



Plate 2. Map showing changes in the channel geomorphology of the Bill Williams River, Arizona 1953-95

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EXPLANATION

Map Units - 1995.

- Yr: Portion of river channel inundated by 1995 flood. Vegetation sparse or absent. Yrv denotes low, inundated areas characterized by relatively dense vegetation.
- Y1: Inundated area with moderate density of vegetation. Flood waters appear to be continuous through these areas, although they are topographically higher than Yr areas. Y1v denotes areas with higher vegetation densities.
- Y1a: Highest inundated surface with highest density of vegetation. Flood waters appear as discontinuous channels separated by bars. In some areas, the vegetation density precludes the assessment of the extent of flood waters.
- Y: Undifferentiated Holocene surfaces that were not inundated in 1995

Map Units - 1953.

- Yr: Lowest alluvial surface, water typically present; inundation frequency very high
- Yrv: Same as above, but with relatively dense coverage of riparian vegetation
- Y1: lowest dry alluvial surface; completely devoid of vegetation; inundation frequency is high
- Y1a: Slightly higher surface entirely devoid of vegetation. Characterized by small scarp separating it from bounding Y1 or Y2 surfaces.
- Y2: highest surface that is completely or nearly completely devoid of vegetation; inundation frequency moderate to high
- Y2a: slightly higher surface with vegetation present; frequency of inundation is moderate to high
- Y3: Next highest alluvial surface, relatively dense, mature vegetation present; infrequently inundated
- Y4: Mixed unit comprising the highest alluvial surface and fine-grained alluvial deposits located along the perimeter of the main channel typically in small re-entrants and niches. Generally, Unit Y4 represents fine-grained flood deposits of varying elevations relative to the main channel. Most Y4 deposits are restricted in spatial extent and were deposited by the largest floods prior to the construction of Alamo Dam.
- pQ: Pre-Quaternary rocks and basin-fill deposits
- Ag: Cultivated land

Map Symbols

- Outer perimeter of late Holocene alluvial deposits of the Bill Williams River
- - - Geomorphic Surface Contact, dashed where inferred
- Position of narrow thread of low flow channel in July of 1953
- Position of low flow channel thalweg in April, 1995. Channel width typically less than 10 m. We consider these areas to encompass the ordinary low-water marks.

