



Natural Resources Conservation Service  
Federal Building, Room 443  
10 East Babcock  
Bozeman, MT 59715

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August 4, 2005

**NATIONAL ENGINEERING HANDBOOK (NEH) FILING SYSTEM (PARTS 600/659)  
210-VI  
AMENDMENT MT39**

**SUBJECT:** ENG—TRANSMIT MONTANA'S IRRIGATION RETURN FLOWS ANALYSIS  
REQUIRED TO COMPLETE THE NRCS-CPA-52 AND REPLACE MISCOPIED  
INFORMATION

**Purpose.** To transmit Montana's Irrigation Return Flows analysis required to complete the NRCS-CPA-52, and updated National/Montana tabulation sheets. In addition, in the National Irrigation Handbook, Part 652, Montana Supplements to Chapter 1 and 4 were previously copied on the wrong color of paper.

**Effective Date.** This amendment is effective upon receipt.

**Explanation of Material.** Additional guidance is necessary when a cooperator is planning to convert from a flood irrigation system to a sprinkler system. Certain streams, sub-basins and watersheds are classified as dewatered in Montana. The conversion from flood to sprinkler can have an environmental impact on the dewatered streams. Early season flood irrigation when the stream flows are adequate may provide beneficial later season return flows to the stream.

There are cases where excess water from flood irrigation imparts negative environmental affects (i.e., nutrients, salts, pesticides, etc., being flushed beyond the root zone). There are also cases, in saline soils, where conversion from flood irrigation to sprinklers can have serious negative affects on crops by not adequately leaching the salts from the root zone.

All federally funded projects require addressing the National Environmental Policy Act (NEPA). Within NRCS, field office staff use the NRCS-CPA-52, ENVIRONMENTAL EFFECTS FOR RESOURCE MANAGEMENT PLANS FORM to document either positive or negative environmental evaluations of the planned actions.

The attached IRRIGATION RETURN FLOWS EVALUATION PROCESS is to be used as the method to evaluate the Water Quantity and Quality section of the NRCS-CPA-52 where the cooperator proposes to change from flood irrigation to sprinkler irrigation. The IRRIGATION RETURN FLOWS EVALUATION PROCESS and necessary documentation shall be followed for all proposed conversions. The IRRIGATION RETURN FLOWS EVALUATION PROCESS shall be attached to the appropriate CPA-52 in the cooperator's file.

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**Filing Instructions.**

**REMOVE:**

NEH, Parts 600/609, General, remove green Montana Tabulation Sheet.

NEH, Part 652, National Irrigation Guide, remove the green Montana tabulation at the beginning of the handbook.

NEH, Part 652, National Irrigation Guide, Chapter 1, State Supplement, Section 652.0106, MT1-6(1) through MT1-6(4), and Chapter 4, Section 652.0408, MT4-10(1) through MT4-10(4), Amend. MT36, both dated May 2005 that was incorrectly copied on white paper.

Please contact D. James Suit at (406) 587-6828, or ReNae Grantier at (406) 587-6822 if you have any questions or concerns.

/s/ by Dave White on (8/4/05) / rg

DAVE WHITE  
State Conservationist

Enclosures

cc:  
Assistant State Conservationists for Field Operations  
All Field Offices  
All Engineers  
All Civil Engineering Technicians

DIST: NEH, Part 652

**INSERT:**

NEH, Parts 600/609, General, insert green Montana Tabulation Sheet followed by the Amendment MT39 green transmittal letter.

NEH, Part 652, National Irrigation Guide, insert the updated green Montana tabulation sheet after the white National tabulation and transmittal letter section at the beginning of the handbook.

NEH, Part 652, National Irrigation Guide, at the end of Chapter 5, Selecting an Irrigation Method, State Supplement, Section 652.0505, insert pages MT5-13(1) through MT5-13(8). Page MT5-13(8) are the five area maps for Montana. Please retain the map(s) that border or overlap your area and discard the rest.

NEH, Part 652, National Irrigation Guide, Chapter 1, State Supplement, Section 652.0106, MT1-6(1) through MT1-6(4), and Chapter 4, Section 652.0408, MT4-10(1) through MT4-10(4), Amend. MT36, both dated May 2005 that is now copied on green paper.