



Advances in Flood Risk Communication

Strategies & Best Practices

Traditional methods relying on financial data and engineering figures haven't been effective in getting people to understand and own their flood risk. These five strategy areas represent proven, innovative approaches from agencies and partners nationwide.



Meeting Communities Where They Are

Malls, parades, festivals. Adapt outreach to community realities rather than expecting them to conform to our preferences.

● Providing Food & Childcare at Community Outreach Events

Remove barriers to attendance by offering practical support. Culver City, California has trained staff members at City Council meetings to provide childcare, dramatically increasing community participation.

[Culver City Example](#) [Childcare Resources](#)

● Bilingual Community Events

Hosting bilingual events will increase trust and be more accessible to all community members. Multilingual engagement demonstrates commitment to serving all community members and breaks down communication barriers that put non-English speakers at disproportionate risk.

[Multilingual Events Guide](#)

● Outdoor Advertising & Materials in Multiple Languages in High Risk Zones

The fundamental goal of emergency communication is to save lives by ensuring everyone can take protective actions. When warnings aren't provided in languages communities understand, people cannot respond appropriately to imminent threats. Valley Water placed banners and bus advertisements in multilingual formats at flood prone locations and used **geo-targeted digital advertising**, deploying multilingual digital ads to IP addresses in high risk flood zones coordinated with National Weather Service alerts.

[Valley Water Flipbook](#) [Valley Water Postcard](#)

● Offer One on One Discussions & Support

Sometimes the message is easier to convey in conversation rather than in a crafted communication piece. Charlotte-Mecklenburg offers to meet residents on site to discuss specific drainage concerns and provide personalized education.

● Use of Realtors to Spread the Word

Research found that exposure to flood risk data influenced every stage of the homebuying process, from initial searches to final purchases, with those who saw the scores more likely to choose lower risk homes. Realtors impact the critical moment when buyers make their largest financial decision, have legal and ethical obligations to disclose known hazards, and can prevent homeowners from being blindsided by devastating floods and financial losses after purchase.

[Covington, LA Case Study](#)

● Brewshed Alliance: Casual Venues for Education

The Brewshed Alliance in Colorado Springs hosts a monthly **Liquid Lecture series**, organizing fundraisers, supporting cleanup events, and promoting sustainable brewing practices in a casual way. The alliance reaches people who wouldn't typically attend traditional water education events by connecting with them through something they already love: craft beer. The model transforms a recreational space into an educational venue, leveraging the brewing industry's natural connection to water quality to build a community of informed, engaged watershed stewards.

[Brewshed Alliance](#)

● Extensive Campaigns to Communicate Floodplain Map Changes

Reach out specifically to households experiencing unemployment, no internet access, and households without a car. Henrico County, Virginia created an interactive, easy to use dashboard to help residents understand impacts relative to their residence. This effort staved off thousands of questions and complaints after map changes.

[Henrico County Dashboard](#)



Using Immersive Art & Interactive Experiences

Studies show immersive experiences translate directly to protective actions, something traditional communication consistently fails to achieve.

● Large Scale Floor Maps

In Norfolk County, a large scale floor map was placed at public meetings to immerse participants in the discussion about risk, transforming passive observers into active participants by placing them physically within the geography of risk.

[Norfolk Open Houses](#)

● Rain Activated Ground Art

A ground map only visible when wet gets people outside during rain to see how water interacts with the space, combining interactive art with real time stormwater education. The City of Kirkland's 132nd Square Park features this innovative approach.

[Kirkland 132nd Square Park](#)

● Phased Video Campaign

Miami Conservancy District created sequential video content building understanding over time. Their three phase video series reached **500,000+ YouTube views** with a **98.2% completion rate** across Streaming TV and social media platforms.

[Video 1](#) [Video 2](#) [Video 3](#)

● Serious Games for Complex Topics

"**That Dam Game!**" Yuba Water Agency developed a collaborative board game simulating dam management and climate adaptation decisions. The simple act of playing improves learning by making abstract infrastructure concepts tangible and interactive.

[About the Game](#)

● Interactive Hands On Demonstrations and Visuals

Valley Water's outreach featured full size interactive sandbag displays and emergency kit assembly tables, allowing participants to learn through hands on experience rather than passive observation. Being hands on is one of the most effective ways to learn through experiential and kinesthetic approaches. Charlotte-Mecklenburg installed flood markers in the community to help people visually see the reality of where the water has been and can go.

[Charlotte Flood Markers \(Video\)](#)



Community Centric Approaches

Communities themselves should lead planning, implementing, and evaluating disaster management activities, building trust that top down approaches cannot achieve.

● Using Community Navigators

Already trusted members (community members, publicly recognized persons) trained to share the message, as done in **King County, WA**. This approach helped facilitate two way communication and better comprehension of flood hazard management. Charlotte-Mecklenburg also equips field teams with educational materials featuring detachable emergency contact cards and magnets.

● Annual Anchor Events

Charlotte-Mecklenburg, NC: Annual Creek Week facilitates community partnerships and organizes safe volunteer opportunities. Volunteers come together on a single day to clean up multiple creeks. Residents can rely on this annual event for learning and environmental stewardship.

[Creek Week](#)

● Strategic Partnership Press Events

Host joint media events with the mayor, National Weather Service, and emergency services at operational sites with hands on demonstrations. This brings the people with the answers to the community, creating efficiency in spreading your message.

● Multiple Contact Methods

Charlotte-Mecklenburg provides phone (311), web form, mobile app (CLT+), and in person options for reporting drainage concerns, ensuring all channels feed into the same response system.

[Charlotte 311 System](#)



Have a Home Base for Information

A centralized, trusted hub eliminates the dangerous problem of multiple, potentially conflicting "truths" during critical moments when lives depend on clear, reliable information.

● Consolidated Central Website Hub

A well designed website where all flood preparedness information is easy to find and digest serves as the single source of truth for all stakeholders. Valley Water's central hub is the go to site for all flood preparedness resources.

[Valley Water Flood Ready Hub](#)

● Real Time Flood Forecasting Portal

SC Flood IMPACT: South Carolina DNR developed an interactive website showing forecasted flooding up to 3 days in advance with updates every 3 to 6 hours for inland and coastal areas. Cost: \$7.6M for statewide implementation (\$3.1M funded, \$4.5M remaining). The site includes a **Citizen Incident Reporting Tool** allowing residents to document hazards like flooded roads, downed power lines, and building damage.

[SC Flood IMPACT Portal](#)

● Interactive Watershed Dashboard

The City of Kirkland, WA created an interactive dashboard allowing users to learn about the health of their neighborhood creek using a simple red, yellow, green coloring system, helping drive home how residents influence watershed health.

[Kirkland Watersheds Dashboard](#)

● Integration with Existing Apps (Waze)

San Antonio River Authority, Bexar County, TX used the Waze app for current flood information and emergency road closures. Leveraging platforms people already use daily removes the adoption barrier and reaches users when they need safety information most.

[SARA Waze Partnership](#)

● Media, Signage, QR Codes & Owned News Channels

Use a multi channel approach including social media, news stations, newsletters, signage, and QR codes. A municipality in Florida operates its own news channel to **control the narrative**. QR codes link to residential flood information where residents can locate their house in the floodplain.

[FL PEG Channel](#) [Key West Flood Lookup](#)



Engage Children as Trusted Messengers

Research shows children demonstrate meaningful communication power. When a child brings home flood risk information, positive effects occur throughout targeted communities.

● Early Engagement with Mascots

St. James Parish, LA has a flood mascot, **Floody the Alligator**, that helps educate school children about flood awareness and permitting rules. Mascots create memorable, approachable characters that make flood safety less intimidating for young audiences.

[Meet Floody the Alligator](#)

● Take Home Goodies & Informational Materials

Provide kids with practical, useful items like flashlights and informational materials to share at home, getting kids talking with their parents. Kids can access community information through school education efforts and field trips.

● Catchy Slogans and Memorable Characters Kids Can Remember

The City of Phoenix's "**Only Rain in the Storm Drain**" slogan appears at outreach events during the city's Stormwater Awareness Week. Kids' minds emotionally engage with catchy slogans. Consider taking your campaign to local schools to further your reach. Clark County Regional Flood Control District has rolled out its TikTok educational piece "**Drainger Danger**". The "Drainger Danger" campaign has achieved significant success in raising awareness about the dangers of storm drains and flood risks in Southern Nevada.

[Phoenix Stormwater Week](#) [Drainger Danger \(TikTok\)](#)

● Animated Multilingual Social Media Content

Valley Water created culturally relevant animated graphics in multiple languages to explain flood preparedness visually. Designed for mobile viewing with captions for sound off watching, keeping videos under 30 seconds for maximum completion rates.

[Valley Water Social Example](#)