



POLICY MEMO NO. 1 – SPLIT FLOW CONDITIONS

DSPM SECTION 4-1.504 C SPLIT FLOW CONDITIONS

Projects in **northern parts** of Scottsdale must address split-flow channel conditions where applicable. These splits in the alluvial channels usually include highly erosive soils and are generally unstable and unpredictable. In **setting lowest floor elevations** relative to upstream splits, assume that 100% of the flow could go either direction in any given flood event. For **infrastructure design**, the estimate of the actual split, based on a hydraulic analysis of the current channel cross sections, must include a minimum safety factor of 30% of the total flow. If there are **extenuating factors** affecting the stability of the split, the safety factor should be increased accordingly.

EXPLANATION:

Northern parts of Scottsdale mean areas north of the Granite Reef Aqueduct also known as the Central Arizona Project (CAP). Current floodplains (with defined flow rates) and preserve lands are excluded. Areas south of CAP are highly urbanized and split flow conditions do not exist.

In current floodplain areas, use the Regulatory Flood Elevation (RFE) to **set the finished floor**.

In SFHA AE/AH/A use the BFE + 1.0'.

In SFHA AO use HAG + depth no. + 1.0'.

In areas outside FEMA delineated SFHA, use the best available data (BAD) including the Flood Control District of Maricopa County (FCDMC) Web Access Tool (WAT) and increase the discharge values by 30%.

The applicants may develop their own engineering analysis and determine the discharge values subject to approval by city staff.

In split-flow areas and SFHA AO Zones apply the 30% factor of safety for WAT flows for **infrastructure design** (including Drainage & Flood Control Easements).

Examples of **extenuating factors** can be critical infrastructure, historic flooding situation, etc.