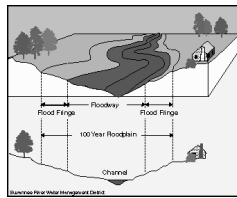


Assessing Impacts to Floodplains

- Identify Source of Potential Impacts
 - Encroachment
 - Fill
 - Pilings/ Bridge Abutments
 - Infrastructure
- Determine Study Area
 - Generally Direct impact
- Determine Existing Conditions
 - Maps of Designated Floodplains (FEMA)
 - State Agencies
 - U.S. Army Corps of Engineers
 - USGS
 - Local flood insurance studies
- Identify Standard
 - Federal Standards
 - State/ Local Standards

Floodplain Basics

- Executive Order 11988
 - Requires measures to minimize, restore and preserve
 - Lives/property
 - Natural /beneficial values
- Definitions
 - Regulated Floodway – encroachment limits
 - 100-year flood – 1% chance of being exceed in any given year



Floodplains (cont.)

- Impact Prediction
 - Direct filling (encroachment) of floodplain
 - Calculations of changes is flood levels, runoff quantity, velocity,
- Assess Significance of Impacts
 - 1 foot rise in flood elevation in flood frings at any location along stream for 100-yr flood
 - Risk to life and property (flood levels, flood-related erosion, mudslides
 - State/Local Policies
- Mitigation
 - No floodplain encroachment is permitted unless no practicable alternative
 - Avoidance
 - Minimization
 - Compensate for conveyance and storage capacity
