
America's Waterway



The River's Ready for Civic Engagement. Are You?
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The rules for gaining public support for an idea, cause or product have changed dramatically. Just ask chief marketing officers for Fortune 500 companies, candidates for public office and non-profit directors. These changes have important implications for integrated approaches to watersheds, especially big ones like the Mississippi River.

We all know we increasingly rely on our iPhones and iPads for communication and for entertainment. But the world of collaboration software is expanding rapidly, too, and it's making a difference to international business as well as urban planning, transportation scheduling and economic development. Not surprisingly, technology development is coinciding with dramatic changes in expectations for decision making. Those expectations are being addressed in software for collaboration, deliberation and creative problem solving to address large scale and complex issues. It's an opportune moment to pull these developments together for a vision and inclusive stakeholder collaboration for the future of the Mississippi River watershed.

First, the increasing use of technology – not just social networking – to problem solve, to collaborate across large geographic tracts and to integrate widely disparate and complex areas of expertise makes integrating disciplines and geographic sectors possible. The economies of technology for collaboration are increasingly attractive, too, especially in an era of low budgets and complex issues. Some examples of well-known software include Huddle, Microsoft SharePoint, Scribe and Do.com. Many lesser known software tools are emerging rapidly to address more specific collaboration needs. And, of course, the rapid rise in phone app use adds to this trend.

Second, expectations for public decision making are changing. Some of this may be due to technology driving public awareness. Or perhaps it's due to, as Tom Friedman says, the world becoming increasingly flat. Regardless, people expect their communities, corporations and, even their churches, to be more transparent, inclusive and responsive to their needs. They expect schools and teachers to inform them and include their input into curriculum, sports and social events. People working in corporations expect to work in teams to decide product design and, even pricing, not just be told to execute the plan. And, yes, this trend is being seen throughout the world where decades-long dictators are being overthrown – or threatened – through accessible, public on-line organizing.

Third, apply what we know from research about people's willingness to commit and act on behalf of an idea or a cause if they engage in deliberative decision-making. Xavier de Souza Briggs, MIT, in his book Democracy as Problem Solving, explains that collective, democratic decision-making has the ability to go beyond understanding issues to building constituency and the capacity of that constituency to make necessary change happen.(1) He differentiates traditional concepts of democracy that pertain to whom we elect and how we steer government from democracy today that's more focused on a collective search for better and less self-interest-driven bargaining. A number of organizations now exist creating standards and putting these practices into play: National Coalition for Dialogue and Deliberation www.ncdd.org and the International Association of Public Participation www.iap2usa.org are two of the leaders.

(1)Xavier de Souza Briggs, Democracy as Problem Solving,(Cambridge, MA: MIT Press, 2008) p. 5.

Enter technology- aided deliberative democracy as a 21st century approach to reaching a shared vision and an integrated river management system for the Mississippi River watershed.

What we've had since the early 20th century is a Mississippi River management plan based on the knowledge and technical expertise of that era. It was also based on an early 20th century America – less urban and more rural, less agricultural, and less densely populated. Then the plan morphed according to the needs of specific interests at specific river locations. As time went on and the science of water quality developed, fish and wildlife expertise developed, economies of different regions developed, more variations were added. That's why today we have a hodge-podge and multitude of governing authorities each with differing objectives and measurements for success.

What is needed today is a way to integrate all of the knowledge and science, public and private interests, economic and social concerns for the river to form an integrated and sustainable river system. The technology and new deliberative decision-making processes allow us to include the myriad of Mississippi River stakeholders on a scale and at a level of complexity that matches America's great watershed. And, they provide us with a way to meet the World Wildlife Fund's criteria for Integrated River Basin Management (2):

- A long-term vision for the river basin, agreed to by all the major stakeholders
- Integration of policies, decisions and costs across sectoral interests such as industry, agriculture, urban development, navigation, fisheries management and conservation, including poverty reduction strategies
- Strategic decision-making at the river basin scale to guide action at sub-basin and local levels
- Effective timing, taking advantage of opportunities as they arise while within a strategic framework
- Active participation by all relevant stakeholders in well-informed and transparent planning and decision making
- Adequate investment by governments, the private sector, and civil society organizations in capacity for river basin planning and participation processes
- A solid foundation of knowledge of the river basin and the natural and socio-economic forces that influence it

The social and technological tools already exist for a 21st century planning process for a unified vision and management plan for the Mississippi River. It goes beyond calling meetings, launching one-way communications campaigns, and only addressing the usual suspects. As stakeholders in the Mississippi River, we need only look outside our traditions and professional perspectives and test some of the new tools and processes. We also need to open the process to ALL stakeholders and adhere to the 7 Core Principles of Public Engagement <http://tiny.cc/dvvtiw> to ensure trust and effectiveness. It's an enormous watershed system and America's great waterway, but we have what is needed to address it in an integrated, sustainable and unified way.

(2,)Abell,R., M.Thieme, E.Dinerstein, and D.Olson. 2002. *A Sourcebook for Conducting Biological Assessments and Developing Biodiversity Visions for Ecoregion Conservation. Volume II: Freshwater Ecoregions.* World Wildlife Fund, Washington, DC, USA.

*America's Waterway is a nonprofit organization committed to building a unified Mississippi River vision and plan for the future using internet-based strategies and deliberative dialogue to achieve civic and stakeholder engagement on the River's behalf. More information is at www.americaswaterway.org.

In this paper, we recommend helping urban young people understand the breadth of good careers in hands-on, outdoor conservation work and we describe the strategic underpinnings, operational practices and overall achievements of a successful national education program addressing rivers and watersheds.

Introduction

Young people—particularly urban kids—don’t know that there are good career opportunities in hands-on, outdoor conservation work.

It’s not their fault.

The conservation community has done a poor job of telling their career story. In this they are not alone. The inland river freight industry faces a similar challenge, as well as that of generally poor recognition and understanding of the role navigable rivers play in the economic life of the nation. In parallel, the river industries only enjoy policy support among officials whose jurisdictions border navigable river systems.

In order to overcome the challenges of slow recruiting and poor recognition, the river industry created a youth-oriented career awareness program, Who Works the Rivers™ (WWR), and a broadly-focused public and policy-maker education program, RiverWorks Discovery™ (RWD). They aim at middle and high schoolers and at seven to 12-year-olds, respectively.

Conservation practitioners wishing to create a conservation career awareness program can use the strategic underpinnings of WWR and RWD in order to speed development and implementation.

Thinking about Career Awareness

Practitioners should be the most effective advocates for recruiting others to the target career fields. Organizing awareness efforts is another matter. An effective awareness program that makes good use of scarce development and execution resources will provide the practitioner with a Strategic Education Framework[®]:

- A. Education Asset Development
- B. Stakeholder Involvement
- C. Effective Messaging
- D. Infrastructure Management

Policy professionals in the barge freight industry created RiverWorks Discovery, an education program for kids plus their parents and grandparents—the voters. The development team recruited a network of corporate co-sponsors who wanted help in targeted states and districts. Using a unique push strategy and supporting infrastructure, the co-sponsors delivered the programming and sent a persuasive message of support to federal authorities. In many communities, RWD is now the public face of the industry, showing policy makers and their constituents—kids and families—the importance of the industry in American life (www.RiverWorksDiscovery.org). RWDs career awareness brand extension, Who Works the Rivers, helps young people understand that there are good careers in the barge industry.

Channel Design Group supports a parallel effort focusing on creating a unified, national career awareness program for outdoor, hands-on work in the conservation field. This effort should focus particular attention on urban youth who are unlikely to have role models in the conservation field. It should also have major elements for and focus on kids who are not college-bound. The field knows how to attract college grads.

Story of a Successful National Program

The intellectual and operational underpinnings of WWR and RWD are Strategic Education Frameworks, described earlier in *Thinking About Career Awareness*. Our company, Channel Design Group, codified the Strategic Education Framework long after RWD grew to national prominence. In the following sections, we explain the four elements of the Framework implemented within WWR and RWD.

A Education Asset Development: AEP River Operations' team, led by a current principal at Channel Design Group, created and funded RWD and its core, standards-based, national education curriculum. This program offers tasks and lessons that support critical STEM plus creative arts education.

We intended to identify one or more sources of existing education materials for river freight and watershed conservation, adapt them for our use, and begin working with the public. After an extensive literature review by curriculum professionals, we determined that the existing materials were too localized, were orphaned by their creators or were otherwise unsuitable. Our education professionals advised the RiverOps PR group to start afresh. We took the experts' advice.

Our team of over a dozen educators, curriculum writers, an illustrator and a graphic artist developed:

- Brand liveries and promise for RWD, and later WWR, that were separate and distinct from that of the freight carrier;
- Casts of mascots and other personalities to serve as our spokes-critters;
- Graphic standards consisting of caricatures, typography and text voice;
- Substantial inventories of lessons, activities, logbooks, sets, computer programs, models and more.

Lessons Learned: Use existing educational materials if they are available and appropriate. Don't fear creating new assets if the existing ones aren't right for the job.

Conservation practitioners may find their sector has better, more current educational assets available for use and adaptation.

Yet as Channel Design Group performed due diligence for our nascent conservation career awareness program, we only found:

- Materials for helping kids understand conservation issues and practice stewardship;
- Vocation or career training for young adults; and
- College programs.

We have not found comprehensive career awareness programs targeting non-college-bound kids at the ages at which they form career preference, which research shows to be middle school and high school.

B Stakeholder Involvement: RiverOps' public relations group initially taught the RWD curriculum at public events. These included community festivals and student outdoor-education days. The team then recruited and trained other barge industry stakeholders as the events grew larger and further afield. These corporate co-sponsors focused on advocating within their own communities and markets. The co-sponsor program has nearly 70 corporations now, nationwide, and growing.

Their RWD labor force generally is active employees and retirees. Some co-sponsors want to support the program but need outside program delivery experts. We identified teachers (retired, unemployed, under-employed, substitutes) to fill those requirements. Several co-sponsors contributed funds to their local children's or nature museums in order for those community institutions to offer the curriculum. This arrangement serves the parties well in places as diverse as Paducah and Chicago.

The RWD team recruited agency and non-profit partners. The support offered them is similar to that offered to the corporate co-sponsors. In some cases, corporate co-sponsors provide services directly to the non-profits partners. These services include buying printing, paying shipping of program assets, and other support. For example, the Port of Pittsburgh, which gets tax revenue from the surrounding seven counties, grants education funds to a neighboring, community-supported partner, RiverQuest, for delivery of RWD and WWR programming in their shared region.

The recreation and vessel groups within the Corps of Engineers are partners. The recreation team supported RWD's participation in a recent Boy Scout national jamboree in Virginia. The RWD lock and dam model asset was deployed in the Corps tour muster area. The asset served as a focal point for groups of scouts. The other tour visitor stations highlighted the Corps mission areas such as flood control, water quality, recreation and the rest. We created WWR in consultation with the vessel team because they have the same career awareness challenges as commercial navigation companies.

C Effective Messaging: While it subsequently branched into other areas, we created RWD to explain to the public the Corps navigation mission. We did that by studying the policy situation at the time of RWD's creation and developed messages that built on strengths and mitigated weaknesses.

Our team took feedback from public events (comprehension or confusion, age-appropriateness or missed opportunities, and so on), from our early partners and co-sponsors, and from others. We also took feedback from policy-makers and our industry's executives on how they envisioned building on our momentum.

We also determined to make RWD an outdoors program, what environmental educators characterize as a *meaningful watershed experience*. We had early encouragement to create a destination website with interactive games and activities. Instead, we went with "kids outside with muddy feet and wet hands." Eventually we did create indoor assets to meet particular opportunities, including an asset in the waiting room of a children's hospital.

Lessons Learned: The Strategic Education Framework guides education curriculum and asset creation, involves stakeholders to achieve scale, crafts messages, and provides logistics and infrastructure that pushes the program and that supports stakeholders.

D Infrastructure Management: The RWD team established a logistics office to coordinate efforts. The office employs an essential push strategy, operates flexibly and is a major convenience to the co-sponsors, partners and other stakeholders:

- Identifies high-impact events and coordinates all event details including registration, logistics, materials and presentations.
- Establishes budgets and recommends growth opportunities.
- Trains co-sponsor and partner staff.
- Supplies print-ready files, festival displays including banners, sponsorship pennants and supplies for hands-on activities, portable models and large-scale puzzles for larger events, plus coordinates the shipping, storage and maintenance of these assets.
- Hires, trains and manages contract workers.
- Adds co-sponsor and partner names and logos to materials, assets, the website and so on.
- Shares public feedback.

At this time, dozens of industry co-sponsors and non-profit/agency partners participate in RWD. As a group, they spend over \$360,000 annually in their own regions delivering RWD programming to their

communities. The RWD audience is roughly 500,000 kids and families. We've shared our story with dozens of federal and state political, policy and regulatory leaders.

Conservation Career Awareness

In this section, Channel Design Group summarizes the steps conservation practitioners may take to build a nationally-scalable career awareness program. Before you start, create the team and budget to push the agenda and materials out to potential stakeholders. Don't wait for them to come to you—that wastes time, energy and money. A push strategy for the conservation sector would entail:

- Actively marketing the program to agencies and to non-profits.
- Identifying public activities and events in which to participate and recruiting stakeholders to do so.

Lessons Learned: The vast majority of advocacy education materials are on stakeholders' shelves. To actually impact public opinion and create awareness, the advocates need scale and support so the ideas and materials get in the minds and hands of the public.

Conservation practitioners should be the most effective advocates for recruiting others to the target career fields.

Organizing awareness efforts is another matter. As creators of the leading commerce, culture and conservation awareness program for our nation's great rivers and watersheds, we recommend:

1. Evaluate education materials that the sector has developed. Your job is to identify enough quality assets to launch an authoritative awareness program. This helps you lower the costs of the program because you won't reinvent the wheel.
2. Create new materials where necessary.
3. Unify all suitable materials into one brand livery. The original developers of the materials may have the capacity to do this work, another means of lowering the costs to launch the effort.
4. Establish a central Framework logistics office that helps sponsors schedule events, train presenters, coordinate shipping of program elements, evaluate successes and mitigate challenges, and related logistical tasks. This office right-sizes over time to meet your service expectations.
5. Create an appeal to conservation agencies and non-profits to join the effort and present the program in their own communities.
6. Schedule presentations at national or regional events, and at various organizational levels, aimed at recruiting stakeholders to become sponsors.
7. Establish and test the message to youth audiences. Revise and retest, as necessary.

Channel Design Group thinks that by taking these steps conservation practitioners can create a national career-awareness program that leverages existing resources without adding recruiting or PR headcount; enlarges stakeholder commitment to your shared agenda; provides a valuable asset to members in their quest to be persuasive community partners; lowers costs of providing education and outreach, and meets other awareness goals.

Channel Design Group develops education, advocacy and business expansion programs in the USA and overseas from offices in Washington, DC, St Louis and New Orleans. Our team codified the Strategic Education Framework. We are actively applying for grants to seed an urban youth-oriented, hands-on, outdoor career awareness program for federal, state and local natural resource agencies and for land management-focused non-profits.



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Operation Watershed Recovery/ Regional Flood Risk Management Communication Plan

PURPOSE

The plan provides a structure and guidance to discuss internally and with partners, stakeholders, and the public the damages caused by the 2011 monumental flooding of the Mississippi River Valley, and the associated risks to the watershed. By carefully orchestrating notifications to the media and key interests regarding the status and outlook of flood damages, USACE can facilitate public safety and raise awareness of the elements, operational characteristics, and contributions of the MR&T Project to the region and nation. This internal document will serve as a guide and reference for the regional communication of various components of Operation Watershed – Recovery. Those components include (1) Damage Assessments, (2) Flood Preparedness, (3) Repair/Restore Construction, (4) Interagency Recovery Task Force, and (5) Evaluate and Inform. Key messaging will focus on current (a) damages and vulnerabilities, (b) reliability of MR&T, (c) near-term reduction of risk and the (d) shared responsibility of flood response, mitigation and risk reduction. Although USACE has positive messages to share about the MR&T system’s accomplishments and joint preparedness, all involved in communication with our public must always convey compassion and sensitivity to those that suffered significant economic hardship and loss from this event. Effectively communicating the coordinated flood recovery efforts among the federal, local and state governments will hopefully reduce public anxiety and promote confidence in the dedicated and purposeful approach we are taking with our many partners to reestablish the full integrity of their flood control and navigation systems.

There are three major parts to this Communication Plan: (1) Introduction, which includes principles of open and transparent communication, goals and objectives, background, audience and timeline, (2) Communication Strategy which identifies tools, methods, resources and protocols for communicating OW-R information methodology and (3) Key Messaging which includes important facts/figures, talking points and “bridging messages”.

PART I: INTRODUCTION

During this historic flood event, the MR&T system has been operating as it was designed, and the existing water control plan has worked to protect the lives and livelihoods of millions of people. Due to the successful operation of the Mississippi River & Tributaries project, flood damages prevented are currently estimated at more than 110 billion dollars. Without the proper operation of the MR&T system, more lives and property would have been put at risk. Without repairing this system before the next high water event, it may not be able to prevent the tens of billions of dollars in damages as it’s doing right now. As is, another record flood in this system might cause a natural and economic disaster.

PRINCIPLES OF OPEN AND TRANSPARENT COMMUNICATION:

- a. Empathetic to impacts
- b. Consistent regionally, locally tailored and delivered
- c. Focus on life safety, risk, actions, and path forward (shared solutions)
- d. Focus on effective discussion/communication of damages and associated risks

GOALS & OBJECTIVES:

- Start the discussion with sponsors, stakeholders and the public about risks associated with the system and the shared responsibility for risk management;

- Improve understanding of risk;
- Drive action to mitigate or reduce risk;
- Build the foundation for a shared responsibility approach to planning non-routine risk reduction measures

BACKGROUND

The Mississippi River and Tributaries Project is the nation's first comprehensive flood control and navigation system. The Mississippi and Atchafalaya river levees are the backbone of this system. The Mississippi River levees are designed to protect the alluvial valley against the project flood by confining flow to the leveed channel, except where it enters the natural backwater areas or is diverted purposely into the floodway areas.

The main stem levee system, comprised of levees, floodwalls, and various control structures, is 2,203 miles long. Some 1,607 miles lie along the Mississippi River itself and 596 miles lie along the south banks of the Arkansas and Red rivers and in the Atchafalaya Basin. The levees are constructed by the federal government and are maintained by local interests, except for government assistance as necessary during major floods. Periodic inspections of maintenance are made by personnel from the U.S. Army Corps of Engineers and from local levee and drainage districts as it is essential that the levees be maintained in good condition for their proper functioning in the flood control plan.

The 2011 Mississippi River Flood was among the largest recorded along the waterway and the MR&T system performed remarkably well under tremendous and prolonged pressure from this historic event, it is the Flood of Record for most gauges between Cape Girardeau, MO and the Gulf of Mexico. The 2011 flood fight is the first time the total watershed system was required to be operated in a synchronized manner to manage the highest level of water it has ever seen, it is important to point out that this event was just shy of the Project Design Flood.

Each MVD district performed **Damage Assessments** by deploying multidisciplinary teams to inspect, investigate and record damages or impairments to MR&T, O&M and PL84-99 project areas. These teams prepared standard documentation, known as Damage Assessment Reports (DARs), designed to characterize the location, nature, extent, repair alternatives and preliminary repair cost estimates for these project areas. All documented damages underwent a detailed prioritization process that classified each item and ranked them in order based on risk and consequences to human life and safety, as well as economic impacts.

With the damaged condition of levees and other flood damage reduction structures and the seasonal spring floods in mind, the Corps created a Regional **2012 Flood Season Preparedness** Team in order to mitigate flood risks to an already vulnerable system. The team is focusing on: 1.) Risk identification – what are the risks? 2.) Risk mitigation – how are risks being addressed, and 3.) Communication - how are we communicating the information to our partners and stakeholders? The risk communication processes and tools will be improved to better inform and prepare the public. From recent events, websites have been created to share up-to-date information including inundation maps, press releases, and communication pamphlets. A regional workshop was scheduled in mid-February to enhance regional coordination efforts with multiple Federal and state agencies, district emergency managers, and stakeholders. The use of social media during the 2011 flood was vital to sharing the message. Regional communication plans will be developed. This regional effort will set precedence for future flood preparedness in years out. After the seasonal floods, the teams will reconvene to discuss an after action review to continue to improve upon our risk identification, risk mitigation, and communication of those risks.

The **MR&T Post Flood Report** effort will investigate and document the performance of the MR&T system and how the entire Mississippi River Watershed was managed as a system during the historic Mississippi River Basin Flood Event that extended from March through June 2011. The purpose of this evaluation would be to (1) assess MR&T system performance, (2) identify and prioritize recapitalization requirements for system components necessary to reset the MR&T system for future events, and (3) assess effectiveness or areas of improvement for water control communication and coordination across the watershed. The resulting document should be a valuable resource for system management, operation and improvements. It will also serve as a reference guide for future flood risk management.

The establishment of the **Interagency Recovery Task Force (IRTF)** created a mutual and holistic method of rehabilitating our flood risk management systems damaged by recent flood events, by collaborating and combining solutions for short and long-term restoration efforts. The Task Force consists of leads from 7 states and 9 agencies with appointed members involved in the assessment, documentation, and repair of flood risk management, flood plain management and watershed management systems.

USACE is a learning organization and a lot has been learned from this flood season, particularly in the areas most damaged by the flood. That knowledge is being applied to our recovery efforts to ensure full restoration of the flood risk management and navigation systems. Effective flood risk management requires the integration of mitigation planning, preparedness, response, and recovery programs and activities into a coordinated flood risk management "life-cycle" framework. The conceptual framework for implementing the flood risk management program is focused on ensuring our programs and authorities and those of our federal, state, local, and tribal partners are coordinated and synchronized so that our combined actions achieve effective management of the flood risk. USACE is a key contributor in "driving down" the Nation's flood risks through its programs to 1) plan structural and nonstructural projects to manage flood risks, 2) inspect the condition of existing flood risk management infrastructure, 3) provide technical and planning support to states and communities, 4) conduct emergency measures to alleviate flooding consequences, and 5) rehabilitate levees and other flood risk management infrastructure damaged by flooding. However, responsibility of managing the Nation's flood risks does not lie exclusively with USACE or any other single Federal or non-Federal entity. Rather, responsibility is shared across multiple Federal, State, and local government agencies, with a complex set of programs and authorities, and private citizen choices/actions.

PARTNERS, STAKEHOLDERS, AND CRITICAL AUDIENCE:

Partners

- Internal Corps – Corps Leadership, FRM, Silver Jacket Leads, LSO, PAO, PM, EC, OPS, and anyone involved in communication with sponsor
- Other Federal agencies such as Department of Homeland Security
 - FEMA
 - USGS
 - NWS
- IRTF, Sponsors, state partners, levee maintaining agencies
- Community leaders

Stakeholders

- The Administration
- Congress and its respective staff members
- State and Local government officials

Critical Audiences

- Local citizens
- General U.S. public
- Business and industry
- Influencers such as think tank personnel and media commentators, editorial boards

TIMELINE:

Time	Events	Outcome
<i>During the Flood: Late April to mid-June 2011</i>	<ul style="list-style-type: none"> • Increase awareness to Commanders • Daily teleconferences with Fusion Team • Develop Operation Stages: Recovery • Stand up Facebook pages • Stand up IRTF • Press releases 	<ul style="list-style-type: none"> • Keeps consistent message • Assisted in next steps • Updated damages and path ahead • Allowed Corps to hear and address concerns quickly • Builds strong relationships toward the mission • More than 70 from lower 3 Districts
<i>Flood Waters Receding: June to October 2011</i>	<ul style="list-style-type: none"> • Commanders calls 2x week • Weekly Press Releases • Updates to IRTF • MR&T Stories in Our Mississippi newsletter • Low Water Inspection – Public Meeting • Public Meetings held in LA, MS, and IL 	<ul style="list-style-type: none"> • Continue the message and path forward • Updates the public – 14 for OW-R • Keep partners involved in the process • Informed the whole watershed of the damages • Corps learns concerns • Great feedback on Corps communication efforts – AAR from the public
<i>After Flood: October to Current</i>	<ul style="list-style-type: none"> • Continue Weekly Reports • Developed Communication Products for Flood Season Preparedness 	<ul style="list-style-type: none"> • Informed Division of OW-R status • Provides valuable risk communication and overall RFRM info

Public meetings were held in: Baton Rouge, LA, 7 Sep 11, Jackson, MS, 8 Sep 11, Cape Girardeau, IL, 27 Sep 11. From the meetings, the Corps gained valuable information on communication efforts during the flood events. Recommendations have been suggested and the Corps is working to accommodate the requests, the greatest being the need to share inundation maps. The Corps is working diligently with Headquarters USACE to standardized and publicly post the maps. In depth details for the recommendations and solutions can be found in the MR&T Post Flood Report.

PART II: COMMUNICATION STRATEGY

The Regional Communication Strategy will serve as a framework and guidance for both the internal and external transfer of OW-R information via CorpsMap, fact sheets, talking points, presentations, press releases, social media, and website. It will also highlight some of the key participants and groups with whom regular

communication is required (e.g. stakeholders, levee districts, congressional, Interagency Recovery Task Force (IRTF), State emergency managers...etc). It is important that this shared responsibility be well coordinated and controlled to ensure our communications are responsive, purposeful, and consistent. Research from past hurricane and flood disasters in 2008-2009 taught USACE to better communicate safety information, flood risk management strategies, and recovery assistance to the public. Based on those lessons learned, the goal is to proactively connect stakeholders and the public with fact-based and timely information, and reaching a diverse target audience: partners, stakeholders, agencies, businesses, local communities. Natural disasters can't be specifically planned for, however, communication tools can be put in place that will continue to be updated and serve the most recent information.

ACTION I - PREPARATION: Begin immediately to ramp up discussions on the flood activities and build on district relationships with sponsors and partners. Keep communication tools updated.

Communication Tools:

1. CorpsMap, the USACE nationwide GIS application, is the single authoritative source for geospatial data assets. Up until recent months CorpsMap was an exclusive internal Corps system. Our regional GIS cadre has worked with both our regional OW-R management team and the national GIS team to establish one of the first External CorpsMap sites, http://geo.usace.army.mil/egis/cm2.cm26.map?map=MVD_OWS with many capabilities specific to our needs for OW-R and current/future Regional Flood Risk Management. For OW-R, CorpsMap has been used to communicate information about the critical damage sites in the Mississippi River Valley. The tool allows our customers to view the damages on a map, zoom in for location and item details (dredging, levee, channel improvement, or structure items), and query to obtain information papers and fact sheets on each site.

Product	Purpose	Updates
<i>Project Information Paper</i>	Provides general background on flood damages, potential consequences, repair options and tentative schedule.	Annually by district
<i>Project Risk Management Paper</i>	Describes how risks at damaged locations are being addressed through construction, interim measures, and flood fight preparation.	Biannually by District
<i>Project Construction Fact Sheet</i>	Provides monthly status of ongoing construction activity, key milestones, % completion, project challenges, and funding.	Monthly by District

2. Websites – A new MVD regional flood risk management website has been established as a primary conduit for external communication and access to a wide range of OW-R and RFRM documents and information: www.mvr.usace.army.mil/PublicAffairsOffice/frmp/rfrmp.htm . From the main RFRM page, visitors can access and gain more information on Operation Watershed Recovery from the following links:
 - a) Flood Season Preparedness: CorpsMap links, CorpsMap User’s Guide, Workshop Materials, Press Releases, Regional Risk Maps, and District EM pages
 - b) Silver Jackets
 - c) National Flood Risk Management
 - d) Regional Flood Risk Management Team

Operation Watershed Recovery / Regional Flood Risk Management Communication

- e) IRTF: All newsletters, All Meeting Materials
 - f) MR&T Post Flood Report
 - g) Damage Assessments: CorpsMap links, CorpsMap User's Guide, Damage Assessment Process, and press releases
 - h) Construction: CorpsMap links, CorpsMap User's Guide, Construction Projects by FY, and press releases
 - i) Press Releases
 - j) District web pages
3. Press Releases – It is important that many aspects of our OW-R maintain regular visibility in a wide variety of media and social-network outlets. This will help instill confidence and calm in our stakeholders and public that site/system vulnerabilities are being reduced in an aggressive and purposeful fashion.
 4. Social Media– Use of Facebook and Twitter will continue to mature and serve as an important means to maintain interest, awareness and education across a broad cross section of our public. District and MVD PAOs will serve as the primary conduits of OW-R and Regional Flood Risk Management information release to this communication outlet.
 5. Interagency Recovery Task Force (IRTF) – established to create a multiagency forum through which to discuss and resolve a variety RFRM challenges by collaborating and combining solutions for short and long-term recovery/mitigation/preparedness efforts. The Task Force is comprised of lead federal and state agencies directly involved in the assessment, documentation, and repair of damaged flood risk management and navigation infrastructure. The team is represented by 9 different federal agencies (USGS, NWS, NRCS, USCG, FEMA, EPA, USFWS, MARAD, and USACE) and 7 states (Missouri, Illinois, Tennessee, Kentucky, Arkansas, Mississippi, and Louisiana).
 6. Develop Communication PDT – researched all aspects of internal and external communication during the flood, reviewed AARs, held public meetings and interviews, to determine what was done right and where improvements can be made.

Sample Supporting Activities and Products:

1. Social Media: Operation Watershed Facebook page creation, Twitter
2. YouTube Products (OW video, news conferences)
3. Strategic Communication guidance
4. Template News Releases, talking points, and presentations
5. Share standardized inundation maps with EM partners
6. Create EM pages for each District to host local updates
7. IRTF Kick-off Webinar – May 2011
8. IRTF brochure
9. Strong Talking Points
10. Fact Sheets on Damage Assessments and IRTF
11. Information papers for each damage site
12. Construction Fact Sheets for interim repairs
13. Hosting Sponsor meetings at District level

ACTION II – INCREASE RISK COMMUNICATION: Provide training on how to communicate risk, what's important, and what audiences need to know. Use webinars and materials from district professionals, sponsors, and partners. Conduct EM scenarios for damaged system. Synch with ongoing risk communication program.

Sample Supporting Activities and Products:

1. Share critical repairs lists by state
2. Share maps of critical repairs
3. Introduce CorpsMap (GIS application)
4. Continue weekly press releases
5. Stand up Flood Season Preparedness effort
6. Regional Flood Risk Management Workshop and webinar
7. Fact Sheets: Flood Season Preparedness, System Performance/Post Flood Report, Construction, Risk Management
8. Hold Town Hall/Public Meetings and follow up with responses

ACTION III – PUBLIC RELEASE OF NEW REPORTING PRODUCTS: Continue to communicate transparently on Corps progress. Create venues to continue to provide update.

Sample Supporting Activities and Products:

1. Continue to use Social Media: MVD Facebook page, Twitter, You Tube
2. Update Regional Flood Risk Management web page
3. Create New web pages: IRTF, MR&T Post Flood Report, Damage Assessments, Flood Season Preparedness
4. Strategic Communication guidance

PART III: KEY MESSAGING

A key messaging methodology assists in capturing core messages and serves as the foundation for the topic. By providing key strategic messages, the Corps can speak with “one voice”, and consistently articulate clear, fact-based, undeniable, balanced messages that can inspire our target audiences and drive success.

OVERARCHING KEY MESSAGES:

- The Mississippi River and Tributaries (MR&T) a legacy flood damage reduction system performed as designed under tremendous and prolonged pressure from this historic event, it is the Flood or Record for most gauges between Cape Girardeau, MO and the Gulf of Mexico.
- Not a single life was lost to flooding in the areas across seven states protected by the MR&T system.
- Many of our flood control and navigation systems remain in a state of vulnerability and risk due to damages incurred in 2011 historic flooding.
- Together...restoring the 3rd largest watershed in the world
- Life safety is paramount.
 - Accurate and timely information about risks associated with occupying a floodplain enable those affected to make informed decisions and take appropriate action.
 - Levee systems are one component of flood risk management and levees do not eliminate flood risk.
 - Informed stakeholders contribute to overall flood risk reduction.
- Living with flood risk reduction infrastructure is a shared responsibility – know your role.
- The coming flood season will require extra vigilance and advance preparedness to ensure the safety and security of our citizens, infrastructure and industry.
- Regional and National reprioritization of available Corps funding was utilized to initiate post flood construction repairs on a few dozen of our most severely damaged areas with immediate human life/safety concerns.

- Disaster Relief Appropriations Act funds of \$802,000,000 for MR&T flood damage repairs, \$534,000,000 for O&M and \$388,000,000 FCCE will be used nationally to aggressively repair and restore hundreds of damaged flood control and navigation system components.
- Careful assessment and evaluation of this historic event and system response continues and is expected to serve as a valuable guide for possible refinements to Corps policy, process and communication across the full life cycle of flood risk management (mitigation, preparation, response, and recovery).
- Characteristics of Current Implementation and Acquisition Strategy
 - Determined - efficiently and effectively restore the safety, security and productivity
 - Aggressive - design-build-deliver
 - Purposeful - Systems perspective, risk informed
 - Partnership - Shared Responsibility to protect the lives and livelihoods of our citizens
 - Component Focused Execution: Levee Repairs, Channel Improvement Repairs, Dredging, Structures
 - Contracting – A/E and construction services to advance design and construction phases

NEXT STEPS

- CONSTRUCTION!!! – initiated on several critical sites in July 2011 will begin aggressive large scale repairs in Spring 2012
- Activities associated with ongoing design, coordination and construction
 - Plans and Specifications,
 - Contract Documentation, Advertisement & Awards
 - Real Estate (LERRDs)
 - Environmental Assessments
 - Tracking and Communication
- Prior to the 2011 flood event \$13.6 billion had been invested in the Mississippi River and Tributaries (MR&T) project that to date has prevented \$474.3 billion in damages (a 34:1 return on investment)
- Although the current 2011 flood flooded 6,786,000 unprotected acres preliminary estimates indicate the MR&T project has prevented flooding of 9,864,000 acres and prevented damages of \$110 billion.
- As a part of the total systems response within the watershed, the reservoir system associated with the Ohio, Arkansas, Mississippi and Missouri Rivers were fully engaged to manage the flow of water into the Mississippi River.
- The 2011 flood fight is the first time the total watershed system was required to be operated in a synchronized manner to manage the highest level of water it has ever seen.
- Assessment and Evaluation of this historic event and system response will serve as a valuable guide for the process and methodologies used to reset and restore components necessary to ensure the dependability and functionality of the MR&T system.
- The assessment and evaluation will be conducted utilizing the full range of USACE personnel in combination with world-class experts drawn from government, private sector, industry, and academia in their respective fields.
- The REPAIR effort will strive to provide the rapid development and installation of initial interim measures designed to provide a basic level of protection and functionality before the next flood season. Current rough order of magnitude cost for the REPAIR effort is \$1.0 billion and will directly address system functionality with respect to floodways, dredging for navigation, and levee degradation.
- The RESTORE effort will strive to provide for the development and installation of permanent measures designed to return the structure to the full level protection and functionality. Current rough order of magnitude cost for the RESTORE effort will require an additional \$1.0 billion above and beyond the

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REPAIR effort. The damaged areas and weak points in the system must be restored to functionality to prevent future catastrophic flooding.

PUBLIC AFFAIRS INFORMATION RELEASED:

- a. Press Release
- b. Information Papers
- c. Question & Answer Sheets
- d. Flood Season Preparedness Fact Sheet
- e. Brochures: IRTF, CorpsMap User's Guide,
- f. Case studies from Regional Flood Risk Management Workshop
- g. Web page links to Facebook, Twitter, You Tube, RFRM page

FOLLOW-UP ACTIVITIES: As the assignments are released, PAOs will identify lessons learned, any additional products needed, and feedback and provide to MVD. Social media pages will continue to be monitored to ensure immediate feedback. Webpages will be monitored monthly to continue the consistencies with what is updated in CorpsMap (spreadsheets to match the Construction Fact Sheets) and provide the latest press releases, talking points, and other pertinent information. Use the information gained from the Communication PDT to better serve the needs of our customers.