

Reclamation Manual

Policy

Subject:	Floodplain Management
Purpose:	To (1) reduce the vulnerability of the nation to loss of life and property and the disruption of societal and economic pursuits caused by flooding or facility operations; and (2) sustain, restore, or enhance the natural resources, ecosystems, and other functions of the floodplain. The benefits of this Policy are to ensure the Bureau of Reclamation's compliance with Federal laws, protect life, and preserve the functions of floodplains.
Authority:	Reclamation Project Act of 1902 (32 Stat. 388), as amended and supplemented; Reclamation Safety of Dams Act of 1978 (Pub. L. 95-578), as amended; National Environmental Policy Act of 1969 (Pub. L. 91-190; 83 Stat. 852), as amended; Executive Order (EO) 11988 Floodplain Management; EO 11990 Protection of Wetlands; Energy Policy Act of 1992 (Pub. L. 102-486); Principles and Requirements for Federal Investments in Water Resources (Council on Environmental Quality, March 2013); Federal Water Project Recreation Act (Pub. L. 89-72; 79 Stat. 213), as amended; Migratory Bird Conservation Act (45 Stat. 1222), as amended; Watershed Protection and Flood Prevention Act (Pub. L. 83-566); Intermodal Surface Transportation Efficiency Act of 1991 (Pub. L. 102-240); Water Resources Development Act of 2007 (Pub. L. 110-114); 520 Departmental Manual Chapter 1 (Floodplain Management and Wetlands Protection Policy and Responsibilities) and Chapter 2 (Floodplain Management and Wetlands Protection Program Requirements); Executive Order 13690 - <i>Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input</i> (January 30, 2015), <i>amending EO 11988</i> ; Executive Order 14030 – <i>Climate-Related Financial Risk</i> (May 20, 2021); and project-specific authorizations.
Approving Official:	Commissioner
Contact:	Environmental Compliance Division (84 53000)

1. **Introduction.** Reclamation, both independently and in partnership with others, will pursue and encourage appropriate use of floodplains. In doing so, Reclamation will seek to (1) reduce the vulnerability of the nation to loss of life and property and the disruption of societal and economic pursuits caused by flooding or facility operations, and (2) sustain, restore, or enhance the natural resources, ecosystems, and other functions of the floodplain.
2. **Applicability.** This Policy applies to Reclamation staff responsible for the management of floodplains.

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3. **Policy.** Reclamation's policy is to avoid, reduce adverse impacts on, and restore floodplains and wetlands, when practicable, while engaging the public in floodplain and wetland impact decisions in managing the Nation's natural and cultural resources, including its streams, wetlands, floodplains, and cultural resources therein.
- A. Reclamation's floodplain management activities will seek to balance the competing uses of floodplains in a way that maximizes benefits to society. Emphasis will be given to:
- (1) utilizing cost-effective nonstructural approaches to reduce potential flood damage and enhance the functions of floodplains, and where possible use natural systems, ecosystem processes and nature-based approaches when developing alternatives for consideration to avoid adverse effects and incompatible development in floodplains and wetlands,
 - (2) encouraging pursuit of opportunities to operate facilities or undertake activities that benefit functions of floodplains,
 - (3) approaching watershed flow management and flood risk assessments on an integrated systems basis (e.g., considering watershed hydrology, river hydraulics, channel and basin geomorphology, river mechanics and sedimentation, land use, water quality, ecosystems, and functions of the floodplain),
 - (4) to the maximum extent practicable, utilizing the climate-informed science approach that uses the best available/actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science when determining the boundary of the floodplain, and
 - (5) assisting, through partnering, development, and implementation of community-based sustainable solutions to floodplain management problems that avoid repetitive losses and fiscal outlays.

This emphasis is not intended to totally exclude structural approaches in accomplishing the objectives.

- B. Reclamation's floodplain management responsibilities include, but are not limited to, flow management, channel maintenance, control of floodplain encroachment, hazard mitigation on critical infrastructure, environmental preservation and restoration, emergency management and preparedness, public safety, flood recovery, and other activities and actions involving use of floodplains. Reclamation's will manage these activities according to applicable directives addressing these issues in the Departmental Manual and the Reclamation Manual, Directive and Standard, *Floodplain Management* (CMP 01-01). The *Floodplain Management Guidelines for Implementing Executive Order 11988* (Federal Register, Volume 43, 6030) discusses example applications,

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including notification and early public involvement in any floodplain management as required by EO 11988 and 520 DM 1 and 2.

4. Requirements and Responsibilities.

- A. **Policy Management.** The Commissioner of the Bureau of Reclamation will establish all policy regarding floodplain management.
- B. **Policy Compliance.** The regional directors and the directors of offices in Denver must ensure compliance with policies regarding floodplain management, as applicable. This includes reviewing their programs for compliance with the Executive Orders and policies and requirements in 520 DM 1, *Floodplain Management and Wetlands Protection Policy and Responsibilities* and 2, *Floodplain Management and Wetlands Protection Program Requirements*, when:
- (1) planning and designing new Federal facilities,
 - (2) modifying existing Federal facilities or constructing new ones,
 - (3) acquiring, managing, and disposing of Federal lands and facilities,
 - (4) carrying out and influencing programs involving land use and water planning and development, including regulating and licensing activities,
 - (5) administering construction, improvement, and land acquisition programs supported or assisted by Federal grants, loans, other forms of financial assistance, and
 - (6) assuring compliance with the public information and other procedural requirements of the EOs.
- C. **Public Safety/Hazard Mitigation/Emergency Management and Preparedness.**
- (1) As appropriate, regions and area offices must develop procedures for: determinations, the activities listed in paragraph 4.B. of this Policy and any other covered activities, the degree of risk present, whether the action is critical, and whether an alternative location or other course of action is practicable. If not practicable, the procedures will indicate what steps to take to minimize harm to facilities, floodplains, and wetland resources.
 - (2) Reclamation may except a region/area office action from establishing a Federal Flood Risk Management Standard (FFRMS) floodplain where the action is an emergency action or is a mission-critical requirement related to an emergency when the regional director/area office manager has that authority under the National Environmental Policy Act's implementing regulations and 43 CFR

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46.150, "Emergency responses." For these excepted actions, Reclamation will direct that the floodplain is the area of land subject to the base flood elevation (100-year or 1-percent annual exceedance probability event).

- (3) All requests for new authorizations or appropriations (for proposals to be located in floodplains and wetlands) must include a statement that the proposal complies with the EOs.
- (4) As appropriate, regions and area offices must inform private parties, and State, tribal, territorial, and local governments participating in regulatory, financial, and land transactions of the hazards and impacts of locating structures in floodplains and wetlands. Appropriate information should include the levels of expected flooding, the location in a riverine or coastal high hazard area, the existence of multiple flooding sources or combinations of hazards, and other important information for the safety of potential floodplain occupants and development.
- (5) The regional director/area office manager, as appropriate, is the responsible official for all statements of findings and public explanation (See 520 DM 2.6 B (7), 520 DM 2.7, and Water Resources Council (WRC) Guidelines, Part II, Step 7).

5. Definitions.

- A. **Federal Flood Risk Management Standard (FFRMS).** The national flood risk management standard established by Executive Order 13690 to be incorporated into existing processes used to implement Executive Order 11988.¹
- B. **Floodplains.** Floodplains are the lowlands adjoining the channel of a river, stream, watercourse, ocean, lake, or other body of water that have been or may be inundated by floodwater. Floodplain lands and adjacent waters combine to form a complex, dynamic physical and biological system that supports a variety of natural resource and societal functions.
- C. **Floodplain Management.** Floodplain management is a continuous process of decision-making and subsequent implementation of those decisions with the goal being appropriate use of the nation's floodplains. Appropriate use is any activity or action that is compatible with both the acceptable risks to human life and property from floods, and the floodplain's functions.

¹ The *Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (January 2015)*.

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- D. **Functions (Natural) of Floodplains.** Functions of floodplains include, but are not limited to, natural moderation of floods; fish, wildlife, and plant resources and habitat; groundwater recharge; and water quality maintenance.
 - E. **Nonstructural Measures.** Nonstructural measures alleviate flood losses by modifying the susceptibility of land, people, and property to flood damage or by modifying the impact of flooding. Nonstructural measures include, but are not limited to, flood warning, flood proofing, acquisition, relocation, and dikes around individual properties. Nonstructural measures can also be used to acquire, perpetuate, restore, and enhance the natural capability of wetlands and floodplains to retain excessive floodwaters, improve water quality, sustain stream flows, and provide fish and wildlife habitat.
 - F. **Structural Measures.** Structural measures modify floods and associated erosion and sedimentation. Structural measures include, but are not limited to, floodwater retarding structures, channel work, levees and dikes, floodways, floodwater diversions, sediment basins, grade stabilization structures, and streambank stabilization.
 - G. **Uses of Floodplains.** Floodplain uses include, but are not limited to, stormwater management; erosion control; open space; natural beauty; opportunities for scientific study, outdoor education, recreation, and cultural preservation and compatible economic utilization of floodplain resources by human society.
 - H. **Water Resources Council Guidelines.** The current WRC Guidelines implement Executive Order 11988 (Floodplain Management) and Executive Order 13690 [Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (January 30, 2015)] are the basic guidance for interpreting Executive Order 11988 and Executive Order 13690 and conducting the floodplain management planning and decision processes.²
6. **Review Period.** The originating office will review this release every 4 years.

² 520 DM 2.4 B., “Interrelationships”