

Background of the Certified Floodplain Manager Program

March 2016



CFM Program History

In 1992, the chair of ASFPM's Professional Development Committee, Jim Owen, conducted a survey of the Association of State Floodplain Managers membership to explore the interest and feasibility of a national floodplain manager certification program. Based on the favorable response to the survey, Owen submitted Jan. 13, 1993 a proposal to the ASFPM Board of Directors to initiate a certification program. A subcommittee was formed Oct. 31, 1993 to research existing floodplain management certification programs and certification programs of parallel organizations and disciplines. In July 1995, Owen, representing the California Floodplain Management Association, presented a proposal to the ASFPM board to join an inter-organizational board effort to establish a certification program. Although the board did not accept his proposal, the background information presented in Owen's proposal was very informative. A formal ASFPM Certification Task Force was formed in 1995 to continue with certification program efforts. Initial discussions of the ASFPM board and task force identified the following topics for further clarification and description:

- Goals
- Levels and types of certification
- Certification/recertification procedures
- Continued education requirements
- Testing
- Training courses
- Program expected expenses and income

The original intent of the Certified Floodplain Manager program was to provide a way to recognize the professionalism of floodplain management activities, and provide a process that those professionals were required to obtain through continuing education credits to keep abreast of changes in federal and state regulations, legislative requirements and have an awareness not only of the National Flood Insurance Program, but of comprehensive floodplain management.

Initially, the CFM program was envisioned as having three categories. Category "A" included individuals who held a Floodplain Manager Certificate of Training from the Federal Emergency Management Agency, Emergency Management Institute or another approved floodplain management training activity. Category "B" included individuals who held an approved Floodplain Manager Certificate issued by a state agency or state floodplain management association. Category "C" included individuals who held a National Floodplain Manager Certificate issued by ASFPM. These individuals satisfied the requirements of Category "A" and/or Category "B" and also passed the ASFPM certification exam.

The initial 1995 ASFPM Floodplain Manager Certification Task Force consisted of:

- Albert Ashwood, OK, Chair OFMA
- Jerry Brems, OH
- Bradley Brink, IL
- Fred Brusso, VA
- Mark Glidden, CO
- Derhyl Herbert, LA, Chair LFMA
- John Ivey, TX, PDC Chair, Halff Associates
- Roland Kadelski, MI
- Morton Lipschultz, FL

- Terri Miller, AZ, ASFPM Chair
- Ken Morris, OK, Executive Director OFMA, ASFPM Treasurer
- Joseph Napoleon, NC
- Michael Parker, CA, Santa Barbara County Flood Control District
- Roy Sedwick, TX, TFMA Executive Director, Lower Colorado River Authority
- Lou Sidell, ME, ASFPM Vice Chair
- Michelle Steinberg, MA
- Alan Wald, WA
- Chuck Williams, AZ

The task force and ASFPM board proceeded cautiously from 1993 to 1996, addressing the certification target audience and evaluating the possible levels of certification, including a basic certification program and feasibility of specialized or advanced certification levels or designations.

In March 1996, the ASFPM Certification Task Force submitted a draft certification program recommendation to the ASFPM board and recommended the certification program target local community floodplain managers who “work in the trenches” issuing building permits in floodprone areas.

In the early stages of the CFM program, states were encouraged to develop their own programs. In fact, New Mexico, Oklahoma and Texas initiated their own programs before the national program. Their efforts were instrumental in the creation of the national CFM program. The Illinois CFM program and state-specific exam were also created simultaneously with the national exam.

In 1995, New Mexico and the New Mexico Floodplain Management Association (NMFMA) initiated action to respond to state legislation requiring community floodplain managers to become “certified” and receive annual floodplain management training. Grant Pinkerton, member of NMFMA and ASFPM, with assistance from Diane Calhoun from FEMA Region VI, developed what became the first Certified Floodplain Manager program in the nation. The action by NMFMA to develop a state certification program laid some valuable groundwork for ASFPM to develop a national CFM program. Also, during this 1995-1996 time period, Texas and Oklahoma, led by Roy Sedwick, Executive Director of the Texas Floodplain Management Association (TFMA) and Ken Morris, Executive Director of the Oklahoma Floodplain Management Association (OFMA) also established CFM programs.

ASFPM/FEMA Certification Task Force

In 1996 the ASFPM/FEMA Certification Task Force developed the framework and Charter for a National Certified Floodplain Manager Program (National CFM Program). The 1996 task force included:

- Bonnie Butler, FEMA, Emergency Management Institute
- Diane Calhoun, TFMA Chair, ASFPM Regional Director, former FEMA Region VI
- Pat Hoggard, City of Tulsa, Chair OFMA
- John Ivey, Task Force Chair, ASFPM Professional Development Committee Chair, Private Sector and former FEMA Headquarters and Region VI
- Larry Larson, ASFPM Executive Director, WI State Manager of Floodplain/Dam Safety
- Bill Lesser, FEMA Headquarters
- Ken Morris, OFMA Executive Director, NFIP State Coordinator, Oklahoma Water Resources Board
- Joe Remondini, US Army Corps of Engineers (USACE) Tulsa District
- Roy Sedwick, Task Force Co-Chair, TFMA Executive Director, former NFIP State Coordinator, Lower Colorado River Authority
- Bill Tingle, Chair North Carolina Association of Floodplain Managers (NCAFPM)
- Michael Parker, Santa Barbara County Flood Control District (CA)
- Wallace (Wally) Wilson, ASFPM Board, Chair ASFPM Floodproofing Committee, former NFIP State Coordinator

ASFPM Certification Board of Regents (CBOR)

Later in 1997, after the charter was created, the ASFPM board created the ASFPM Certification Board of Regents to administer the national CFM program. The charter mandated that CBOR must be made up of representation from local government, state chapters, state government, FEMA, Emergency Management Institute, academia and private sector. The charter also identified CBOR must include a past chair of the ASFPM board, the executive director of ASFPM, representation from ASFPM's executive office and provide for one "at-large" position. Initial CBOR members are listed below. Their role on CBOR is listed after their name and their professional position title is listed second. Jerry Louthain, former ASFPM chair, served as the first CBOR president, Dave Canaan, former NCFMA chair, served as the first vice president and Larry Larson, ASFPM executive director at the time, served as the first CBOR secretary.

1997 CBOR

- Jerry Louthain, President, Past ASFPM Chair Representative, Washington Department of Ecology
- Dave Canaan, Vice-President, ASFPM Chapters Representative, Mecklenburg County Engineering
- Larry Larson, Secretary, ASFPM Executive Director
- Ken Zwickl, Federal Interagency Task Force Representative, USACE Headquarters
- Donna Daniels, FEMA Directorate Representative
- Eve Gruntfest, Academia Representative, CIRA Colorado State University
- Bill Lesser, FEMA Certification Project Officer, FEMA Headquarters
- Christy Miller, State Government Representative, Alaska Department Commerce & Economic Development
- Grant Pinkerton, Local Government Representative, Chaves County (NM) P&E Services
- Lillian Virgil, Emergency Management Institute (EMI) Representative
- French Wetmore, Private Sector Representative, French & Associates, Ltd.
- Wally Wilson, Certification Project Leader for ASFPM Board, Wallace A. Wilson Consulting Services

One of CBOR's first tasks was to draft a vision and goals for the CFM program. They determined the CFM program vision was for every state to establish a cadre of certified professionals who provide state-specific technical assistance and guidance to their communities to ensure effective floodplain management.

CBOR determined that the primary goal of the CFM program was to help reduce the nation's flood losses and protect and enhance the natural resources and functions of its floodplains by improving the knowledge and abilities of floodplain managers in the United States. This goal will be achieved over time by:

- Encouraging self-study and attendance at training courses to pass testing to obtain certification;
- Requiring continuing education as a condition for renewal;
- Encouraging ASFPM chapters, state agencies and state or regional associations to prepare tests for floodplain managers on specific knowledge of state and regional requirements and legislation; and
- Ensuring CFMs have awareness not only of the NFIP, but of comprehensive floodplain management.

A second goal was to increase the prominence of floodplain management in decision making by local officials and the public. This goal will be achieved on a larger scale and over a longer time frame by:

- Improving the recognition of floodplain management as a specific discipline;
- Increasing the status of floodplain managers as knowledgeable professionals;
- Providing greater credibility and visibility for the profession;
- Increasing the educational and training opportunities for floodplain managers through partnerships with other organizations; and
- Encouraging CFMs to contribute to the floodplain management profession for the betterment of the nation.

2016-2017 CBOR

- Mark Riebau, CFM, President, Former Director FEMA Region X Floodplain Management Division
- Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District
- Warren Campbell, CFM, Academia Representative, Western Kentucky University
- Dave Carlton, CFM, Liaison to NAI and NBF Committees, ISO-CRS Consultant
- Louie Greenwell, CFM, ASFPM Professional Development Committee Liaison, PRIME AE Group
- Ingrid Wadsworth, CFM, Secretary, ASFPM Deputy Executive Director
- Lisa Jones, CFM, Private Sector Representative, Carolina Flood Sources, LLC
- Roger Lindsey, CFM, At-Large Member, Metro Nashville Water Services
- Beth Norton, FEMA Representative, Headquarters
- Jennifer Dunn, CFM, Silver Jackets Program Manager, USACE
- Anita Larson, Certification Program Coordinator, ASFPM Executive Office
- Jamie Prochno, CFM, State Regent, Colorado Water Conservation Board
- Joe Fernandez, CFM, Chapter Regent, San Antonio River Authority

A historical listing of all CBOR members is included at the end of this paper.

Creation of the National Certification Exam

In 1998, Eve Gruntfest, Bill Lesser and Grant Pinkerton of the CBOR created a national CFM Exam Pool. CBOR introduced a national CFM exam that was offered as a pilot at the ASFPM annual conference in Milwaukee in May 1998. Based on lessons learned, the initial CFM exam was modified by CBOR and ASFPM’s Professional Development Committee into a 120-question exam that was officially offered at the ASFPM national conference at Portland, Oregon May 1999. The PDC Exam Review Committee is made up of representatives from FEMA, state NFIP coordinators, accredited state chapters, insurance industry and private consulting industry.

In 1998 French Wetmore became the CBOR president and led the initial effort to standardize the CFM exam by creating seven CFM exam categories and assigning a specific breakdown of percentages for exam questions. This exam criterion has been followed since 1998.

The certification exam measures a person's knowledge of a community's responsibilities under the NFIP and related floodplain management topics. The ASFPM CFM program has established a policy in which the national exam is approximately 120 multiple choice and true/false questions. Approximately 20 questions require obtaining information from a Flood Insurance Rate Map, Flood Boundary and Floodway Map and Flood Insurance Study. Another 5-10 questions focus on the FEMA Elevation Certificate.

The exam requires approximately 2-3 hours to complete, and covers the following seven categories in the proportions shown. Under each category are examples of the topics that are tested.

<u>Topic with Examples</u>	<u>Percent of Total Questions</u>
<u>Overall Context of Floodplain Management</u>	5-10%
-Unified National Program	
-NFIP	
-Community Sanctions	
 <u>Floodplain Mapping</u>	 25-30%
-Base flood concept	
-Discharges, profiles, floodways	
-Coastal flooding	
-Reading/using maps	
-Revising FEMA maps	

<u>NFIP Regulatory Standards</u>	25-30%
-“Development” requirements for a permit	
-Encroachment rules	
-V Zone rules	
-Building protection standards	
-Substantial improvement/damage	
<u>Regulatory Administrative Procedures</u>	20-25%
-Inspections	
-Elevation records	
-Enforcement	
-Variance rules	
<u>Flood Insurance</u>	10-15%
-Coverage	
-Rating	
<u>Flood Hazard Mitigation</u>	5-10%
-Disaster assistance procedures	
-Funding sources	
<u>Natural and Beneficial Functions</u>	5-10%
-Wetlands	
-Multi-objective management	

Bonnie Butler with FEMA’s EMI provided valuable information regarding FEMA’s involvement and legal reviews that led to creation of the (national) Certified Emergency Manager (CEM) program. This information was shared with ASFPM to assist in avoiding the “pitfalls” identified during development of the CEM program. Important issues such as required education and experience to take the certification exam and avoidance of narrative or subjective exam questions. The ASFPM board, CBOR and PDC have followed these recommendations since 1999.

ASFPM Professional Development Committee

The PDC provides support for the national CFM program. Several PDC members are members of the CFM Exam Work Group who maintain the CFM exam and CFM exam pool, and report directly to CBOR and coordinates with the ASFPM executive office. The CFM exam pool was initially created and maintained by the PDC to support the CFM exam administrated by ASFPM, and to assist state chapters that have established and maintain CFM programs. The CFM Exam Work Group submits an annual CFM Exam Review Report to CBOR describing the status of the CFM exam and summarizes support provided to state chapter accredited programs and the status of special assignments from the ASFPM Board and CBOR.

Annual changes and updates have been made to the exam since 1999 by the CFM Exam Work Group. This group has consisted of state NFIP coordinators, ASFPM state chapter members, FEMA, USACE, consulting engineers, planners, surveyors and insurance professionals. All members of the CFM Exam Work Group are required to be CFMs. During the early days of the program, Bill Lesser, FEMA’s representative to CBOR, played an important role in this effort by conducting an annual FEMA Program Review to update the CFM exam to reflect changes in the NFIP and FEMA programs.

Historically, the annual CFM exam review and update is finalized after each ASFPM annual conference, utilizing a summary of statistical information on CFM exam scores and exam comments from persons who have taken the exam. This valuable information is compiled by the ASFPM executive office. CFM exam data has been compiled from exam offerings since the initial CFM exam was offered at the May 1999 ASFPM conference in Portland, Oregon. While maintaining the confidentiality of CFM exam takers, the ASFPM EO compiles a listing of the "most

missed" and "least missed" exam questions, and summarizes written comments received from persons who have taken the exam during the previous 12-month exam period.

State Exams

After introduction of the ASFPM national CFM exam in 1999, efforts began to standardize program requirements to allow the New Mexico, Oklahoma and Texas state chapters to obtain national accreditation for their ongoing CFM programs. CBOR worked closely with the ASFPM EO, ASFPM PDC, NMFMA, OFMA and TFMA to accredit the three existing state chapter CFM programs. During this time period, state programs were also created in Arkansas, Illinois and North Carolina. Mike Borengasser, executive director of the Arkansas Floodplain Management Association (AFMA) took the lead in Arkansas. French Wetmore, executive director of the Illinois Floodplain Managers Association (IAFSM), created the first totally “state specific” CFM exam using national CFM exam pool questions converted to address state-specific conditions in Illinois. Barry Williams, consultant, and Bill Tingle, chair with the North Carolina Association of Floodplain Managers (NCAFM) took the lead in North Carolina. All six state chapters adopted state specific CFM exams and CFM charters that received national accreditation from ASFPM, thus establishing the current six state accredited programs.

The six accredited state programs were reviewed by the PDC and found to be consistent with the national ASFPM program, with slight variations due to state-specific issues. State-specific exams were developed from the national CFM exam pool and approved by the PDC as meeting the required question distribution and other exam requirements established by CBOR. Annual CFM program reviews were performed by the PDC from 2000-2008. The comparison of the accredited state CFM program exams to the national CFM program exam are listed below.

<u>Exam</u>	<u>Number of Questions</u>	<u>Question Contents</u>
ASFPM	120	Coastal and riverine
NMFMA	120	Riverine only. ASFPM pool questions were revised to become “state-specific” questions (In 2008 TFMA transition to the 120 question ASFPM exam)
OFMA	120	Riverine only. ASFPM pool questions revised to become “state-specific” questions
TFMA	132	ASFPM exam with 12 additional state specific questions (In 2008 TFMA transition to the 120 question ASFPM exam)
IAFSM	120	Riverine only. ASFPM pool questions revised to state-specific questions
AFMA	120	Riverine only. ASFPM pool questions revised to become state-specific questions (In 2008 AFMA transition to the 120 question ASFPM exam)
NCFMA	120	ASFPM pool questions were revised to become “state-specific” questions

Standardization of the program was one of the goals of the Reliability and Validity (R&V) assessment of the CFM program by CBOR with assistance from Ohio State University. In the period from 2008-2011, the six accredited states CFM programs transitioned from state specific CFM exams to the national CFM exam. This transition simplified the annual CFM exam review and allowed creation of a single CFM exam pool. The CFM Exam Work Group was expanded to include a minimum of two representatives from states with accredited CFM programs.

National and accredited state programs must meet the exam category percent breakdown established by CBOR and outlined above. This has proven to be a difficult task as a question can often be classified in multiple categories. During the early years of the program the PDC evaluated FEMA’s Flood County USA Flood Insurance Study and accompanying Flood Insurance Rate Map and created an alternate CFM exam FIRM exercise. The PDC recommended to CBOR that the Flood County exercise not be incorporated into the exam primarily because it required the examinee to reference multiple FIRM panels, making it difficult for the exam takers to manage and for the ASFPM EO to copy, distribute, grade and maintain. The resulting Flood County exam document would have consisted of the exam questions, Flood Insurance Study Report, FIRM Index, four individual FIRM panels and a FEMA Elevation Certificate with instructions. It was the PDC’s opinion that the examinee may be overwhelmed with the complex examination packet.

Exam Statistics

Since 1999, a total of 13,878 CFMs have been certified nationwide. The statistics below include those certified under the national CFM program and accredited state programs as of Dec. 31, 2015.

Table 1

ASFPM Comparison with State Chapter CFM Programs:						Passing Grade
State	AV Grade	# Examinees	# Pass	# Fail	% Pass	
AR	71.27	391	269	122	69%	70%
IL	77.63	836	678	158	81%	70%
OK	81.51	650	579	72	89%	70%
NM	73.84	584	355	229	61%	70%
NC	76.60	652	562	90	86%	70%
TX	72.86	3585	2,648	937	74%	70%
ASFPM	75.60	11,262	8,787	2,226	78%	70%
National	76.73	17,960	13,878	3,834	77%	70%

Sixteen years after the 1999 initial exam offering, the CFM exam pass rate and average exam scores have basically remained constant. This indicates the integrity of the exam has not been compromised.

Nationwide CFM Statistics

There are more than 22,000 communities that participate in the NFIP and more than 1,300 of these participate in FEMA’s Community Rating System (CRS). CBOR established early goals for the national CFM program with projections of the potential categories of professional that could become CFMs. Ideally, the potential pool of CFMs would exist in the following groups:

- Every community that has an active floodplain management program;
- The NFIP state coordinator offices in all 50 states;
- FEMA headquarters and all 10 regional offices;
- All federal and state agencies responsible for water resources, flood protection, water development and water quality;
- Consultants who do work with these federal, state and local agencies;
- Architects, engineers, surveyors, planners and environmental scientists involved with water resources and floodplain management; and
- Academia and non-profits involved with water resources and floodplain management.

CFM Projections

In 2002 and 2003 the PDC began to make projections to estimate the number of floodplain management professionals who may consider becoming a CFM. The initial PDC nationwide projections and comparison to the actual number of CFMs are outlined in Tables 2, 3 and 4. The Projected Total of CFMs assumes an average of one CFM in each NFIP community, 20 CFMs in each state (state and federal employees), 200 CFMs from architecture/engineering, planning, surveying and environmental firms in each state and 100 CFMs from academia and non-profit organizations in each state.

Table 2
2002 National Projections for CFMs

Category	CFMs in 2002		Target	Potential CFMs	
Government	557	44.85%	22,000 communities + 50 States+Feds=	20,000	64.5%
Private Sector	673	54.19%	Engineers/Planners/Surveyors/Scientists	10,000	32.3%
Academia & Non Profit	12	0.97%		1,000	3.2%
Total	1,242	100.00%		31,000	100.0%

Table 3
Projected Number of CFMs by Year in the US

Year	Low		Actual	Projected	High
	CFMs	Assumptions	CFMs*	CFMs	Assumptions
1999			66		
2000			397		
2001			806		
2002	1,331	20% annual growth	1,331	1,331	25% annual growth
2003	1,597	20% annual growth	1,937	1,663	25% annual growth
2004	1,917	20% annual growth	2,567	2,080	25% annual growth
2005	2,300	20% annual growth	3,301	2,600	25% annual growth
2006	2,760	20% annual growth	4,375	3,250	25% annual growth
2007	3,312	20% annual growth	5,484	4,063	25% annual growth
2008	3,974	20% annual growth	6,808	5,078	25% annual growth
2009	4,769	20% annual growth	8,125	6,348	25% annual growth
2010	5,723	20% annual growth	9,243	7,935	25% annual growth
2011	6,582	15% annual growth	10,132	9,521	20% annual growth
2012	7,569	15% annual growth	11,023	11,426	20% annual growth
2013	8,704	15% annual growth	11,844	13,711	20% annual growth
2014	10,010	15% annual growth	12,909	16,453	20% annual growth
2015	11,511	15% annual growth	13,878	19,744	20% annual growth
2016	12,662	10% annual growth		22,705	15% annual growth
2017	13,928	10% annual growth		26,111	15% annual growth
2018	15,321	10% annual growth		30,028	15% annual growth
2019	16,853	10% annual growth		34,532	15% annual growth
2020	18,539	10% annual growth		39,712	15% annual growth

**Actual number of CFMs includes the national CFM program and all accredited state chapter programs.*

At the end of 2015, the current number of CFMs nationwide exceeds the initial projection, making the ultimate goal more realistic for certifying between 20,000-30,000 CFMs by the year 2020.

The overall success of CFM programs nationwide can be attributed to the dedication of the state accredited programs, commitment of the ASFPM membership, efforts of CBOR and the program administration and guidance provided by the ASFPM EO. These individuals, groups and organizations have volunteered countless hours to make the CFM program a success.

Comparison to Other Professional Certification Programs

The PDC, working closely with the CBOR Training Committee and the ASFPM Training and Outreach Committee, has the responsibility to improve the professional development of the floodplain management profession. Since 2003, the PDC has conducted an annual Certification Survey and delivered an annual report to CBOR that

compares the national CFM program to certifications for professional engineers, emergency managers, hydrologists, planners, surveyors, erosion specialists, architects, landscape architects and wetland specialists.

An annual Certification Survey compares certification requirements for:

- State and national requirements
- Education requirements to become certified
- Years of experience required
- National and state association membership requirements
- Certification exam requirements
- Certification exam type and number of questions
- CEC requirements
- Fees (examination, membership, recertification)
- Recertification requirements (annual/biannual)
- Ethics requirements (annual training requirements)

The PDC also provides the annual Certification Survey results to ASFPM and CBOR, which helps them evaluate:

How many certifications require annual ethics CECs?

Is online training available for other certifications?

What type of exam do other certifications use?

Membership and certification fees compared to ASFPM and CFM.

Is exam required for certification?

Minimal requirements to take certification exam.

The PDC also modifies the survey as needed.

In September 2015 a comparison of 41 professional certification programs revealed the following:

- Average annual organization dues are \$172
- Average required experience includes a Bachelors degree plus 3.1 years experience
- 11 programs require a college degree, 30 do not
- 32 programs out of 41 evaluated have a continuing education requirement with an average of 12.75 credits required per year. Of the 41 programs, 27 allow for continuing education credits to be obtained online. There were nine programs that have no continuing education requirement.
- 29 of 41 certification programs have established a code of ethics and five have annual ethics CEC requirements
- 37 programs require a certification exam, four do not
- Average exam fee is \$265
- Average recertification fees are \$92 per year

CFM becomes the ASFPM Trademark

In 2005, ASFPM copyrighted CFM as a CFM program trademark. This legal action safeguards the use of CFM and helps the national recognition desired for the program.

2008-2010 R&V Assessment of the National CFM Program and Exam

Annual reviews of the CFM exam have been conducted by the CBOR PDC since the national CFM exam was introduced in 1999. At CBOR's request in 2003, the PDC initiated an assessment of the CFM program and exam following criteria outlined in *Standards for Educational and Psychological Testing* published by the American Educational Research Association, American Psychological Association and National Council of Measurements in Education. The PDC report submitted to CBOR Nov. 12, 2003 that the ASFPM CFM program complies with the R&V standards established by the *Standards for Educational and Psychological Testing*.

During CBOR meetings in 2007 and 2008, plans were initiated to conduct an R&V assessment of the entire CFM program and exam. In 2008 ASFPM and CBOR prepared a Request for Proposals (RFP) for a contractor to perform an R&V assessment of the program. The ASFPM EO interviewed and consulted various experts to determine the best way to reach qualified contractors for the R&V process, and what standard of measure to use when assessing the CFM program and exam through R&V. Following this research, CBOR decided to use the National Commission on Certifying Agencies (NCCA) standards as the measuring stick to assess the national CFM certification program and exam. ASFPM received a total of seven proposals from qualified contractors.

In 2009, ASFPM executed a contract with the Ohio State University to perform the R&V analysis of the CFM program and exam using the NCCA Standards for Accreditation of Certification Programs as the standard of measure.

The ASFPM EO provided CFM program background, exam formats and statistics to assist OSU with the R&V assessment. There were numerous meetings and correspondence during the R&V start-up period. OSU researched the ASFPM national CFM program and worked closely with CBOR and ASFPM EO to identify and initiate the initial phases of the R&V assessment.

CBOR's R&V goal was to evaluate how well the CFM exam is constructed to include:

- Individual test questions and answer choices well written on best testing practices and design
- Questions performance both individually and collectively as a well-designed exam
- That the exam measured what floodplain managers really needed to know (in current practice)
- Topics are represented correctly on the exam comparable to representation in the field
- Passing score is properly placed
- Exam is legally defensible – properly researched, designed and documented
- Follows an established criteria for best practices (such as NCCA standards)
- Proper and consistent procedures are followed for question pool maintenance, question design, exam design, scoring, grading, and protection of test results
- Program administration overall is appropriate with policies, procedures and adequate autonomy to follow and maintain NCAA accreditation standards.

In 2009, CBOR identified a group of Subject Matter Experts from a representative cross section of the floodplain management profession to participate in a Floodplain Management Practice Analysis to create a comprehensive list of tasks and duties floodplain managers perform. The SME group was identified consisting of candidates:

- From diverse geographical representation including riverine and coastal areas
- From all levels of government, as well as representatives from private industry and academia
- From a variety of areas of emphasis within the practice of floodplain management
- Committed to continued involvement and support of the national CFM program and exam
- Representation from an accredited state CFM program

The ASFPM panel of SMEs convened in July 2009 in Columbus, OH at the Ohio State University Center on Education and Training for Employment (CETE) facility to perform the Floodplain Management Practice Analysis and **Developing A CurriculUM** (DACUM) process. OSU defines the DACUM process as a quick, effective, low cost method of analyzing jobs and occupations. The panel of SMEs from ASFPM who participated in this process included:

- Jessica Baker, P.E., CFM, Project Manager, Halff Associates, Richardson, TX
- Michelle F. Burnett, CFM, Rhode Island State Floodplain Coordinator, Rhode Island Emergency Management Agency, Cranston, RI
- Jerry Hancock, CFM, Stormwater & Floodplain Programs Coordinator, City of Ann Arbor Systems Planning Unit, Ann Arbor, MI
- Laura Hendrix, CFM, Executive Director, Association of Montana Floodplain Managers, Helena, MT
- Christy Miller, CFM, Program Manager, Tetra Tech, Inc. Anchorage, AK

- Stephen Mitchell, CFM, Operations Manager, City of Pascagoula, MS
- Rhonda Montgomery, CFM, Program Specialist, FEMA-HQ – Mitigation Directorate, Arlington, VA
- Ricardo S. Pineda, CFM, Chief, Floodplain Management Branch, State Floodplain Coordinator, Department of Water Resources, Division of Flood Management, Sacramento, CA
- Joe Remondini, P.E., CFM, Program Manager Floodplain Management Services, US Army Corps of Engineers, Tulsa, OK
- Robert Rogerson, CFM, Floodplain Manager, Town of Mount Pleasant, Mount Pleasant, SC
- Terri L. Turner, CFM, Assistant Zoning & Development Administration, Augusta-Richmond County Planning Commission, Augusta, GA
- Kait Laufenberg, CFM, Training & Chapter Coordinator, ASFPM, Madison, WI

These SMEs defined the duties, tasks, general knowledge and skills required for the floodplain management professional and defined the tools, equipment, supplies and materials required for a floodplain manager to perform his or her duties. The DACUM panel identified future trends and concerns. This process produced an end product, the “DACUM Chart” that was used by OSU to develop the verification survey. The survey was distributed to a select pool of 6,622 ASFPM members in September 2009 and 2,187 (33%) responses were received. The survey data was summarized by OSU, and became the basis for the R&V validation process in forming the recommended exam blueprint, topic areas and question writing.

The second and third ASFPM panel of SMEs convened in November 2009 and February 2010 in Columbus, OH at the OSU CETE facility to identify and validate exam topic areas, percentages of questions on the exam (exam blue print) and to review/revise exam pool questions, and write new questions using established best practices for question writing. The panel of ASFPM SMEs who participated in the November 2009 meeting included:

- Chad Berginnis, CFM, Senior Specialists, Hazard Mitigation & Floodplain Management, Michael Baker Jr., Inc, Columbus, OH
- Diane Calhoun, CFM, Project Manager, Michael Baker Jr., Inc., Denton, TX
- Warren Campbell, Ph.D., P.E.,CFM, Hall Professor of Civil Engineering, Western Kentucky University, Bowling Green, KY
- Heidi Carlin, CFM, Floodplain Management Coordinator, Lower Colorado River Authority, Austin, TX
- Cindy Crecelius, CFM, Consultant, CC Consults, Westerville, OH
- John Ivey, CFM, Vice President, Halff Associates, Inc., Fort Worth, TX
- Kait Laufenberg, CFM, Training & Chapter Coordinator, ASFPM, Madison, WI
- Jen Marcy, CFM, Senior Public Information Specialists, PBS&J, Buffalo, NY
- Dorothy Martinez, CFM, Senior Territory Training Manager, H2O Partners, Austin, TX
- Stephen Mitchell, CFM, Operations Manager, City of Pascagoula, MS
- Rhonda Montgomery, CFM, Program Specialist, FEMA-HQ – Mitigation Directorate, Arlington, VA
- Michael Parker, CFM, Floodplain Coordinator, Santa Barbara County, Santa Barbara, CA
- Joe Remondini, P.E., CFM, Program Manager, Floodplain Management Services, US Army Corps of Engineers, Tulsa, OK

During the November 2009 and February 2010 meetings, the SMEs reviewed the outcomes and results from the DACUM process and verification survey. The panelists reviewed the current seven CFM exam question categories and recommended a new percentage for several of the exam categories. OSU held a question writing workshop to train SMEs on proper question construction. OSU walked the panelists through all questions past and present from the national CFM exam question pool, including retired and discontinued questions with statistics about number of exam takers who had answered the question, and percentage of exam takers who had gotten it right or wrong. Each individual exam question was tagged by the panel to match it to the appropriate exam topic category and knowledge area. During this work session, more than 180 actual exam questions were reviewed and revised using the recommended question writing guidelines and 17 new exam questions were developed. The SMEs assisted Ivey in compiling a report to CBOR with the following recommendations:

1. Instruct the CFM Exam Review Committee to revise the current exam based on the R&V assessment recommendations
2. Revise the exam topic categories (%) based on R&V SME's recommendations
3. Evaluate and incorporate, if appropriate, OSU's R&V recommendations to finalize R&V.

The third ASFPM panel of SMEs convened in February 2010 in Columbus, OH to perform the Exam Content Validation process and determine exam passing score. The panel of SMEs from ASFPM who participated in this process included:

- Diane Calhoun, CFM, Project Manager, Michael Baker Jr., Inc., Denton, TX
- Heidi Carlin, CFM, Floodplain Management Coordinator, Lower Colorado River Authority, Austin, TX
- Cindy Crecelius, CFM, Consultant, CC Consults, Westerville, OH
- John Ivey, CFM, Vice President, Halff Associates, Inc., Fort Worth, TX
- Kait Laufenberg, CFM, Training & Chapter Coordinator, ASFPM, Madison, WI
- Rhonda Montgomery, CFM, Program Specialist, FEMA-HQ – Mitigation Directorate, Arlington, VA
- Michael Parker, CFM, Floodplain Coordinator, Santa Barbara County, Santa Barbara, CA

The February 2010 meeting provided the SMEs time to complete their review of all the questions in the exam pool and to write enough new questions following the question writing guidelines to fulfill the new exam blueprint topic percentages should CBOR choose to adopt the new blueprint. OSU recommended that future CFM exam question construction should limit (and over time eliminate) the number of true/false questions to utilize more multiple choice, matching and exercise scenarios that would reduce the probability of an exam taker "guessing" a correct answer (true/false questions have a 50-50% probability of identifying the correct answer). The SMEs established recommendations on exam question structure requirements for question stem and answer choices. The number of answer choices for multiple choice questions should be limited to four or five total options, but whichever number, the number of answer options should be consistent across the entire exam (including "all of the above" or "none of the above") so as not indicate clues to which option is the answer.

The ASFPM panelists then took the newly developed pool of new and revised questions and assessed each individual question for difficulty and criticality of knowledge required to pass the exam (which questions must be answered correctly in order to pass the exam). This process provided the information to help the SMEs in assessing the percentage of questions that must be answered in order to determine a "pass" score on the exam. A summary of the panelist's assessment of passing score percentage as determined using this process was provided to CBOR from OSU in its report. The February 2010 Content Validation Workshop resulted in approval of OSU's recommended protocol for writing, review and performance assessment of CFM exam questions and panelists recommended that CBOR adopt and implement use of the revised question pool for the next version of the exam released.

OSU submitted a draft R&V report in early 2010, which resulted in several exchanges of review and comments from CBOR and the ASFPM EO. The Final R&V report was submitted by OSU prior to the ASFPM annual conference in May 2010. CBOR met in March 2010 to discuss the draft report and recommendations. During the meeting, CBOR formed two work groups to review and develop pros and cons of the OSU recommendations for:

1. Testing standards
2. Governance of the CFM program

CBOR met May 8, 2010 during the ASFPM annual conference in Oklahoma City to review the final OSU R&V report and discuss recommendations to improve the national CFM program and exam. CBOR formed an R&V Work Group of CBOR members to develop an implementation plan and timeline for implementing OSU's recommendations for testing and governance.

CBOR met Sept. 27-29, 2010 at the ASFPM EO. At that meeting, CBOR discussed recommendations from the Ohio State University report, and the CBOR R&V Work Group presented CBOR a plan to phase in the recommendations

from the R&V report. CBOR instructed the CFM Exam Review Committee to complete Phase 1 of R&V including expediting the 2010 CFM Exam Review and coordinating with the ASFPM Executive Office to introduce an updated CFM Exam by January 2011. CBOR then instructed the Exam Review Committee to initiate Phase 2 of R&V in 2011 to update the CFM Exam to comply with the updated exam description and the revised topic percentages (%) recommended by the R&V work group and approved by CBOR. Phase 2 of R&V was completed in Jan. 1, 2012, Phase 3 completed Jan. 1, 2013 and Phase 4 completed in January 2014. Phase 5 of R&V will be completed in July 2016 by issuing the 2016 CFM Exam with updating exam exercises and an expanded CFM Exam Pool (of questions) to support two independent exams.

CBOR authorized the CFM Exam Review Committee to conduct annual CFM exam reviews following recommendations of the CBOR R&V work groups, incorporating the new exam blue print topic percentages, exam pool and question revisions, in compliance with the newly developed R&V exam question protocol.

An update version of the CFM Exam Description was posted on the ASFPM website in 2014:

The certification exam measures a person's knowledge of a community's responsibilities under the NFIP and related floodplain management topics. The ASFPM CFM program has established a policy in which the national exam is approximately 120 multiple choice and true/false questions. Approximately 20 questions require obtaining information from a FIRM and FIS. Another 5-10 questions focus on the FEMA Elevation Certificate.

The exam requires approximately 2-3 hours to complete, and covers the following seven topics/categories in the proportions shown. Under each topic/category are examples of the topics that are tested.

<u>Topic with Examples</u>	<u>Percent of Total Questions</u>
<u>Overall Context of Floodplain Management</u> -Unified national program -Community sanctions -History and background of the NFIP -Other federal programs	5-10%
<u>Floodplain Mapping</u> -Base flood concept -Discharges, profiles, floodways -Coastal flooding -Reading/using maps -Revising FEMA maps	20-25%
<u>NFIP Regulatory and Non-regulatory Standards</u> -"Development" requirements for a permit -Encroachment rules -V Zone rules -Building protection standards -Substantial improvement/damage -Floodproofing and retrofitting	20-25%
<u>Regulatory Administrative Procedures</u> -Permit process and inspections -Elevation records -NFIP regulations -Enforcement -Variance rules	15-20%

Flood Insurance 10-15%

- Coverage
- Rating
- Mandatory purchase requirements
- NFIP grandfather rules
- ICC
- CRS
- Section 1316

Flood Hazard Mitigation 10-15%

- Disaster assistance procedures
- Mitigation planning (DMA2000)
- Funding sources
- Erosion and other flood hazards

Natural and Beneficial Functions 10-15%

- Wetlands
- Multi-objective management
- NAI
- Stream corridor restoration
- Water quality (NEPA, NPDES, MS4s)

The CFM Exam Work Group met Sept. 21-22, 2015 in Madison to conduct the 2015 CFM exam review incorporating R&V updated exam questions to comply with instructions from CBOR. Work group members participating:

- Mark Riebau, CFM, FEMA Region X retired, CBOR President
- Michael Parker, CFM, Floodplain Coordinator, Santa Barbara County, Santa Barbara, CA
- Dave Carlton, CFM, NIA and NBF Committee Liaison, ISO-CRS Consultant
- Dorothy Martinez, CFM, Senior Territory Training Manager, H2O Partners, Austin, TX
- John Ivey, CFM, John P. Ivey Consulting Engineers, Fort Worth, TX
- Anita Larson, ASFPM Certification Program Coordinator

In September 2015, the CFM Exam Work Group created the 2016 updated CFM exam, replaced all exam exercises and updated the CFM exam pool of questions. The 2016 CFM exam received the final review at the March 2016 CBOR meeting in Madison to ensure current FEMA and NFIP program changes were properly reflected in the new exam.

The ASFPM EO plans to implement the 2016 updated CFM exam in July 2016, and will distribute it to the six accredited state chapters: Arkansas, Illinois, New Mexico, North Carolina, Oklahoma and Texas. The 2016 CFM exam completes the five-year process to incorporate CBOR approved recommendations from the R&V assessment by OSU.

History of Annual CFM Exam Reviews

CFM Exam reviews and updates have been performed annually since 1999. The ASFPM Exam Review Committee typically meets annually during the ASFPM conference to initiate the annual CFM exam review and update. The exam review includes a review of the most missed exam questions from the previous year and review of exam comments from examinees. Rhonda Montgomery, CFM, FEMA Representative to CBOR, performs an annual NFIP/FEMA programs review of the exam. This review, formerly conducted by Bill Lesser, FEMA headquarters, explores recent changes in the NFIP and FEMA to identify possible impacts and conflicts in the CFM exam. The ASFPM Exam Review Committee is charged with maintenance of the CFM exam to be in harmony with recent NFIP and federal policy and program changes such as:

- BW12 (NFIP Reform Act of 2012)
- Homeowners Flood Insurance Affordability Act of 2014
- Federal Flood Risk Management Standard (FFRMS), EO 13690
- Endangered Species Act (ESA) impacts on FEMA's CLOMR process
- FEMA Disaster Response and Recovery Programs; Public Assistance
- FEMA's Provisional Accredited Levee (PAL) certification;
- Transition to digital FIRMs;
- FEMA's Risk MAP, HAZUS-MH, Public Assistance and disaster response programs;
- NFIP updates such as mandatory purchase requirements, CBRA, and ICC changes;
- Transition from NGVD 1929 to NAVD 1988;
- Revisions to FEMA's Elevation Certificate and Floodproofing Certificate
- HMGP; PDM; Severe Repetitive Loss Program; Flood Mitigation Assistance Program; and
- Technical Bulletins with the latest being TB 11, Crawlspace Construction.

Upon completion of each annual exam review, the updated CFM exam will be delivered to the ASFPM EO and then to the six accredited state chapters. The ASFPM EO will execute the transition to the updated CFM exam. While the annual exam evaluation effort is very time consuming, the CFM Exam Work Group, supported by the PDC, recommends that the evaluation continue as an annual event.

CFM Signature Stamp

In 2006, in response to requests from state chapters and individual members, CBOR investigated the feasibility of a CFM signature stamp. Since use of the CFM logo is a copyright, CBOR conducted a comparison of stamps and seals used by other certification programs and possible legal issues. CBOR designated the instrument as a signature stamp and prepared a sample design to reveal to the ASFPM membership at the 2008 ASFPM annual conference in Reno, NV. CBOR created a signature stamp policy thereby allowing the six accredited states with CFM programs to design and distribute CFM signature stamps that meet the CBOR criteria.

CBOR Charter

In 2014 CBOR, working closely with the ASFPM board, updated the charter to expand representation on CBOR. Additional Certification Board of Regents were added in 2014 and beyond to fulfill the needs of the CFM program.

A historical listing of all CBOR members beginning in 1997:

1997 CBOR

Dave Canaan, ASFPM Chapters Representative, Mecklenburg County Engineering

Donna Daniels, FEMA Directorate Representative

Eve Gruntfest, Academia Representative, CIRA Colorado State University

Larry Larson, ASFPM Executive Director

Bill Lesser, FEMA Certification Project Officer, FEMA Headquarters

Jerry Louthain, Past ASFPM Chair Representative, Washington Department of Ecology

Christy Miller, State Government Representative, Alaska Department Commerce & Economic Development

Grant Pinkerton, Local Government Representative, Chaves County P&E Services

Lillian Virgil, Emergency Management Institute (EMI) Representative

French Wetmore, Private Sector Representative, French & Associates, Ltd.

Ken Zwickl, Federal Interagency Task Force Representative, USACE

1998 – 2000 CBOR

Jerry Louthain, President, Washington Department of Ecology

Lillian Virgil, Emergency Management Institute (EMI) Representative

Donna Daniels, FEMA Directorate Representative

Ken Zwickl, Federal Interagency Task Force Representative, USACE
Larry Larson, ASFPM Executive Director
Eve Gruntfest, Academia Representative, CIRA Colorado State University
Grant Pinkerton, Local Government Representative, Chaves County (NM) P&E Services
French Wetmore, Private Sector, French & Associates, Ltd.
Dave Canaan, ASFPM Chapters, Mecklenburg County Engineering

2001 CBOR

French Wetmore, CFM, President, French & Associates
Grant Pinkerton, CFM, Vice President/Local Government Representative, Chaves County, NM
Collis Brown, CFM, State Government, George Dept. of Natural Resource
David Stearrett, FEMA Mitigation Directorate Representative Headquarters
Bob Freitag, Academia Representative,
Ken Zwickl, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Ken Morris, CFM, ASFPM Chapters, Oklahoma Water Resources Board
Larry Larson, CFM, Secretary/ASFPM Executive Director
Jerry Louthain, Past President, Washington Department of Ecology
Lillian Virgil, Emergency Management Institute (EMI) Representative

2002 CBOR

French Wetmore, CFM, President, French & Associates
Grant Pinkerton, CFM, Vice President/Local Government Representative, Chaves County, NM
Collis Brown, CFM, State Government, George Dept. of Natural Resource
Bill Lesser, FEMA Mitigation Directorate Representative Headquarters
Bob Freitag, CFM, Academia Representative, University of Washington
Ken Zwickl, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Ken Morris, CFM, ASFPM Chapters, Oklahoma Water Resources Board
Larry Larson, CFM, Secretary, ASFPM Executive Director
Tom Hirt, Emergency Management Institute (EMI) Representative, FEMA
William Carrigee, CFM, At-Large, City of Bay St. Louis

2003 CBOR

French Wetmore, CFM, President, French & Associates
Collis Brown, CFM, State Government, George Dept. of Natural Resource
Victor Rothacker, CFM, Local Government, Pima Co. Floodplain Management Division
Bill Lesser, FEMA Mitigation Directorate Representative Headquarters
Bob Freitag, CFM, Academia Representative, University of Washington
Ken Zwickl, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Ken Morris, CFM, ASFPM Chapters, Oklahoma Water Resources Board
Larry Larson, CFM, Secretary, ASFPM Executive Director
Tom Hirt, Emergency Management Institute (EMI) Representative, FEMA
Diane Calhoun, CFM, At-Large, Diane Calhoun Consulting

2004- 2005 CBOR

Diane Calhoun, CFM, President/CBOR At-Large, Michael Baker Corp
Collis Brown, CFM, Vice-President/State Government, George Dept. of Natural Resource
Larry Larson, CFM, Secretary, ASFPM Executive Director
Victor Rothacker, CFM, Local Government, Pima Co. Floodplain Management Division
Bill Lesser, CFM, FEMA Mitigation Directorate Representative Headquarters
Ken Zwickl, CFM, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Tom Hirt, Emergency Management Institute (EMI) Representative, FEMA
Bob Freitag, CFM, Academia Representative, University of Washington

Mike Borengasser, CFM, ASFPM Chapters Representative, Arkansas Soil and Water Conservation Commission
French Wetmore, CFM, Private Sector, French & Associates

2006 CBOR

Diane Calhoun, CFM, President/CBOR At-Large, Michael Baker Corp
Collis Brown, CFM, Vice-President/State Government, George Dept. of Natural Resource
George Riedel, CFM, Secretary, ASFPM Deputy Executive Director
Michael Parker, CFM, Local Government Representative, Santa Barbara County Flood Control District
Mike Borengasser, CFM, ASFPM Chapters Representative, Arkansas Soil and Water Conservation Commission
Bob Freitag, CFM, Academia Representative, University of Washington
Tom Hirt, CFM, Emergency Management Institute Representative, FEMA
John Ivey, CFM, Co-Chair ASFPM Professional Development Committee, Halff Associates
Bill Lesser, CFM, FEMA Mitigation Directorate Representative Headquarters
Cleighton Smith, CFM, Private Sector Representative, Dewberry, Inc.
Rhonda Montgomery, CFM, Co-Chair ASFPM Training Committee, State of Kansas
Ken Zwickl, CFM, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2007- 2008 CBOR

Mike Borengasser, CFM, ASFPM Chapters Representative, Arkansas Natural Resources Commission
Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District
Diane Calhoun, CFM, President/CBOR At-Large position, Michael Baker Corp.
Cindy Crecelius, CFM, State Government Representative, Ohio DNR-Division of Water
Bob Freitag, CFM, Academia Representative, University of Washington
Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA
John Ivey, CFM, Co-Chair ASFPM Professional Development Committee, Halff Associates
Rhonda Montgomery, CFM, FEMA Mitigation Directorate Representative Headquarters
George Riedel, CFM, ASFPM Deputy Executive Director
Cleighton Smith, CFM, Private Sector Representative, Dewberry, Inc.
Ann Yakimovicz, CFM, Co-Chair ASFPM Training Committee, First American Flood Data Services
Ken Zwickl, CFM, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2008 CBOR

Diane Calhoun, CFM, President/CBOR At-Large position, Michael Baker Corp.
Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District
Tom Morey, CFM, State Government Representative, Kansas Department of Agriculture
Warren Campbell, CFM, Academia Representative, Western Kentucky University
Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA
John Ivey, CFM, Co-Chair ASFPM Professional Development Committee, Halff Associates
Desiree Companion, CFM, ASFPM Chapters Representative, Sarasota County Environmental Services
George Riedel, CFM, ASFPM Deputy Executive Director
Cleighton Smith, CFM, Private Sector Representative, Dewberry, Inc.
Debbie Heiden, CFM, Co-Chair ASFPM Training Committee, Black & Veatch
Rhonda Montgomery, CFM, FEMA Mitigation Directorate Representative Headquarters
Ken Zwickl, CFM, Federal Interagency FPM Task Force Representative, USACE Chief's Office
Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2009 CBOR

Diane Calhoun, CFM, President/CBOR At-Large position, Michael Baker Corp.

Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District

Tom Morey, CFM, State Government Representative, Kansas Department of Agriculture

Warren Campbell, CFM, Academia Representative, Western Kentucky University

Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA

John Ivey, CFM, Co-Chair ASFPM Professional Development Committee, Halff Associates, Incorporated

Desiree Companion, CFM, ASFPM Chapters Representative, Sarasota County Environmental Services

George Riedel, CFM, ASFPM Deputy Executive Director

Cleighton Smith, CFM, Private Sector Representative, Dewberry, Inc.

Heidi Carlin, CFM, Co-Chair ASFPM Training Committee, Lower Colorado River Authority

Rhonda Montgomery, CFM, FEMA Mitigation Directorate Representative Headquarters

Ken Zwickl, CFM, Federal Interagency FPM Task Force Representative, USACE Chief's Office

Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2010 CBOR

Tom Morey, CFM, President/State Government Representative, Kansas Department of Agriculture

Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District

George Riedel, CFM, Secretary, ASFPM Deputy Executive Director

Diane Calhoun, CFM, Past President/CBOR At-Large position, Michael Baker Corp

Warren Campbell, CFM, Academia Representative, Western Kentucky University

Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA

John Ivey, CFM, Chair ASFPM Exam Work Group – Co-chair Professional Development Committee, Halff Associates, Inc.

Desiree Companion, CFM, ASFPM Chapters Representative, Sarasota County Environmental Services

Cleighton Smith, CFM, Private Sector Representative, Dewberry, Inc.

Heidi Carlin, CFM, Co-Chair ASFPM Training Committee, Lower Colorado River Authority

Rhonda Montgomery, CFM, FEMA Mitigation Directorate Representative Headquarters

Ken Zwickl, CFM, Federal Interagency FPM Task Force Representative, USACE Chief's Office

Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2011 – 2012 CBOR

Tom Morey, CFM, President, State Government Representative, Kansas Department of Agriculture

Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District

Warren Campbell, CFM, Academia Representative, Western Kentucky University

Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA

John Ivey, CFM, ASFPM Professional Development Committee Liasion, Halff Associates, Incorporated

Desiree Companion, CFM, ASFPM Chapters Representative, Sarasota County Environmental Services

Ingrid Danler, CFM, Secretary, ASFPM Deputy Executive Director

Michael DePue, CFM, Private Sector Representative, PBS&J

Heidi Carlin, CFM, Co-Chair ASFPM Training Committee, URS

Rhonda Montgomery, CFM, FEMA Mitigation Directorate Representative Headquarters

Jennifer Dunn, CFM, Silver Jackets Program Manager, USACE

Eugene Henry, CFM, CBOR At-Large position, Hillsboro County, FL

Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2013 – 2014 CBOR

Tom Morey, CFM, President, State Government Representative, Kansas Department of Agriculture

Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District

Warren Campbell, CFM, Academia Representative, Western Kentucky University

Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA
John Ivey, CFM, ASFPM Professional Development Committee Liaison, Halff Associates, Incorporated
Desiree Companion, CFM, ASFPM Chapters Representative, Sarasota County Environmental Services
Ingrid Danler, CFM, Secretary, ASFPM Deputy Executive Director
Lisa Jones, CFM, Private Sector Representative, Carolina Flood Sources, LLC
Heidi Carlin, CFM, Co-Chair ASFPM Training Committee, URS
Rhonda Montgomery, CFM, FEMA Representative Headquarters
Jennifer Dunn, CFM, Silver Jackets Program Manager, USACE
Eugene Henry, CFM, CBOR At-Large position, Hillsboro County, FL
Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2014 – 2015 CBOR

Mark Riebau, CFM, President, Former Director FEMA Region X Floodplain Management Division
Tom Morey, CFM, State Government Representative, Kansas Department of Agriculture
Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District
Warren Campbell, CFM, Academia Representative, Western Kentucky University
Tom Hirt, CFM, Emergency Management Institute (EMI) Representative, FEMA
John Ivey, CFM, ASFPM Professional Development Committee Liaison, Halff Associates, Incorporated
Desiree Companion, CFM, ASFPM Chapters Representative, Sarasota County Environmental Services
Ingrid Danler, CFM, Secretary, ASFPM Deputy Executive Director
Lisa Jones, CFM, Private Sector Representative, Carolina Flood Sources, LLC
Heidi Carlin, CFM, Co-Chair ASFPM Training Committee, URS
Dave Carlton, CFM, Liaison to NAI and NBF Committees, ISO-CRS Consultant
Rhonda Montgomery, CFM, FEMA Representative Headquarters
Jennifer Dunn, CFM, Silver Jackets Program Manager, USACE
Eugene Henry, CFM, CBOR At-Large position, Hillsboro County, FL
Anita Larson, Certification Program Coordinator, ASFPM Executive Office

2016-2017 CBOR

Mark Riebau, CFM, President, Former Director FEMA Region X Floodplain Management Division
Michael Parker, CFM, Vice-President/Local Government Representative, Santa Barbara County Flood Control District
Warren Campbell, CFM, Academia Representative, Western Kentucky University
Dave Carlton, CFM, Liaison to NAI and NBF Committees, ISO-CRS Consultant
Louie Greenwell, CFM, ASFPM Professional Development Committee Liaison, PRIME AE Group
Ingrid Wadsworth, CFM, Secretary, ASFPM Deputy Executive Director
Lisa Jones, CFM, Private Sector Representative, Carolina Flood Sources, LLC
Roger Lindsey, CFM, At-Large Member, Metro Nashville Water Services
Beth Norton, FEMA Representative, Headquarters
Jennifer Dunn, CFM, Silver Jackets Program Manager, USACE
Anita Larson, Certification Program Coordinator, ASFPM Executive Office
Jamie Prochno, CFM, State Regent, Colorado Water Conservation Board
Joe Fernandez, CFM, Chapter Regent, San Antonio River Authority

AWARDS:

THE JOHN IVEY AWARD FOR SUPERIOR EFFORTS IN CERTIFICATION

This award was established by the ASFPM Board of Directors in 2000 to recognize exceptional efforts to promote the professional certification of floodplain managers. Any individual, agency or organization is eligible.

Recipients of THE JOHN IVEY "AWARD FOR SUPERIOR EFFORTS IN CERTIFICATION"

Florida Floodplain Management Association (2015)
Dr. Warren Campbell (2014)
Diane Calhoun (2013)
Michael Parker (2012)
Texas Floodplain Management Association (2011)
New Jersey Association for Floodplain Management (2010)
Collis Brown (2009)
Jennifer Marcy (2008)
French Wetmore (2007)
Anita Larson (2006)
Bill Lesser (2005)
Tom Hirt (2005)
Arkansas Floodplain Managers Association (2004)
Grant Pinkerton (2003)
Dewberry & Davis (2002)
Oklahoma Floodplain Managers Association (2001)
John Ivey (2000)