

**Cooperative Monitoring, Evaluation & Research
(CMER)**

USE DOCUMENT



OCTOBER 1994



Cooperative Monitoring,
Evaluation & Research (CMER)

Research Documents Use Report

Introduction:

This document was initially prepared at the initiative of the Northwest Indian Fisheries Commission, to provide the TFW Policy Committee with current information on the work accomplished by CMER and the uses which have been made of the research findings. The WA Department of Natural Resources, Forest Practices Division has since assumed responsibility for preparation of this report. As of August 1993, 65 documents have resulted from accomplishments related to the CMER work plan. The list of reports, and their categorization relative to how the results have been or will be used is intended to provide TFW participants and others with an understanding of how the outputs of the CMER program are being utilized in the management of Washington's forest resources.

The CMER documents produced to date have been assigned to one of six basic use categories (listed below). The results of this characterization by the CMER committee are included in this report. The report is intended to serve as a companion document to the Research and Status Reports with Abstracts (NWIFC 1988-92) which provides additional detail about the individual projects. WA DNR has assumed responsibility for updating that document as well. The Document Use Report should allow the user to locate documents of specific interest, obtain the abstract from the Research and Status report, and if additional detail is needed, obtain the complete report from DNR. Documents are keyed to the CMER program workplan element which the research originally addressed. Each workplan element is the responsibility of one of six steering committees, which are responsible for carrying out the multiple programs in the work plan; they are identified here as sources of additional information on specific CMER efforts in their technical areas.

As a result of a budget reduction of greater than 60 percent for the 1993-95 biennium, the CMER effort has been significantly reduced. For those efforts that are continuing, and as a result of completion of some projects funded in the last biennium, a number of additional reports are expected. Thus, this document will be revised annually to include recently completed CMER work. It is CMER's hope that the program's accomplishments reflect the substantial efforts that have been made in support of improvement in the management of forest resources on state and private lands in Washington state.

BASIC DOCUMENT USE CATEGORIES:

A) LITERATURE REVIEWS

- * A fundamental Product needed in many of the Program Workplan elements to integrate existing data and conclusions for addressing the Specific Questions related to the Program Issue.

B) PROPOSALS AND STUDY PLANS

- * Two fundamental Products needed for the initiating and monitoring progress of the Program Action Steps.

C) INTERIM REPORTS

- * A fundamental Product mostly related to Action Steps accomplishment requiring work to be performed under contract. Most are tied to contract stipulations and provide the necessary documentation for the biennium report.

D) PROGRAM DEVELOPMENT

- * Evaluation reports, questionnaires, Program Workplans, workshop reports and field procedures manuals.

E) FINAL PRODUCTS (includes pilot studies)

1. No Action

- * Product not resulting in recommendation for implementation.

2. Recommendations

- * Product containing recommendations for implementation.

3. In Implementation Phase

- * Product contains recommendations which have been, or are in the process of implementation.

F) NOT A CMER PRODUCT

- * Products that may have resulted from CMER Program Action Steps and resulting Products, but that were not part of the planned product in those Steps.



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Use Document

| DOCUMENT NUMBER | REPORT | STEERING COMMITTEE ¹ | USE |
|-----------------|---|---------------------------------|-----|
| TFW-000-89-007 | An Analysis of Program Integration and Development - Jim Currie, September 1989. (1)* | CMER | D |
| TFW-000-91-001 | TFW - Cooperative Monitoring, Evaluation and Research Program Workplan, May 1991. (26) | CMER | D |
| TFW-000-93-002 | TFW - Cooperative Monitoring, Evaluation and Research Workplan Status Report, September 1993. (68) | CMER | D |
| TFW-000-94-001 | 1993 Riparian Management Zone Survey; TFW Field Implementation Committee, June 20, 1994. (74) | FIC | F |
| TFW-000-94-002 | CMER Research and Status Reports with Abstracts 1988-1994, Northwest Indian Fisheries Commission & Washington Department of Natural Resources, October 1994. (47) | CMER | |
| TFW-003-88-001 | Characterization of Riparian Management Zones and Upland Management Areas with Respect to Wildlife Habitat - 1988 Field Report. (5) | WSC | C |
| TFW-003-90-003 | Characterization of Riparian Management Zones and Upland Management Areas with Respect to Wildlife Habitat - 1989 Field Report. (5A) | WSC | C |
| TFW-003-90-005 | Characterization of Riparian Management Zones and Upland Management Areas with Respect to Wildlife Habitat - Field Procedures Handbook, May 1990. (4) | WSC | D |
| TFW-009-89-005 | The Effect of Elevated Holding Temperatures on Adult Spring Chinook Salmon Reproductive Success - Interim Final Report - Berman, Quinn, June 1989. (3) | FSC | E-1 |
| TFW-012-89-002 | Sediment Dynamics in Type 4 and 5 Waters, A Review and Synthesis, Ann MacDonald and Kerry W. Ritland, June 1989. (11) | SHAMW | A |
| TFW-16B-90-011 | Evaluation of the TFW Stream Classification System: Stratification of Physical Habitat Area and Distribution, Beechie and Sibley, Final Report, July 1990. (8A) | AMSC | D |
| TFW-16E-90-004 | TFW Stream Ambient Monitoring Field Manual, May 1990. (7) | AMSC | D |
| TFW-017-89-004 | Wildlife Use of Managed Forests: Literature Review and Synthesis, NCASI, June 1989. (6) | WSC | A |
| TFW-18A-89-003 | Effects of Timber Harvest on Rain-on-Snow Runoff in the Transient Snow Zone of the WA Cascades-Intrm Fnl Report (Harr, 1989). Replaced by TFW-SH1-92-001. | SHAMW | C |

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|-----------------|---|------|-----|
| TFW-AM-89-001 | Valley Segment Type Classification for Forest Lands of Washington, Cupp, June 1989. (30) | AMSC | D |
| TFW-AM3-90-010 | Quantitative Modeling of the Relationships among Basin, Channel and Habitat Characteristics for Classification and Impact Assessment, with Appendices, Orsborn, July 1990. (9A Report & 9B Appendices) | AMSC | D |
| TFW-AM9-91-001 | TFW Ambient Monitoring Projects Biennial Progress Report, (Naiman, Conquest, Ralph, 1989-91 Biennium) Not Available. | AMSC | C |
| TFW-AM9-91-002 | Status and Trends of Instream Habitat in Forested Lands of Washington: TFW Ambient Monitoring Project, Biennial Progress Report, Robert J. Naiman, Ph.D., Loveday L. Conquest, Ph.D., Stephen C. Ralph, 1989-91 Biennium. (43) | AMSC | C |
| TFW-AM9-92-001 | Large Woody Debris and Percent Pools in Streams Draining Managed and Unmanaged Watershed of the Olympic and Western Cascade Mountains of Washington, Initial Results of the Analysis of 1991 Ambient Monitoring Field Date (Conquest & Naiman, 1992). Not for distribution. | AMSC | C |
| TFW-AM9-92-002 | TFW Ambient Monitoring Program Manual - Modules: Stream Segment Identification, Reference Point Survey, Habitat Unit Survey, Large Woody Debris Survey, 1992. Edited by Dave Schuett-Hames, Lyman Bullchild, Scott Hall, & Allen Pleus, | AMSC | D |
| TFW-AM9-93-001 | TFW Ambient Monitoring Program Manual - Modules: Stream Segment Identification, Reference Point Survey, Habitat Unit Survey, Large Woody Debris Survey, Salmonid Spawning Gravel Composition, Stream Temperature, July 1993. Edited by Dave Schuett-Hames, Allen Pleus, Northwest Indian Fisheries Commission. (57) | AMSC | D |
| TFW-AM9-94-001 | TFW Ambient Monitoring Program Manual - Modules: Stream Segment Identification, Reference Point Survey, Habitat Unit Survey, Large Woody Debris Survey, Salmonid Spawning Gravel Composition, Stream Temperature, Quality Assurance August 1994, Edited by Dave Schuett-Hames, Allen Pleus, Northwest Indian Fisheries Commission. (76) | AMSC | D |
| TFW-AM10-91-001 | Watershed Characteristics and Conditions Inventory, Pysht River and Snow Creek Watersheds, Jones & Stokes Associates, May 1991. (34) | AMSC | E-1 |
| TFW-AM10-91-002 | Watershed Characteristics and Conditions Inventory, Taneum Creek and Tacoma Creek Watersheds, Jones & Stokes Associates, June 28, 1991. (35) | AMSC | E-1 |
| TFW-AM10-91-003 | Watershed Characteristics and Conditions Inventory, Upper Mashel River Watershed, Charley Creek Watershed, Jones & Stokes Associates, March 1991. (36) | AMSC | E-1 |

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|-----------------|--|-------|-----|
| TFW-AM14-94-001 | A Strategy to Implement Watershed Analysis Monitoring: Assessment of Parameters and Methods, Monitoring Module Outline, Recommendations for Program Development, Dave Schuett-Hames and George Pess, Northwest Indian Fisheries Commission, May 1994. (72) | AMSC | E-1 |
| TFW-AM14-94-002 | User Instructions: Sediment Sampling Application, Rbase Ver 1.2, Anita Sparks and Dave Schuett-Hames, June 1994. (73) | AMSC | |
| TFW-F3-91-001 | Project 19, "Big Fish" Workplan; Fisheries Steering Committee (Quinn & Peterson, 1991) Not available. | FSC | D |
| TFW-F3-92-001 | Assessment of Cumulative Effects on Salmonid Habitat: Some Suggested Parameters and Target Conditions, N. Phil Peterson, Andrew Hendry, Dr. Thomas P. Quinn, March 2, 1992. (46) | WFS | E-3 |
| TFW-F3-94-001 | The Effect of Forest Practices on Fish Populations, Final Report, Dr. Thomas P. Quinn, N. Phil Peterson, May 1994. (71) | FSC | |
| TFW-F4-91-001 | Patterns of Flow, Temperature and Migration of Adult Yakima River Spring Chinook Salmon, Thomas P. Quinn, June 1991. (49) | FSC | E-1 |
| TFW-F4-94-001 | The Effect of Forest Practices on Fish Populations, Final Report, Thomas P. Quinn, N. Phil Peterson, May 1994. (71) | FSC | |
| TFW-IM-91-001 | Information Management Coordination Project: Report to TFW Administrative Committee, Dan Cantrell, Peter T. Haug, June 30, 1991. (24) | IMC | F |
| TFW-SH1-92-001 | Effects of Forest Cover On Volume of Water Delivery to Soil During Rain-On-Snow, Final Report, Bengt A. Coffin and R. Dennis Harr, July 30, 1992. (54) | SHAMW | E-1 |
| TFW-SH5-91-001 | Literature Search of Effects of Timber Harvest To Deep-Seated Landslides, Thomas E. Koler, June 1991. (32) | SHAMW | A |
| TFW-SH6-91-001 | TFW Road Questionnaire: Analysis and Compilation of Responses, Cogan Sharpe Cogan, February, 1991. (13) | SHAMW | D |
| TFW-SH7-91-001 | Sediment Transport Processes in Steep Mountain Streams in Forested Watersheds on the Olympic Peninsula, Washington: Interim Final Report, Matthew O'Connor, R. Dennis Harr, August 6, 1991. (48) | SHAMW | C |
| TFW-SH8-91-001 | Watershed and Stream Channel Cumulative Effects Analysis Using Aerial Photography and Ground Survey Data - Interim Report, Dave Somers, Jeanette Smith, Robert Wissmar, 1991. (25) | CESC | C |
| TFW-SH9-91-001 | Analysis of Initiation Mechanisms of Dam-Break Floods in Managed Forests, Carol Coho, Stephen J. Burges, July 1991. (33) | SHAMW | C |
| TFW-SH9-93-001 | Dam-Break Floods in Low-Order Mountain Channels, Carol Coho and Stephen J. Burges, June, 1994, (66) | SHAMW | |
| TFW-SH10-91-001 | Geomorphological Watershed Analysis: A Conceptual Framework and Review of Techniques, Lee Benda and Lynne Rodgers Miller, June 28, 1991. (21) | SHAMW | D |
| TFW-SH10-91-002 | Proposal for Research in Geomorphological Watershed Analysis, Thomas Dunne and David Montgomery, July 15, 1991. (39) | SHAMW | B |

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|-----------------|--|-------|-----|
| TFW-SH10-92-001 | Geomorphological Watershed Analysis Project, Annual Report for the Period from 10/91 to 5/92 (Montgomery, 1992) | SHAMW | C |
| TFW-SH10-93-001 | Geomorphological Watershed Analysis Project, Final Report For The Period From 10/1/91 to 6/30/93, David R. Montgomery, Thomas Dunne, William E. Dietrich. (61) (Replaced by TFW-SH10-93-001) | SHAMW | C |
| TFW-SH10-93-002 | Channel Classification, Prediction of Channel Response, and Assessment of Channel Condition, David R. Montgomery and John M. Buffington, June 24, 1993. (62) | SHAMW | D |
| TFW-SH11-91-001 | A Process-Based Stream Classification System for Small Streams in Washington, April 1992, Jeffrey B. Bradley and Peter J. Whiting. (16) | SHAMW | C |
| TFW-SH13-91-001 | Design of a Slope Hazard Assessment System for Washington's Forested Land, Phase 1, Draft Report, June 1991, Golder Associates. (15) | SHAMW | C |
| TFW-SH14-91-007 | A Road Damage Inventory for the Upper Deschutes River Basin, Steven Toth, January 1991. (12) | SHAMW | E-1 |
| TFW-SH15-90-001 | Slope Stability in the Transient Snow Zone, T.H. Wu and Carolyn J. Merry, March 1990. (17) | SHAMW | C |
| TFW-SH15-93-001 | Landslide Hazard Mapping, Part 1: Estimating Piezometric Levels; Tien H. Wu and Mohamed Abdel-Latif, January 1993. (55) | SHAMW | E-3 |
| TFW-SH17-91-001 | Effects of Landslide-Dam-Break Floods on Channel Morphology, Adelaide C. Johnson, June 1991. (18) | SHAMW | E-1 |
| TFW-WL1-91-001 | Characterization of Riparian Management Zones and Upland Management Areas with Respect to Wildlife Habitat - 1988-90 Cumulative Report, Washington Department of Wildlife. (44) | WSC | E-1 |
| TFW-WL1-91-003 | Characterization of Riparian Management Zones and Upland Management Areas with Respect to Wildlife Habitat - Data Documentation, Washington Department of Wildlife. (45) (companion to TFW-WL1-91-001) | WSC | E-1 |
| TFW-WL1-93-001 | Wildlife Use of Riparian Habitats: A Literature Review, compiled by Margaret A. O'Connell, James G. Hallett, Stephen D. West; March 1993. (59) | WSC | A |
| TFW-WL3-94-001 | Effectiveness of Riparian Management Zones in Providing Habitat for Wildlife: Pre-Harvest Interim Report, Stephen D. West and Kathryn A. Kelsey, June 30, 1994. (78) | WSC | |
| TFW-WL4-91-001 | Wildlife Use of Managed Forests - A Landscape Perspective (Study Design), Stephen West and James Hallett, June 28, 1991. (23) | WSC | B |
| TFW-WQ1-91-001 | Proposed Surface Water Standards for Selected Pesticides Use in Oregon and Washington, Logan A. Norris and Frank Dost, 1991. (19) (Replaced by TFW-WQ1-92-001) | WQSC | C |

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|-----------------|---|------|---------|
| TFW-WQ1-92-001 | Proposed Surface Water Criteria for Selected Pesticides Used for Forest Management and Management of Forest Tree Seedling Nurseries and Christmas Tree Plantations in Oregon and Washington, Logan A. Norris and Frank Dost, August 20, 1992. (60) (Replaces TFW-WQ1-91-001) Published with disclaimer. | WQSC | E-3 |
| TFW-WQ1-93-001 | Effectiveness of Best Management Practices For Aerial Application of Forest Pesticides, Ed Rashin, Craig Graber, October 1993. (64) | WQSC | C/D |
| TFW-WQ3-90-006 | Evaluation of Prediction Models and Characterization of Stream Temperature Regimes in Washington, December 1990. (2) Data Appendix (2A) | WQSC | E-3 |
| TFW-WQ3-90-007 | The Physics of Forest Stream Heating: A Simple Model, by Terry N. Adams and Kathleen Sullivan, 1989. (75) | | F |
| TFW-WQ4-91-002 | TFW Stream Temperature Method: User's Manual, Doughty, Caldwell, & Sullivan, June 1991. (37) | WQSC | E-3 |
| TFW-WQ4-91-003 | Management Trials Testing Plan for the TFW Stream Temperature Method, Caldwell, Sullivan, & Doughty, July 1991. (38) | WQSC | D |
| TFW-WQ4-93-001 | TFWTEMP Computer Model: Revisions and Testing; Kent Doughty, J. Smith and J. E. Caldwell, June 1993. (65) | WQSC | E-3 |
| TFW-WQ5-91-004 | Evaluation of Downstream Temperature Effects of Type 4/5 Waters, Jean Caldwell, Kent Doughty, and Kate Sullivan, September 1991. (41) | WQSC | E-3 |
| TFW-WQ6-92-001 | Effectiveness of Washington's Forest Practice Riparian Management Zone Regulations for Protection of Stream Temperature, Ed Rashin and Craig Graber, Washington Department of Ecology, July 1992. (50) | WQSC | E-3 |
| TFW-WQ8-91-008 | Methods for Testing Effectiveness of Washington Forest Practices Rules and Regulations with Regard to Sediment Production and Transport to Streams, Pentec Environmental, Inc., June 28, 1991. (20) | WQSC | A/E-3 |
| TFW-WQ8-93-001 | Effectiveness of Forest Road and Timber Harvest Best Management Practices With Respect To Sediment-Related Water Quality Impacts, Interim Report 1, Ed Rashin, Johanna Bell, Casey Clishe, June 1993. (63) | WQSC | C |
| TFW-WQ8-94-001 | Effectiveness of Forest Road and Timber Harvest Best Management Practices with Respect to Sediment-Related Water Quality Impacts - Interim Report 2, Ed Rashin, Casey Clishe, Andy Loch, May 1994. (70) (Companion to Interim Report 1, TFW-WQ8-93-001.) | WQSC | |
| TFW-WQ11-91-001 | TFW Ecoregion Bioassessment Pilot Project, Interim Report, Plotnikoff and Dietrich, Interim Report, 1991. (53) | WQSC | E2/3 |
| TFW-WQ11-92-001 | TFW Ecoregion Bioassessment Pilot Project, Plotnikoff and Dietrich, Interim Report, July 1992. (53) | WQSC | E-2 |
| | Draft Literature Review and Synthesis: Wildlife Use of Riparian Management Zones and Upland Management Areas, BioSystems Analysis Inc., June 1989. (27) | WSC | Deleted |

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| | Wildlife Issue Paper. Wildlife Steering Committee, Fall 1989. (28) | Policy Ctte | F |
| | Ambient Monitoring Program Workplan, March 1989 and April 1990. (29) | AMSC | D |
| | Stream Classification Peer Review Workshop Draft Report, Summer 1990, NWIFC. (31) | AMSC | D |
| | "Think Tank" Workshop on Evaluating Streams and Forest Practices, David C. Flaherty and Associates, September 20, 1989. TFW-16C-89-008. (40) | AMSC | D |
| | Prototype Watershed Analysis, Review Draft, The Pacific Watershed Institute, December 1991, TFW-CE1-92-001. (Funded by WFPA) (42) | CESS | B |

Notes:

1. Abbreviations:

| | |
|-------------|---|
| AMSC | Ambient Monitoring Steering Committee |
| CESS | Cumulative Effects Steering Committee |
| CMER | Cooperative Monitoring, Evaluation & Research Committee |
| FSC | Fisheries Steering Committee |
| IMC | Information Management Committee |
| Policy Ctte | TFW Policy Committee |
| SHAMW | Sediment, Hydrology and Mass Wasting Steering Committee |
| WQSC | Water Quality Steering Committee |
| WSC | Wildlife Steering Committee |

2. Numbers within parenthesis are cross-references to product list and order form.

3. Documents overdue:

TFW-SH7-94-001 Bedload Transport and Large Organic Debris in Steep Mountain Streams in Forested Watersheds on the Olympic Peninsula, Washington; by Matt O'Connor and R. Dennis Harr, September 1994. (77) . (replaces 48) (This is promised to be turned in by end of October).

TFW-SH8-93-001 Application and Suitability of the RAPID Technique for Assessing Stream and Watershed Conditions Over Time, Dave Somers, Jeanette Smith, DATE? (67)

SUMMARY:

| <u>CODE:</u> | <u>USE CATEGORY:</u> | <u>COUNTS:</u> |
|--------------|----------------------------|----------------|
| A | LITERATURE REVIEWS | 5 |
| B | PROPOSALS AND STUDY PLANS | 3 |
| C | INTERIM REPORTS | 17 |
| D | PROGRAM DEVELOPMENT | 17 |
| E | FINAL PRODUCTS | 22 |
| | 1. No Action | 10 |
| | 2. Recommendations | 2 |
| | 3. In Implementation Phase | 10 |
| F | NOT A CMER PRODUCT | 2 |
| | NOT RATED | 1 |
| | <u>DELETED</u> | <u>1</u> |
| | TOTAL | 68* |

* Some documents fit two categories