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**Yellowboy** — Iron oxide flocculent (clumps of solids in waste or water); usually observed as orange-yellow deposits in surface streams with excess iron content. Characterized by unsightly yellowish precipitates of ferric sulfate and hydroxide and frequently observed in many streams polluted by mine drainage.

**Yellow Rain** — A powdery, poisonous, yellow substance reported as dropping from the air in southeast Asia and found to be the excrement of wild honeybees contaminated by a fungal toxin.

**Yield** — (1) The quantity of water expressed either as a continuous rate of flow (e.g., cubic feet per second – cfs) or as a volume per unit of time (e.g., acre-feet per year – AFY) which can be collected for a given use or uses from surface- or ground-water sources on a watershed. The yield may vary with the use proposed, with the plan of development, and also with economic considerations. (2) Total runoff. (3) The streamflow in a given interval of time derived from a unit area of watershed. It is determined by dividing the observed streamflow at a given location by the drainage area above that location and is usually expressed in cubic feet per second per square mile.

**Yield, Average Annual** — The average annual supply of water produced by a given stream or water development.

**Yield, Firm** — The maximum annual supply of a given water development that is expected to be available on demand, with the understanding that lower yields will occur in accordance with a predetermined schedule or probability. Sometimes referred to as *Dependable Yield*.

**Yield, Gross (Water)** — (1) The available water runoff, both surface and subsurface, prior to use by man's activities, use by phreatophytes, or evaporation from free water surfaces. (2) The estimated or actual available water, both surface and sub-surface, prior to agricultural and phreatophytic use. Generally, this water yield is estimated for a stream or streams at a point above the highest diversion for the main body of irrigated land on a flood plain of a valley.

**Yield, Perennial** — The amount of usable water of a ground-water reservoir that can be economically withdrawn and consumed each year for an indefinite period of time. It cannot exceed the sum of the *Natural Recharge*, the *Artificial (or Induced) Recharge*, and the *Incidental Recharge* without causing depletion of the groundwater reservoir. Also referred to as *Safe Yield*.

**Yield, Safe** — With reference to either a surface- or ground-water supply, the rate of diversion or extraction for *Consumptive Use* which can be maintained indefinitely, within the limits of economic feasibility, under specified conditions of water-supply development. Also see *Perennial Yield*.

**Young** — (Geology) Being of an early stage in a geologic cycle. Used of bodies of water and land formations.

**Youth** — (Geology) The first stage in the erosion cycle.