Under each CFM® Exam Topic Area, we have provided **extra review materials** to use to supplement FEMA 480 and the 273 courses (which is the minimum preparation for the exam). These materials are organized by topic area below for easy review, or to narrow your focus on a topic where you may feel you need more preparation.

### Floodplain Mapping

#### Base Flood Concept
- Base Flood (webpage definition)
  [https://www.fema.gov/base-flood](https://www.fema.gov/base-flood)
- Hydrology and Hydraulics for Non-engineers (Video – 10 minutes)
  [https://www.youtube.com/watch?v=IDhllgoGjNA](https://www.youtube.com/watch?v=IDhllgoGjNA)

#### Discharges, Profiles, Floodways
- Watersheds, Rivers and Floodplains (Video – 8 minutes)
  [https://www.youtube.com/watch?v=ButQspZX2yA](https://www.youtube.com/watch?v=ButQspZX2yA)
- Flood Insurance Study (FIS) (online tutorial)
  [http://www.floodmaps.fema.gov/tutorials/ot_fis.swf](http://www.floodmaps.fema.gov/tutorials/ot_fis.swf)

#### Coastal Flooding
- The Coastal Flood Risk Analysis and Mapping Process (two-page summary)
  [https://www.fema.gov/media-library/assets/documents/116160](https://www.fema.gov/media-library/assets/documents/116160)
- IS-1113: Coastal Barrier Resources Act (Independent Study Course)

#### Reading/Using Maps
- Flood Insurance Rate Map (FIRM) (Online tutorial)
  [https://www.floodmaps.fema.gov/tutorials/ot_firm.swf](https://www.floodmaps.fema.gov/tutorials/ot_firm.swf)
- Flood County, USA-Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), Digital Flood Insurance Rate Maps (DFIRMs) and Engineering Scale

#### Revising FEMA Maps
- Revision to National Flood Insurance Program Maps (web page description)
  [https://www.fema.gov/revision-national-flood-insurance-program-maps](https://www.fema.gov/revision-national-flood-insurance-program-maps)
- Letter of Map Amendment – Letter of Map Revision-F (two separate online tutorials)
- IS-1106 A: FEMA Mapping Change (Independent Study Course)
**Future Conditions**

- Future-Conditions hydrology (webpage definition)
  [https://definitions.uslegal.com/f/future-conditions-hydrology/](https://definitions.uslegal.com/f/future-conditions-hydrology/)
- Final Guidelines for Using Future-conditions hydrology (webpage summary)

**NFIP Minimum Regulatory Standards**

**National Flood Insurance Program (NFIP)**

- NFIP Floodplain Management Requirements: a study guide and desk reference for local officials.

**44 CFR 60.3**

- 44 CFR Excerpts for Floodplain Managers Annotated Revised: 19 May 2017

**Development**

- Development (webpage definition and reference to 44CFR 60.3 sections)
  [https://www.fema.gov/permit-floodplain-development](https://www.fema.gov/permit-floodplain-development)

**Encroachment Rules**

- Encroachment (webpage definition and reference to 44CFR 60.3 sections)
  **NOTE:** This definition only discusses floodway. It does not include 1 foot cumulative encroachment rule in AE floodplains without floodways. The reference 44 CFR 60.3 requirements do include the 1 foot cumulative rule. This distinction is important to know for the CFM exam question(s).
  [https://www.fema.gov/encroachments](https://www.fema.gov/encroachments)

**V Zone Rules**

- Coastal High Hazard Areas (webpage definition and reference to 44CFR 60.3 sections)
  [https://www.fema.gov/coastal-high-hazard-area](https://www.fema.gov/coastal-high-hazard-area)

**Building Protection Standards**

- FEMA Publication P-348, Protecting Building Utility Systems From Flood Damage – (apx. 170 pages)
  [https://www.fema.gov/media-library/assets/documents/3729](https://www.fema.gov/media-library/assets/documents/3729)

**Substantial Improvement/Damage**

- Substantial improvement/damage (web page definition and reference to 44CFR 60.3 sections)
  [https://www.fema.gov/floodplain-management-old/substantial-improvement](https://www.fema.gov/floodplain-management-old/substantial-improvement)
Flood Proofing and Retrofitting

- IS-279 A: Introduction to Retrofitting Flood-prone residential Buildings (Independent Study Course)  
  [https://www.fema.gov/media-library/assets/documents/34270](https://www.fema.gov/media-library/assets/documents/34270)

### Regulatory Administrative Procedures

#### National Flood Insurance Program (NFIP)

- NFIP Floodplain Management Requirements: a study guide and desk reference for local officials  

#### Permit Process and Inspections

- Reducing Flood Losses through the International Code Series – (150 page publication – see sample permit/site plan checklists in Appendix D)  
  [https://www.fema.gov/media-library/assets/documents/96634](https://www.fema.gov/media-library/assets/documents/96634)

#### Elevation Records

- IS-1103: Elevation Certificate for Surveyors (Independent Study Course)  

#### NFIP Regulations

- 44 CFR Excerpts for Floodplain Managers Annotated Revised: May 19, 2017  

#### Enforcement

- Section 1316 Denial of Flood Insurance Coverage (FEMA webpage)  
  [https://www.fema.gov/section-1316](https://www.fema.gov/section-1316)

#### Variance Rules

- FEMA P-993 FPM Bulletin Variance – Variances and the National Flood Insurance Program  
  [https://www.fema.gov/media-library/assets/documents/99703](https://www.fema.gov/media-library/assets/documents/99703)

### Flood Insurance

#### Coverage

- IS-1101 : Basic Agent Tutorial (Independent Study Course)  
Normal flood coverage (6 page plain language booklet)
https://www.fema.gov/media-library/assets/documents/12179

Rating

• IS-1102: Theory of Elevation Rating (Independent Study Course)
  https://training.fema.gov/is/courseoverview.aspx?code=IS-1102

Mandatory Purchase Requirements

• Mandatory purchase of flood insurance (Web page description)
  https://www.fema.gov/faq-details/Mandatory-Purchase-of-NFIP-Coverage/
• FDIC Regulations concerning Mandatory purchase of flood insurance

NFIP Grandfather Rules

• NFIP Grandfathering rules – A Fact Sheet for Insurance Agents

ICC

• IS-1100 A: Increased Cost of Compliance (Independent Study Course)
  https://training.fema.gov/is/courseoverview.aspx?code=IS-1100.a

CRS

• National Flood Insurance Program Community Rating System (Webpage description)
  https://www.fema.gov/national-flood-insurance-program-community-rating-system

Section 1316

• Section 1316 – Definition/Description (Web page description)
  https://www.fema.gov/section-1316

Flood Hazard Mitigation

Disaster Assistance Procedures

• Overview of the disaster assistance process – (1-page flyer)
  https://www.fema.gov/media-library/assets/documents/122899

Mitigation Planning

• IS-318: Mitigation Planning for Local and Tribal Communities (Independent Study Courses)
Funding Sources

- IS-212B: Introduction to Unified Hazard Mitigation Assistance (HMA) (Independent Study Courses)
  https://training.fema.gov/is/courseoverview.aspx?code=IS-212.b
- FEMA HMA Grants (4 page brochure)
  https://www.fema.gov/media-library/assets/documents/107704

Erosion and Other Related Hazards

- Flood Hazards of Special Concern (web page description)
  https://www.fema.gov/flood-hazards-special-concern

Overall Context of Floodplain Management

Wetlands

- Executive Order 11990 – Protection of wetlands (webpage description)

Multi-Objective Management

- Summary of the Clean Water Act (EPA webpage overview)
  https://www.epa.gov/laws-regulations/summary-clean-water-act
- Section 404 Permit Program (EPA web page overview)
  https://www.epa.gov/cwa-404/section-404-permit-program

NAI

- ASFPM NAI No Adverse Impact Floodplain Management
  (Webpage description)
  http://www.floods.org/index.asp?menuid=%20349

Stream Corridor Restoration

- Stream Restoration Wiki (Wikipedia webpage description)
- Natural Stream Restoration: Restoring Streams (video 17 minutes)
  https://www.youtube.com/watch?v=h-0NIG508FA

Water Quality (NEPA, NPDES, MS4s)

- Tools for Water & Wastewater partners to use to comply with regulations (webpage with link to a
  4-minute video and 47-page guide along with other resources)
  https://www.epa.gov/waterutilityresponse/build-flood-resilience-your-water-utility

Endangered Species Act

- Endangered Species Act (ESA) (2-page fact sheet)
  https://www.fema.gov/media-library/assets/documents/116871
Natual and Beneficial Functions

Unified National Program

- FEMA Publication 248 A Unified National Program for Floodplain Management – (47 pages)
  https://www.fema.gov/media-library/assets/documents/18472

Community Sanctions

- Suspension (webpage)
  https://www.fema.gov/suspension
- Probation (webpage)
  https://www.fema.gov/probation

History and Background of the NFIP

- NFIP Description – (section on history and background)
  https://www.fema.gov/media-library/assets/documents/1150
- Perspectives: The History and Background of the NFIP (video)
  https://www.fema.gov/media-library/assets/videos/108044

Other Federal Programs

- FEMA Publication 409 Natural and Beneficial Functions of Floodplains – (only available in hard copy)