propagation of aquatic organisms.
 Purifying office of aquatic life.
 Intimate relation between grade of organisms and quality of water.
 Agricultural; mineral; manufacturing and sewage impurities.

WELL, SPRING, LAKE AND RIVER SUPPLIES.

Locations for wells; fouling of old wells.
 Spring waters; impregnations; mineral springs.
 Lake waters; impounding; plant growth.
 Preservation of purity; natural clarification.
 River waters; pollutions; sanitary discussions.
 Spontaneous clarification.
 Artificial do
 Sugar test of the quality of water.

FLOW OF WATER THROUGH SLUICES, PIPES AND CHANNELS.

Weight, pressure and motion of water.
 Atomic Theory—Molecular Theory.
 Influence of Caloric—Relative densities and volumes.
 Weight of water and its constituents.
 Crystalline forms of water.