

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

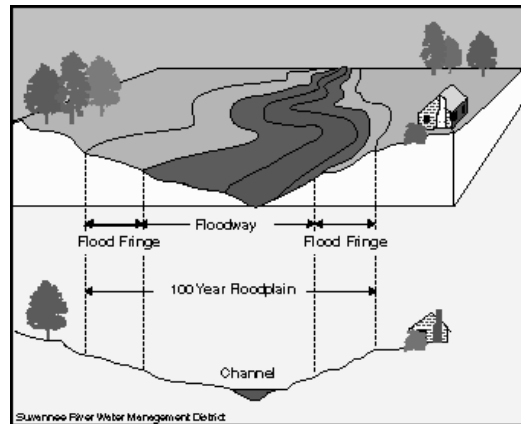
- **Identify Standard**

- 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 in flood levels, runoff quantity, velocity,

- **Assess Significance of Impacts**

- 1 foot rise in flood elevation in flood fringes 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