On-Going Projects

ASFPM – Flood Mapping for the Nation – The Association of State Floodplain Managers continues to use the cost estimates from this report to promote increased funding for flood hazard mapping. Completed in 2013, this internally funded project developed an estimate of the total cost to complete the floodplain mapping of the country based on the parameters specified in the Biggert-Waters Flood Insurance Reform Act of 2012 and ASFPM’s projection of what constitutes adequate flood mapping for the country. This estimate shows the initial cost to complete flood mapping for the nation ranges from $4.5 billion to $7.5 billion. These cost estimates are repeatedly being cited by members of Congress justifying the need for increased funding for flood hazard mapping.

NOAA Digital Coast Partnership – ASFPM continues to partner with NOAA’s Office for Coastal Management in development and expansion of its Digital Coast website to improve coastal community access to data and decision support tools for addressing coastal hazards. This project also enhances ASFPM partnerships - ASFPM is part of an 8 NGO partnership that includes The Nature Conservancy (TNC), the Coastal States Organization (CSO), the National Association of Counties (NACo), the National State Geographic Information Council (NSGIC), the Urban Land Institute (ULI), the National Estuarine Research Reserve Association (NERRA), and the American Planning Association (APA).

National Flood Barrier Testing & Certification Program – ASFPM in partnership with FM Approvals and the US Army Corps of Engineers National Nonstructural/Flood Proofing Committee (NFPC) are implementing a national program of testing and certifying flood barrier products used for flood proofing and flood fighting. This program currently tests barrier products in two broad categories, Temporary Flood Barriers and Closure Devices (http://nationalfloodbarrier.org/)

Floodplain Management Training (Mentoring) – ASFPM has developed a standard process to support State floodplain management programs in long-range strategic planning and annual work plan development. An official mentoring program website is being developed that will support automatic signup as a mentor or mentee along with access to relevant training materials, resources and publications.

L-273: Managing Floodplain Development through the NFIP – ASFPM has been funded by FEMA to manage the field deployment of this course. We have developed a cadre of instructors to support States interested in providing this training in their State.

Active Projects

NOAA Digital Coast Fellow – With funding from NOAA and the ASFM Foundation, ASFPM is partnering with the Coastal States Organization to integrate and update guides to help coastal communities, including ASFPM’s Coastal No Adverse Impact (CNAI) Handbook (2007) and the Foundation’s Holistic Coasts report (2013), and align them with the forward looking vision provided in the Federal Flood Risk Management Standard (FFRMS).

ASFPM Flood Science Center Library – Since 2010, ASFPM has been investing in its library. With over $50,000 in investment in the past six years, the ASFPM library has grown significantly. In addition to curating a physical collection, ASFPM has also invested into R&D for creating an online library using the cutting edge of library science. The ASFPM Foundation is providing resources for the creation of the ASFPM Library website interface as well as providing resources for creating a sustainable process and web content for donated collections of publications.
Building Coastal Resilience through Capital Improvements Planning – ASFPM is partnering with the American Planning Agency on a NOAA grant to identify mainstream techniques that increase community resiliency by incorporating information from extreme weather events, climate hazards, and changing ocean conditions into local or regional capital improvement plans.

Nature-Based Flood Risk Reduction Case Studies - The National Wildlife Federation (NWF) has funded ASFPM to assist in developing a set of climate change adaptation case studies to highlight ecological approaches to natural hazard risk reduction.

Naturally Resilient Communities - The Nature Conservancy (TNC) has funded ASFPM to help develop a siting guide and case studies for the mainstreaming of natural infrastructure to address coastal and riverine flooding.

Socioeconomic Assessment of Natural Infrastructure – The Argosy Foundation has funded ASFPM to conduct research and analysis focused on modeling the social and economic costs and benefits of green infrastructure for flood risk reduction in urban areas including the potential impacts resulting from future conditions and climate change.

CTP Support – FEMA has funded ASFPM to help support Cooperating Technical Partners. The project involves documenting best practices and providing training. In conjunction with this effort a Mapping & Engineering Standards subcommittee has been established that focuses on CTPs. Steve Story with Montana and Amanda Flegel with Illinois are co-chairs of this subcommittee.

Community Engagement for Higher Standards – For 20 years ASFPM has produced data on the status of floodplain management focused on state programs, authorities and activities. However, the knowledge of local floodplain management programs is limited and even then, viewed from a state perspective. FEMA has funded ASFPM to compile information focused on local floodplain management programs. The objective of this project is to survey, assess and make public, by way of a report and interactive web tool, the status of local floodplain management programs in the United States that can be periodically updated to establish long-term trend information.

Improving Coastal Resiliency Through Community Engagement – ASFPM is partnering with the Coastal States Organization on a National Fish & Wildlife Foundation Hurricane Sandy Coastal Resiliency Grant related to the CRS program. The overall goal of the project is to increase the number of communities making voluntary, effective measures to increase coastal resiliency by taking advantage of the window of opportunity that has been created by NFIP Reform legislation and the need for communities to take steps to make flood insurance affordable. It will do so by promoting CRS participation, providing guidance on activities that increase community’s rating, and working directly with communities to increase their resiliency through the CRS process.

Subdivision Design in Flood Hazard Areas – ASFPM has been invited to partner with the American Planning Association in a project funded by FEMA that will update APA’s 1997 publication, Subdivision Design in Flood Hazard Areas (PAS Report No. 473, 1997). A new PAS Report would be broadened from the strict subdivision approach used in the 1997 edition to include other land-use regulatory considerations affecting design in flood hazard areas, but also other innovations in coastal and floodplain zoning and regulation.

Planning Information Exchange – APA leads this FEMA-funded project with ASFPM playing a key partner role. The Planning Information Exchange will focus on all hazards and primarily on mitigation planning, but also its connections with recovery planning and preparedness.

Great Lakes Coastal Flood Study Outreach – FEMA is updating the Great Lakes Coastal Methodology and will be revising the FIRMs for the Great Lakes coastline. FEMA has funded ASFPM to assist with outreach and host a website associated with the project.

Great Lakes Coastal Resilience Planning Guide – Funded through the Great Lakes Restoration Initiative (GLRI) ASFPM and NOAA’s Office for Coastal Management (formerly Coastal Service Center) are leading the
Digital Coast Partnership in working with coastal communities on the Great Lakes to improve community resiliency through the comprehensive planning and management within coastal watersheds. This project has two major outcomes: 1) development of peer-reviewed case studies and process-driven solutions and strategies delivered through a web-based guide titled “Great Lakes Coastal Resilience Planning Guide” (greatlakesresilience.org); and 2) development of a long-term regional training and outreach strategy for the Great Lakes. Partners include the Digital Coast Partnership along with the University of Wisconsin – Sea Grant Institute.

**NAI How-To Guides** – In furtherance of ASFPM’s No Adverse Impact (NAI) ™ initiative, the Association is developing a series of No Adverse Impact (NAI) “How-To” Guides. Funded by the ASFPM Foundation, How-To” Guides are being developed for each of the Building Blocks in the No Adverse Impact: A Toolkit for Common Sense Floodplain Management and include: 1) Mitigation (completed in 2013); 2) Infrastructure (completed in 2013); 3) Planning (completed in 2015); 4) Education and Outreach (completed in 2015); 5) Hazard Identification and Mapping (under development); 6) Regulations and Development Standards (under development); and 7) Emergency Services (2016).

**Legal No Adverse Impact Workshops** – Funded through FEMA, ASFPM is currently in the planning stages for two (2) legal workshops. The first workshop is being planned for early August in Biloxi, Mississippi. ASFPM is working with Mississippi-Alabama Sea Grant and Rich Stickler, Biloxi’s Floodplain Manager. Both workshops will see to provide Legal CEC’s helping work toward key objectives of these workshops and continuing the discussion on topics such as Takings, High Regulatory Standards, Protecting Property Rights for All, NAI, and recent court filings.

**Bluff Stability and Erosion Analysis** – Wisconsin Coastal Management Program has funded ASFPM and Emeritus Professor David Mickelson – UW Madison for a 2nd year to conduct a bluff stability analysis. FEMA’s Great Lakes Costal Flood Study is developing new models and maps on the Lake Michigan shoreline in order to better define the extent of potential coastal flooding. Their study will not in any detail consider the other major hazard along the shoreline – bluff erosion and retreat. This study will complement the FEMA study and provide a predictive ability of the bluff shorelines, especially those most prone to erosion.

**Floodplain Conservation as a Flood Mitigation Strategy: Examining Costs and Benefits** – ASFPM was invited by Resources for the Future to consult on this study that will evaluate how local governments can utilize floodplain conservation as a flood damage reduction strategy. This study is evaluating one such investment for a greenway along the Meramec River in St. Louis County, Missouri.

**Projects – Proposals (funding not yet available)**

ASFPM has submitted the following proposal for funding:

- National Flood Mitigation & Floodproofing Workshop
- Survey mapping open house participants and collect information as to what flood insurance inquiries or concerns they receive.
- Update the State Floodplain Management Programs in 2010 document to reflect the current status of state floodplain management programs.
- Assessment of the consistency of insurance policy rating
- Assessment of the impact of digitized FIRMs on home owners required to purchase flood insurance.
- Survey floodplain management professionals on flood insurance mapping, outreach, and response experiences
- Update of ASFPM’s 1996 “Addressing Your Community’s Flood Problem, Elected Officials Guide”
- K12 Education for Floodplain Management Gap Assessment
- Population at Risk – Mapping the Natural Floodplain and Associated Demographic Characteristics

**Completed Projects**
Legal No Adverse Impact Workshops – Funded through FEMA and supported by the NOAA Coastal Storms Program in the Great Lakes, ASFPM participated in and coordinated two (2) legal workshops in partnership with Illinois-Indiana Sea Grant. The workshops were held in Hammond, IN – June 25, 2016 and Chicago, IL – July 8th, 2015. Both workshops provided Legal CEC’s helping work toward key objectives of these workshops and continuing the discussion on topics such as Takings, High Regulatory Standards, Protecting Property Rights for All, NAI, and recent court filings. **Completed – June/July 2015**

Ecosystems Services in Flood Risk Assessment – ASFPM worked with Earth Economics in a McKnight Foundation funded effort that focused on ways to incorporate floodplain natural and beneficial functions in FEMA Risk MAP activities. The project involved promoting natural capital projects as part of the inventory of mitigation actions and tested the inclusion of ecosystems values in the FEMA cost benefit analysis. **Completed – January 2015**


NOAA Coastal Fellowship Program – ASFPM together with The Nature Conservancy received funding for a 2-year Coastal Fellow position. For the ASFPM component of the project, a framework was developed to guide county planners and conservationists through the process of prioritizing locations for potential multi-beneficial wetland restoration to capture and control non-point pollution loads from agricultural landscapes. Her work can be found on the Great Lakes Coastal Resilience Planning Guide (greatlakesresilience.org) in the case study “Prioritizing Locations for Potential Wetland Restoration. For The Nature Conservancy she focused on spatial analysis that illustrates flooding impacts and risk reduction solutions in specific Puget Sound floodplains. **Completed – September 2014**

FEMA Risk MAP Support – High-water marks and flood inundation maps are useful for calibrating floodplain engineering models used to generate flood hazard mapping. One of the limitations associated with HWMs and historic flood inundation maps is that the frequency of the associated events is unknown. This project documented ways to establish flood frequencies associated with floods in which HWMs have been established. **Completed – 2014**

FEMA Dam Risk Reduction Strategy – State and local floodplain managers (ASFPM members and others) need to better understand how dams affect floodplains and floodplain management. This project involved an analysis of the relationship of dams to the floodplain and includes recommendations on how to start integrating dams into floodplain management. **Completed – July 2013**

ASFPM - The Floodway Encroachment Standard: Minimizing Cumulative Adverse Impact – This report reviews the origin, use and establishment of regulatory floodways and provides an assessment of the impact of encroachments based upon allowing a one foot increase in flood elevations during the regulatory flood. The assessment evaluated impact on: the physical characteristics of the floodway (floodway width, water velocity and area inundated), damages to development in the floodplain and floodplain natural resources. **Completed – June 2013**

FEMA EMI HAZUS/GIS Course for Floodplain Managers (E176) – ASFPM in conjunction with the POLIS Center in Indianapolis, IN assisted FEMA in the development of an EMI approved training course - HAZUS and GIS applications for Floodplain Managers. The course is intended to meet the training needs of floodplain managers related to the use of HAZUS and GIS in flood risk reduction. As of this report the course continues and is available through EMI, the POLIS Center and other locations. **Completed – April 2012**