



Review of 2D Models

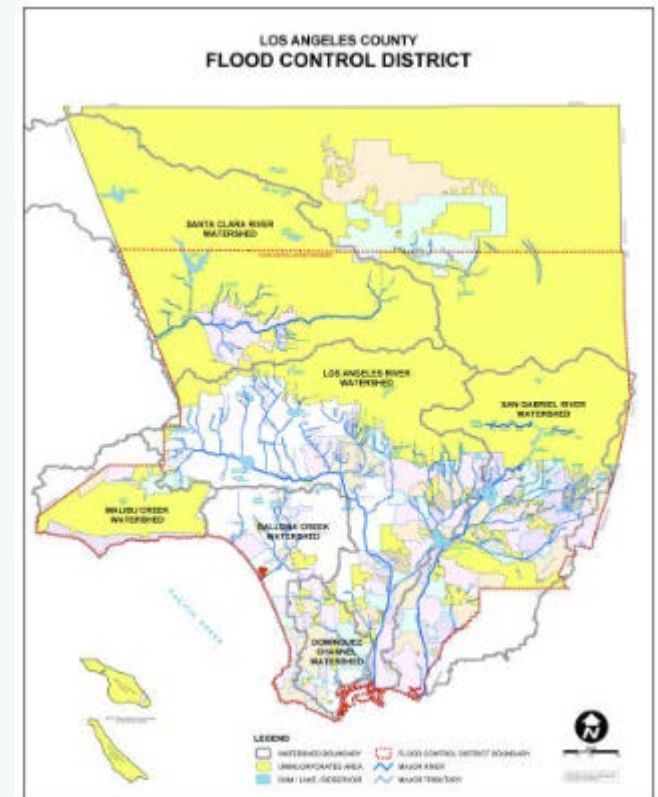
Los Angeles County Department of Public Works
Los Angeles County Flood Control District

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Los Angeles County

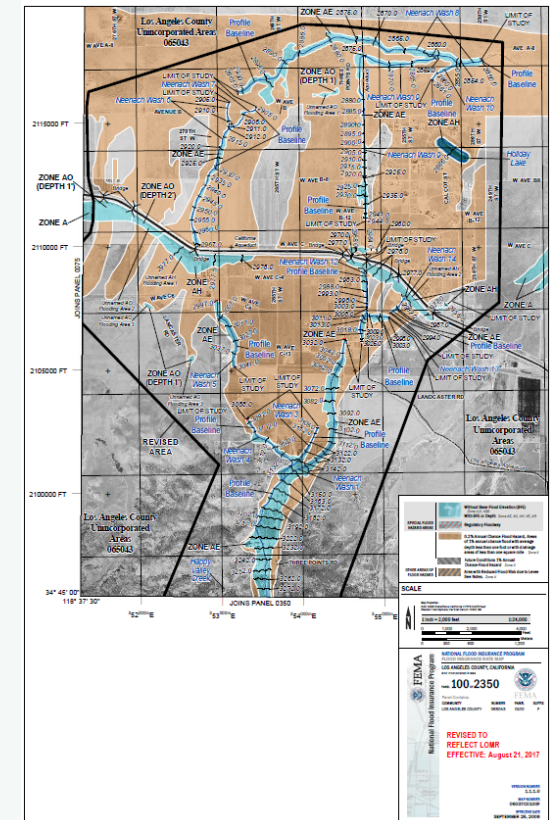
- Los Angeles County Flood Control District is responsible for enforcement of floodplain management regulations for unincorporated areas of Los Angeles County
- The District boundaries encompass 2,752 square miles, 6 major watersheds and 88 cities
- The District's municipal flood protection and water conservation system includes:
 - 14 major dams and reservoirs
 - 487 miles of open channels
 - 162 debris dams
 - 3 seawater intrusion barriers
 - 2,919 miles of underground storm drains
 - more than 80,000 catch basins





Los Angeles County and 2D Modeling

- LOMR's from internal projects
 - New storm drain/improved channel
 - Correct mapping errors
- LOMR's from land development community
 - Determine if development is in a flood hazard area
 - Conditions for permit issuance and plan approvals





Guidance for Using 2D Models

- No formal guidance available from Los Angeles County
- Rely on existing guidance available
 - FEMA, ARR Project 15, HEC-RAS 2D Manual
- Encourage meeting with County before performing analysis



2D Modeling Reviews

- Understand purpose of study
- Project Report
- Input/Output Files
- Boundary conditions
- Hydrology
- Roughness values
- Time step
- Grid size
- Terrain Data
- Datum
- Hydraulic structures
- Calibration/Sensitivity Analysis
- Model stability



Future Plans

- Develop guidance for Los Angeles County
- Prepare review checklist
- Look at the various models available
- Prepare test cases