Rebuild wisely, not cheaply: Doing it right the first time through fish passage

Cross-agency and NGO initiative (Forest Service, Fish and Wildlife Service, DOT, FEMA, NRCS, State agencies, Trout Unlimited, American Rivers, TNC, and others)

Problem:

Outdated or improperly-sized road stream crossings that cannot withstand flooding events are causing increased hazards to human health and safety and significant, sometimes repeated, replacement costs. This problem is magnified by stream channelization and the clearing of sediment, boulders, and large wood in streams which increases the magnitude of subsequent flooding events, thereby increasing the magnitude of human safety hazards and infrastructure damage to humans and their investments. In addition to these impacts threats to public safety and health, the devastation to water quality and aquatic life is immeasurable. Unfortunately in a state of emergency following a flood event and where replacement standards are not effective, and in small rural areas in these tough economic times, road crossing replacements after a flooding event is often not much better than what existed before the event and sometimes is an exact duplication of the situation that existed prior to a flood, maintaining or even increasing the likelihood of it happening again. Agencies and local personnel sometimes work at odds with each other due to differing missions (perceived or real) and lack of coordinated responses. The flooding brought on by Hurricane Irene in August 2011 provides an excellent improve upon federal post-flood responses while protecting financial investments, increasing safety and protecting streams, rivers, roads, homes and businesses from significant damage, all while restoring fish habitat.

Goal:

Bring national and State attention to a problem with untapped solutions that lead to future avoidable devastation, including decreased loss of property damage, caused by flooding events where infrastructure is compromised. These proactive solutions reduce human safety risks, reduce property damage, contribute to aquatic natural resource protection, and save tax payer money.

Objectives:

1. Affect choice of standards that are used for restoration, recovery, and replacement of road infrastructure
2. Affect post flooding, in-stream activities through education, demonstration, and proactive floodplain restoration
3. Development and education of implementable alternatives to recovery activities on national, regional, and local levels
4. Bring together federal, state, local, and NGO's to compile and utilize resources and expertise to

5. Develop mechanisms (monetary and technical) that States and municipalities can come to for assistance.

Potential actions:

1. Form a national contingent of partners (Federal, NGO's, States) that can promote collaborative action of working together to "build disaster resistant communities" by working through:
    a. Evaluation of existing policies
    b. Building a collaboration of expertise among the groups
    c. Education
    d. Demonstration
    e. Mobilization – "strike teams" (regional and local) that can assist infollowing an emergency flooding event.
    f. Identification or development of funding resources for States and municipalities, particularly small towns, to utilize as match to rebuild or be proactive in infrastructure restoration projects
2. Work with recovery agencies and towns to promote "building disaster resistant communities"
3. Congressional and/or partner summit which could be a step to achieve 1 a, b, and c.
    a. Audience: Congressional staff, State and Federal agencies, and NGO's
    b. Messages: discuss above problem identified above with an open discussion on long term solutions. This includes economic values of doing it right the first time, and the advantages of restoring for the aquatic resources greatly benefits the public safety and saves tax payer dollars.
    c. Goal: begin the collaboration process and discussion of more effective policies in the spring of 2012.

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Example of what happened to road stream crossings in the NE

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This is an example of an emergency fix right after the Tropical Storm Irene.

Many streams were straightened in an attempt to pass water faster as well as for gravel mining purposes.