

**Forest Service Handbook  
National Headquarters – Washington Office  
Washington, DC**

**Forest Service Handbook 7709.56b – Transportation Structures Handbook  
Transmittal**

**Amendment:** 7709.56b-2014-1

**Effective date:** November 24, 2014

**Duration:** This amendment is effective until superseded or removed.

**Superseded Directive:** 7709.56b,contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 0 Code Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 0 Code, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 1 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,1 Amendment, 7709.56b-94-1, July 27, 1994; 7709.56b, 2 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,2, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 3 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,3, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 4 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,4, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 5 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,5, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b, 6 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,6, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b\_7, Amendment 7709.56b-2005-1, August 26, 2005; 7709.56b\_8, Amendment 7709.56b-2005-2, August 26, 2005; 7709.56b, 9 Contents, Amendment 7709.56b-94-1, July 27, 1994; 7709.56b,9, Amendment 7709.56b-94-1, July 27, 1994

**Approved by:** Gregory Smith, Acting Associate Deputy Chief, NFS

**Date approved:** November 18, 2014

**Responsible Staff:**

**Explanation of changes:** Following is an explanation of the changes throughout the directive by section.

**7709.56b:** The entire Handbook has been revised; refer to the digest for a summary of the revisions.

**Zero Code:** Makes minor technical and editorial changes, removes obsolete direction and terminology, and updates the coding system by changing from the one-digit to the two-digit coding system.

**10:** Recodes, reorganizes, and updates direction throughout the chapter. Makes minor technical and editorial changes, removes obsolete directions, and updates the coding system by changing from the one-digit to the two-digit coding system.

**11:** Recodes, reorganizes, and updates this section in its entirety. Replaces discussion of forest plans, ecosystem management, and least total cost method decisions with subsections on travel analysis and travel management decisions. Updates direction on road management to include direction on Trail Management Objectives and recodes the direction to section 11.3. Reduces scope of direction on alternatives to stay within limits of travel management decisions and the Road and Trail Management Objectives and recodes the direction to section 11.4. Recodes the remainder of the section to new section 11.5 entitled, “Project Development Process.”

**13:** Sets forth new direction on inspection reports for existing structures and evaluation of load-carrying capacity of existing structures to listing of required design information.

**20:** Makes minor technical and editorial changes, removes obsolete direction, adds direction to meet Road and Trail Management Objectives, and updates the coding system by changing from the one-digit to the two-digit coding system throughout the chapter.

**23:** Adds direction to consider roadway widening needed to accommodate off-tracking of large trucks when curves are constructed close to bridges, to consider construction access to both sides of a stream, and to consider measures needed to maintain existing road traffic when replacing existing bridges.

**30:** Makes minor technical and editorial changes, removes obsolete direction, and updates the coding system by changing from the one-digit to the two-digit coding throughout the chapter.

**34:** Revises direction to conform to stream simulation requirements and to reference chapter 60.

**35.4:** Adds direction for identification of construction staging areas.

**40:** Makes minor technical and editorial changes and updates the coding system by changing from the one-digit to the two-digit coding throughout the chapter. Removes obsolete direction referencing economic analysis methods and flood insurance.

**43.5:** Updates direction to allow previously used materials only when they have been inspected, determined to be structurally adequate, economical and approved by the Regional Director of Engineering.

**50:** Changes chapter caption from “Hydrology” to “Hydrology and Geomorphology” and adds direction to require stream simulation and aquatic organism passage. Makes minor technical

and editorial changes and updates the coding system by changing from the one-digit to the two-digit coding system.

**60:** Changes chapter caption from “Hydraulics” to “Hydraulics and Watershed Protection” and adds direction to require stream simulation and aquatic organism passage. Makes minor technical and editorial changes and updates the coding system by changing from the one-digit to the two-digit coding system throughout the chapter. Removes obsolete direction.

**70:** Changes chapter caption from “Structural Design” to “Road Bridge Design” and updates the coding system by changing from the one-digit to the two-digit coding system throughout the chapter. Adds new direction and revises, reorganizes, and recodes direction throughout the entire chapter. Changes various section captions to be applicable for road bridge designs and sets forth new direction throughout the chapter. Removes obsolete direction.

**80:** Changes chapter caption from “Operations” to “Trail Bridge Design” and updates the coding system by changing from the one-digit to the two-digit coding system throughout the chapter. Sets forth direction for planning, design, and construction of trail bridges and other engineered trail structures.

**90:** Changes chapter caption from “Construction” to “Road Bridge Operation” and updates the coding system by changing from the one-digit to the two-digit coding system throughout the chapter. Revises, reorganizes, and recodes entire chapter. Major changes are: 1) removes the distinction and inspection requirements between bridges formerly known as NBIS and non-NBIS (National Bridge Inspection Standards), 2) removes all trail bridge references and guidance and 3) incorporates culvert guidance.

**100:** Establishes code, chapter “Trail Bridge Operation”, and sets forth direction for maintenance, inventorying, and operation of trail bridges and other engineered trail structures.