

# The Federal Plan for Meteorological Services and Supporting Research

FISCAL YEAR 2005

FEDERAL COORDINATOR  
FOR  
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

8455 Colesville Road, Suite 1500  
Silver Spring, MD 20910

FCM-P1-2004  
OCTOBER 2004  
WASHINGTON, D.C.

Editors: Frank Estis  
Blaine Tsugawa  
Assistant Editor: Kenneth Barnett



## PREFACE

Since 1965, the Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) has developed a Federal Plan that articulates the provision of meteorological services and the support for meteorological and related research by agencies of the Federal government. OFCM's 2005 Federal Plan provides Congress and the Executive Branch with a comprehensive compilation of proposed programs for fiscal year (FY) 2005 and a review of agency programs in FY 2004. The Federal Plan's narratives, timelines, and schedules are current as of July 2004.

The Federal Plan consists of an Executive Summary, three sections, and Appendices. The Executive Summary, which is written as a concise, stand-alone report, provides a high-level view of the Federal resources dedicated to meteorological programs and the achievements of those programs. This year's feature article (Section 1) presents the idea that to make better decisions we need to understand the risks involved, and that some of the most important roles we ask of government are related to avoiding, mitigating, transferring, or accepting risks--in short, risk management. The activities involved in understanding risk go by many names, such as risk identification, risk evaluation, risk assessment, risk estimation, and risk characterization. However, the article suggests that the most important point is that understanding the risk is essential to making sound decisions on managing it, no matter who the decision maker will be. In the area of understanding risks, the OFCM is primarily interested in risks that are meteorological in nature, and has a strong interest and clear role in coordinating the meteorological risk characterization and management activities of the Federal agencies. The OFCM believes that near-term safety and resource priorities require a better understanding and application of risk assessment and management tools to the weather and climate hazards that affect our communities and lives. A critical part of the data required to use risk tools effectively is a comprehensive collection of economic data, impacts and variables. A coordinated, collaborative initiative is needed to establish such a data collection effort.

Section 2 of the Federal Plan summarizes the resources requested in the President's FY 2005 Budget, compared with the resources appropriated by Congress for FY 2004. Section 3 contains departmental and agency narratives on programs for providing meteorological services and supporting research and development. It also describes relevant research funded by the National Science Foundation.

Appendix A describes the OFCM's coordination, program, and planning activities. Appendix B summarizes the World Meteorological Organization's World Weather Program. Appendix C lists the feature articles published in previous Federal Plans. The acronyms and abbreviations used throughout this year's Federal Plan are defined in Appendix D. The inside front cover lists the current members of the Federal and Interdepartmental Committees for Meteorological Services and Supporting Research, which provide guidance and support for OFCM activities. The inside back cover diagrams the infrastructure through which the OFCM performs its coordinating mission.



Samuel P. Williamson  
Federal Coordinator for Meteorological  
Services and Supporting Research



---

# THE FEDERAL PLAN FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH, FISCAL YEAR 2005

## TABLE OF CONTENTS

Preface .....	iii
EXECUTIVE SUMMARY .....	vii
Section 1. THE REWARDS OF MANAGING WEATHER-RELATED RISKS .....	1
Section 2. RESOURCE INFORMATION AND AGENCY PROGRAM UPDATES .....	7
Agency Obligations for Meteorological Operations and Supporting Research .....	7
Department of Agriculture .....	7
Department of Commerce .....	7
Department of Defense .....	12
Department of Homeland Security .....	15
Department of the Interior .....	15
Department of Transportation .....	16
Environmental Protection Agency .....	17
National Aeronautics and Space Administration .....	18
Nuclear Regulatory Commission .....	18
Agency Funding by Budget Category .....	19
Agency Funding by Service Category .....	19
Personnel Engaged in Meteorological Operations .....	19
Interagency Fund Transfers .....	25
Facilities/Locations for Taking Meteorological Observations .....	27
Section 3. AGENCY METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH PROGRAMS .....	29
Department of Commerce Weather Programs .....	29
National Oceanic and Atmospheric Administration .....	29
National Weather Service .....	29
National Environmental Satellite, Data, and Information Service .....	39
Office of Oceanic and Atmospheric Research .....	69
National Ocean Service .....	83
NOAA Marine and Aviation Operations .....	85
Department of Defense Weather Programs .....	89
United States Air Force .....	89
United States Navy .....	105
United States Army .....	115
Department of Transportation Weather Programs .....	129
Federal Aviation Administration .....	129
Federal Highway Administration .....	139
Federal Railroad Administration .....	147
Federal Transit Administration .....	149

---

Department of Agriculture Weather Programs .....	151
Department of Energy and National Nuclear Security Administration	
Operational and Research Weather Programs .....	157
Department of Homeland Security Weather Programs .....	177
Department of the Interior Weather Programs .....	181
Department of State Climate and Atmospheric Programs .....	189
Environmental Protection Agency Weather Programs .....	191
National Aeronautics and Space Administration Weather Programs .....	195
Nuclear Regulatory Commission Weather Programs .....	205
National Science Foundation .....	207

## APPENDICES

A. FEDERAL COORDINATION AND PLANNING .....	209
B. WORLD WEATHER PROGRAM .....	223
C. LISTING OF PREVIOUS FEATURE ARTICLES .....	229
D. ACRONYMS AND ABBREVIATIONS .....	231

## LIST OF TABLES

ES-1 Federal Budget for Meteorological Operations and Supporting Research, FY 2005 .....	vii
2.1 Meteorological Operations and Supporting Research	
Costs, by Agency .....	8
2.2 Agency Operational Costs, by Budget Category .....	20
2.3 Agency Supporting Research Costs, by Budget Category .....	21
2.4 Agency Operational Costs, by Service .....	22
2.5 Agency Supporting Research Costs, by Service .....	23
2.6 Personnel Engaged in Meteorological Operations .....	24
2.7 Interagency Fund Transfers for Meteorological Operations and Supporting Research .....	26
2.8 Facilities/Locations for Taking Meteorological Observations .....	27
3.1 Projected Satellite Launch Schedule .....	47
A.1 Current OFCM Publications .....	221