



## CRS Report for Congress

# FEMA Flood Map Modernization Funding

Wayne A. Morrissey  
Information Research Specialist  
Knowledge Services Group

### Summary

For FY2009, President Bush requested \$151 million to finalize implementation of the Federal Emergency Management Agency (FEMA)'s Flood Map Modernization (Map Mod) Initiative (FMMI) and its ongoing Map Mod program. FEMA introduced the FMMI in September 1997 as a strategic plan to convert paper flood insurance rate maps (FIRMs) to digital electronic format, or DFIRMs. DFIRMs contain more accurate spatial measurements and digital data associated with flood hazards and are developed with an automated geographic information system (GIS) that also facilitates mandatory periodic updating of flood maps and helps to determine flood insurance risk. Published DFIRMs are available from FEMA over the Internet. In FY2000, Congress appropriated \$5 million for a FEMA Flood Map Modernization Fund (FMMF) and the administrative needs of the FMMI. FEMA Map Mod appropriations began in FY2003. Since FY2004, FEMA has been funded by Department of Homeland Security (DHS) appropriations. Congress also has approved supplemental spending authority for FMMI offset by flood map-related service fees. To date, FEMA has obligated \$1.18 billion for FMMI and associated Map Mod activities. This report will be updated as events warrant.

### The FY2009 Request for the Flood Map Modernization Program

Some in Congress have been concerned about FEMA's inability to perform timely five-year (digital) updates of flood maps for National Flood Insurance Program (NFIP) communities.<sup>1</sup> For FY2009, President Bush requested \$151 million to complete the Flood Map Modernization Initiative (FMMI) and fund the associated ongoing flood map modernization program, "Map Mod." Although the request is \$73 million less than the FY2008 appropriation (**Table 1**),<sup>2</sup> priorities for Map Mod in FY2009 include \$90 million to develop better maps of coastal flood hazards and flood hazards around flood protection structures (levees) and \$30 million to improve storm surge models, for more accurate

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<sup>1</sup> As required by §575 of P.L. 103-325, the 1994 National Flood Insurance Program Reform Act (NFIPRA).

<sup>2</sup> FEMA, *Flood Map Modernization Fund, Fiscal Year 2009, Congressional Budget Submission*, "Budget Request and Supporting Information, Appropriations Overview," pp. FEMA-FMMI-1–FEMA-FMMI-22, February 2008.

coastal flood maps. Also, FEMA would launch a multi-year effort (through 2012) to meet requirements for five-year updates of flood maps, taking into consideration geophysical changes that may have occurred and affected base flood elevations (BFE's) on existing flood maps.<sup>3</sup> FEMA officials indicate that the budget decrease for FY2009 can be misleading because henceforth costs of Map Mod would be leveraged to a greater degree with other federal agencies, state and local governments, and private stakeholders known as FEMA Cooperating Technical Partners (CTPs).<sup>4</sup>

## **FMMI Spending Authority and Funding: FY2000-FY2008**

Under the 1968 National Flood Insurance Program Act (1968 NFIPA),<sup>5</sup> Congress created a National Flood Insurance Fund (NFIF, 42 U.S.C., Ch. III § 4107) administered by the Flood Insurance Administration (FIA) of the Department of Housing and Urban Development (HUD). The FIA was responsible for preparing flood insurance rate maps (FIRMS) after assessing flood hazards and insurance risk. When President Jimmy Carter created FEMA with Reorganization Plan No. 4 of 1978, the flood map program and associated flood hazard studies (FHSs) continued under the NFIF, and resources were allocated after a presidentially declared flood disaster emergency. The NFIF also provided resources to produce preliminary flood hazard boundary maps (FHBMs) for unmapped communities in the post-flood disaster “emergency phase,” if the community chose to join the NFIP.<sup>6</sup> The 1968 NFIPA also authorized preemptive FHSs to evaluate potential flood hazard risk in unmapped communities. FEMA considered this an opportunity to increase NFIP membership and expand the pool of future NFIF resources.<sup>7</sup>

The Riegle Community Development and Regulatory Improvement Act of 1994 (P.L. 103-325) required that flood-prone NFIP communities be eligible to receive the fullest amount of federal flood insurance coverage needed. It authorized FEMA to extend assistance through a Flood Mitigation Assistance Grant Program (FMAGP)<sup>8</sup> for various cities, towns, villages, and Metropolitan Sewerage Districts that were potentially subject to flooding. FMAGP covers *non-emergency* FHSs and may be used for Map Mod needs.

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<sup>3</sup> FEMA, *Flood Map Modernization — Preparing for FY2009 and Beyond: Integrated Flood Data Update, Risk Assessment, and Mitigation Planning*, Draft Concept Paper, June 1, 2007.

<sup>4</sup> Ibid. See also FEMA, NFIP website, “CTP Frequently Asked Questions,” at [[http://www.fema.gov/plan/prevent/fhm/ctp\\_qa1.shtm](http://www.fema.gov/plan/prevent/fhm/ctp_qa1.shtm)].

<sup>5</sup> P.L. 90-448, 82 Stat. 670.

<sup>6</sup> Preliminary flood insurance rate maps are authorized by the 1968 NFIPA (42 U.S.C. § 1360(f)(2)). During this phase, property owners can purchase only limited amounts of federal flood insurance coverage. Then, FEMA conducts a Flood Hazard Study (FHS), updates a FHBM to reflect actual flood risks, and publishes a FIRM. When the process concludes, residents of NFIP communities are eligible to purchase full coverage. See FEMA, National Flood Insurance Program, *Flood Insurance Manual*, “Types of Flood Maps,” May 2005, p. MAP 1, I, A (updated July 2007, May 2008 edition, in press).

<sup>7</sup> 42 U.S.C. Chapter 50 - National Flood Insurance, Subchapter III, Sec. 4101(d). Plan for Bringing Communities with Flood-Risk Zones into Full Program Status.

<sup>8</sup> FMAGP was authorized by Section 1266 of NFIRA in 1994 (42 U.S.C. §§ 410c-4104d). National Flood Insurance Reform Act of 1994, Title V, Sections 553 and 554 (P.L. 103-325, 42 U.S.C. 5154a).

**Early Budget Authority for FMMI.** When Congress established the Flood Map Modernization Fund (FMMF) in FY2000, it became a source of spending authority for FMMI administrative needs through FY2002. During this time, demand began to grow for federal assistance on the part of communities to undertake *non-emergency*, preemptive flood map modernization activities (i.e., develop DFIRMs). **Table 1** shows annual spending authority from FY2000 to FY2002 for combined emergency and non-emergency flood map modernization activities. In FY2003, the FMMF became the primary source of funding for FMMI implementation and all Map Mod activities. Even so, the NFIF continued to be a resource for emergency flood map modernization needs.

**Table 1. FY2000-FY2002 FMMF Spending Authority**  
(\$ million)

Source	FY2000 <sup>a</sup>	FY2001 <sup>b</sup>	FY2002 <sup>c</sup>
Request	\$5.0	\$32.7	\$32.0
House	\$5.0	\$30.0	\$65.0
Senate	\$0.0	\$12.0	\$7.0
<b>Final<sup>d</sup></b>	<b>\$5.0</b>	<b>\$32.7</b>	<b>\$32.0</b>

**Source:** Request figures were compiled by CRS from FEMA’s annual budget justifications. Spending authorization figures are from House Appropriations Committee, Senate Appropriations Committee, and conference committee reports on annual VA, HUD, and Independent Agencies Appropriations for FY2000-FY2002.

- The FY2000 request does not include spending authority of \$58.5 million proposed from mortgage transaction fees which Congress did not approve.
- For FY2001, the President requested collections of \$104.0 million in Flood Policy Fees (FPFs). Instead, Congress authorized \$30 million in disaster funds, and \$2.7 million was carried over from FY2000 for FMMI administrative costs.
- For FY2002, \$25 million in emergency funding was transferred to the FMMF from the NFIF. Another \$7 million was authorized for FMMI from “flood service fees” that were anticipated to be collected for FY2001-FY2002, and which were approved by Congress.
- The final amount for FY2000 of \$5 million was a congressional appropriation to establish the FMMF.

**The President’s Requests for FMMI Appropriations.** In his FY2003 budget, President Bush requested \$300 million for FEMA for the FMMF, to implement the FMMI, and to fund the associated Map Mod program (**Table 2**).<sup>9</sup> The FY2003 request was the President’s last one to be transmitted to the House Department of Veterans’ Affairs, HUD, and Independent Agencies Appropriations Subcommittee on behalf of FEMA. Since FY2004, presidential requests for FMMI have been about \$200 million annually, and were funded under DHS appropriations. In FY2009, \$151 million was requested to continue Map Mod activities.

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<sup>9</sup> For FY2003, President Bush also requested \$50 million in spending authorized by the Stafford Act (42. U.S.C. 5121 et seq.) to conduct map modernization projects after declared flooding disasters.

**Table 2. President's Funding Requests and Appropriations for FMMF, Including the FMMI and Map Mod, FY2003-FY2009**  
(\$ millions)

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FMMI \$Total
Request	\$300.0	\$200.0	\$200.0	\$200.1	\$198.9	\$195.9	\$151.0	\$1,445.9
House	\$200.0	\$200.0	\$150.0	\$200.0	\$198.9	\$230.0	—	\$1,178.9
Senate	\$100.0	\$200.0	\$200.0	\$200.0	\$198.9	\$200.0	—	\$1,098.9
Conf.	\$150.0	\$200.0	\$200.0	\$200.0	\$198.9	\$215.0	—	\$1,163.9
<b>Enacted</b>	<b>\$149.0</b>	<b>\$198.8</b>	<b>\$199.8</b>	<b>\$206.8</b>	<b>\$202.1</b>	<b>\$223.9</b>	—	<b>\$1,180.4</b>

**Source:** Compiled by CRS from sources noted in **Table 1** and footnotes in text.

**Notes:** Congress authorized appropriations from FY2003-FY2008 for the FMMI. The FMMF funds more than just the FMMI. Enacted figures for FY2006, FY2007, and FY2008 are total FMMF funding that includes employee salaries and benefits and other administrative costs limited to no more than 3% of annual FMMF appropriations. These figures also reflect rescissions in FEMA's budget. Thus, FMMI/Map Mod funding for FY2006 was \$204.7 million, for FY2007 \$198.9 million, for FY2008 \$217.5 million and, for FY2009, \$144.4 million is requested for continuing Map Mod activities.

**The President's Budget for FMMI.** President Bush's FY2003 budget request proposed a five-year plan for the FMMI, as part of a government-wide initiative to implement cost-effective disaster prevention strategies. It stated that "inadequate funding hinders the [flood map] program," and that "... maps are needed to assist rebuilding after disasters and to steer future development away from floodplains."<sup>10</sup> It continued that "focusing flood reduction efforts on identifying the areas at risk for flooding and steering development away from those areas ... [is] a less-costly, long-term approach to [flood] mitigation,"<sup>11</sup> and that "... modernizing flood maps would be critical to that effort."<sup>12</sup> The FY2003 request also noted that many of the FEMA flood maps were "out-of-date and inaccurate."<sup>13</sup> The President had requested \$58.5 million in additional spending authority for FMMI that would be offset with a federal Flood Policy Fee (FPF) levied on mortgage lenders. The budget indicated that anticipated collections of FPFs for FY2004-FY2007 would provide the balance of funding needed to complete the FMMI by FY2008. Had Congress authorized FPFs, the President would have made an initial down payment of almost \$359 million, or 48% of estimated incremental costs for FMMI implementation.<sup>14</sup>

<sup>10</sup> Executive Office of the President, Office of Management and Budget, *Fiscal Year 2003, Budget of the U.S. Government*, "Federal Emergency Management Agency: Status Report on Selected Programs" (Washington, DC: GPO, 2002), pp. 315-318.

<sup>11</sup> *Fiscal Year 2003, Budget of the U.S. Government*, p. 316.

<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> *Fiscal Year 2003, Budget of the U.S. Government*, "Federal Emergency Management Agency: The President's Proposal," pp. 318-322. At the time, incremental costs for FMMI from FY2003 to 2007 were estimated to be \$750 million.

**FEMA's Transfer to the Department of Homeland Security.** On November 20, 2002, President Bush signed into law P.L. 107-296 which created the Department of Homeland Security (DHS).<sup>15</sup> In March 2003, FEMA was transferred to a new Emergency Preparedness and Response Directorate (EPRD) that reported directly to the Secretary of DHS. Meanwhile, FEMA's FY2003 budget was submitted to the House Appropriations Subcommittee on VA, HUD, and Independent Agencies. However, in the end, FEMA, FMMF, FMMI, and Map Mod activities were funded in the Consolidated Appropriations Resolution, 2003 (P.L. 108-7). For FY2004, FEMA's budget was submitted to the House Appropriations Subcommittee on DHS. The EPRD budget justification noted that FEMA would provide federal grant assistance to help allay some NFIP communities' concerns about their costs in developing DFIRMS.<sup>16</sup>

In 2005, when it appeared that FMMI implementation costs would exceed original estimates, Congress ordered the Inspector General (IG) of DHS to review FEMA's management of the FMMI and Map Mod.<sup>17</sup> The IG investigated whether the program was properly managed and whether funding for the nation's investment in Map Mod was obligated optimally.<sup>18</sup> The outcome of the departmental review was a *Multi-Year Identification Plan* for prioritizing Map Mod resources annually, according to degree of flood hazard risk, potential for loss of life and damage, and the greatest needs for meeting NFIP Map Mod requirements locally.<sup>19</sup> In FY2006, the President requested supplemental spending authority for the FMMI from flood map service fee collections for commercial uses of DFIRMS, professional licenses, and printed and CD-ROM-based DFIRMS, which Congress approved.<sup>20</sup> In FY2008, the DHS issued a stand-alone budget justification for FMMI noting that the FMMI was winding down.<sup>21</sup> Thus, the Administration requested a "last down payment" for FMMI of \$195.9, about \$7.6 million less than \$203.5 million appropriated for FY2007 (**Table 2**). The President noted that despite the funding reduction, his request would account for new goals and priorities set forth in FEMA's May 2006 FMMI *Mid-Course Adjustment (MCA)*, issued in response to Hurricane

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<sup>15</sup> 116 STAT. 2135.

<sup>16</sup> See U.S. Congress, House, *Making Appropriations for VA, HUD, and Independent Agencies, Fiscal Year 2000: Conference Report to Accompany H.R. 2684* (H.Rept. 106-379, October 13, 1999).

<sup>17</sup> DHS, Office of the Inspector General, Office of Information Technology, *Challenges in FEMA's Flood Map Modernization Program*, OIG-05-44, "Mapping Plans and Priorities," Washington, DC, September 2005, p. 5.

<sup>18</sup> Congress also requested the Government Accountability Office (GAO) to perform a similar reviews. See for example, General Accounting Office (GAO), *Flood Map Modernization: Program Strategy Shows Promise, but Challenges Remain*, GAO-04-417, March 2004.

<sup>19</sup> FEMA, NFIP, *Multi-Year Flood Hazard Identification Plan (MHIP)*, MHIP Version 2.5, April 2007, available at [[http://www.fema.gov/plan/prevent/fhm/dl\\_mhip.shtm#1](http://www.fema.gov/plan/prevent/fhm/dl_mhip.shtm#1)].

<sup>20</sup> A current schedule of fees is available at [<http://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=orderCost&title=Ordering%20and%20Cost#Prices>].

<sup>21</sup> Map Mod would then supplant the FMMI. See Department of Homeland Security, FEMA, *Flood Map Modernization Fund: Fiscal Year 2008, Congressional Justification*, February 2007.

Katrina.<sup>22</sup> As a major policy shift, the *MCA* noted that FEMA would forego the wholesale conversion of existing FIRMs to DFIRMs. Instead, it would (1) target federal resources to update flood maps where populations are most vulnerable to flood risk, and using Census block-based data, rather than county-wide flood maps; (2) ensure that standards for DFIRM accuracy apply to emergency FHBMs and FHSs in unmapped communities; and (3) tie flood risk analysis to length of “stream miles” (i.e., along riverbanks and U.S. coastal and Great Lake shores), thus focusing Map Mod resources where flood hazards are most likely occur. The President noted that if his FY2008 budget were approved, no additional funding for FMMI would be required.<sup>23</sup> The Map Mod program will continue into a “post-FMMI implementation phase,” when among its goals FEMA would develop a seamless national digital flood hazard database layer which it claims will be invaluable for future land-use and development planning, disaster mitigation planning, and homeland security.<sup>24</sup>

**Congressional Budget Action on FMMI.** For FY2003, Congress approved an appropriation of \$150 million for the FMMF and the associated FMMI/Map Mod program, half of what the President had requested (**Table 2**). Some lawmakers assert that this was a reasonable level of funding given a five-year funding commitment for the FMMI. Since FY2004 through FY2007, appropriations for FMMI have tracked Administration requests, except for a notable increase in FY2008 (**Table 2**). Conference report language in the Joint Explanatory Statement to accompany H.R. 2767, the Consolidated Appropriations Act, 2008 (Div. E, DHS) approved \$223.9 million for FMMF (**Table 2**) and authorized FEMA to collect supplemental financial resources from state and local governments. It also required on behalf of the Senate that FEMA address recommendations of a January 2007, National Academy of Sciences report, *Base Map Inputs for Floodplain Mapping*, about acquisition of geophysical data and imagery for flood risk assessment.<sup>25</sup>

The Map Mod program continues to be of interest to the 110<sup>th</sup> Congress. Flood map updates and revisions (FIRM-DFIRM), which are mandated by law, are coming due. Legislation in the House (H.R. 3121) and the related Senate (S. 2284) would implement various recommendations by FEMA and others to proceed with the Map Mod effort, including authorizing its funding through FY2013. Some Members are concerned about FEMA’s effectiveness in educating the public about how FMMI requirements may affect local communities and about FEMA’s lead time for notifying local authorities of an intent to initiate flood map revisions or updates.

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<sup>22</sup> For detailed estimates of the FY2008 request, see *Department of Homeland Security: FEMA Flood Map Modernization Fund: Funding Schedule*, Exhibit H, “PPA Budget Justifications [FEMA - FMMI - 13],” February 2006.

<sup>23</sup> Department of Homeland Security, FEMA, *Flood Map Modernization Mid-Course Adjustment*, March 30, 2006, pp. I-x, 1-38, and Appendices A, B.

<sup>24</sup> *Ibid.*

<sup>25</sup> See U.S. Congress, Senate, Committee on Appropriations, Department of Homeland Security Appropriations Bill, 2008 to Accompany S. 1644 (S.Rept. 110-84), June 18, 2007, pp. 105-106.