

## Alluvial Fan Discussion Group Participants and Objectives

Jon Fuller Jon Fuller [jon@jefuller.com] Discussion Paper primary author.

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One of my main objectives would be to suggest ways that FEMA can update its techniques of assessing risk on alluvial fans to be more current with state of the science.

Geoff Brownell Brownell, Geoff [gbrownell@mbakercorp.com]

My goal would be to help facilitate the advancement of the state of practice for determining flood hazards on alluvial fans.

Anthony Barry Barry, Anthony [Anthony.Barry@sdcounty.ca.gov]

As I am sure you are well aware of by now, I would like to be included in the new group that you had referred to as "Alluvial Fan Discussion Group"

I would like to propose to include the following objectives:

- Obtain clear support from the Committee and ASFPM for the enforcement of current regulations and accepted methodologies.
- Ensure that any work product produced or promoted by the Arid Regions Committee clearly serves its mission, and does not give the appearance of being driven by interests that conflict with the Committee's mission to reduce losses.
- Determine if current regulations and methodologies are adequate to protect public and property from flood risk, and propose and promote revisions as necessary.
- Ensure that any changes recommended to regulations or methodology would result in decreased flood risk.
- Educate the public, developers and their consultants, and municipal staff on the risks associated with alluvial fans, and how these risks justify the current regulations and methodologies.
- Avoid promoting or recommending any changes to regulations or methodologies that do not clearly reduce flood hazard risk, or where the impact of the proposed change has not been clearly determined with supporting justification.

I propose that we accomplish these objectives through the following activities:

- Research and define current regulation with respect to development on alluvial fans.
- Educate the public, developers and their consultants and municipal staff on the current regulation.

- Analyze the current regulations and historic flooding and past damage to determine the effectiveness of the current regulation.
- Where it can be clearly and justifiably demonstrated that current regulations or methodologies are insufficient to provide protection to individuals and property, further research and analyses should be performed to identify the steps by which the shortcomings can be addressed.
- Where it can be clearly and justifiably demonstrated that the current regulations or methodologies are prohibitively conservative, further research and analyses should be performed to identify the steps that could be taken to remove unnecessary conservativeness without compromising safety, or increasing risk.
- Where current regulations or methodologies are appropriate, or cannot be proven otherwise (or until they can), ASFPM should do everything within its power to endorse them and thereby aid those enforcing the regulations and the use of the methodologies, and educate the public and the development community.

Mark Forest Forest, Mark E. [Mark.Forest@hdrinc.com]

Important topics of interest should start with the development of a problem statement based on a fact-finding approach that solicits the input from arid regions organizations. Once you develop a problem statement, then the work of the committee or subcommittee that is developing work products has a more defined objective statement(s). The resulting document would then include the pre-defined problem statements and objectives that came from the fact-finding effort, a review of previously prepared documents on the topic that are relevant to the objectives, gaps in the existing research, recommendations for additional research, and recommendations for policy processes needed to address the topics of interest.

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Kathryn Gross Kathryn Gross - FCDX [kag@mail.maricopa.gov]

Bing Zhao Bing Zhao - FCDX

Ed Raleigh Ed Raleigh - FCDX

Objectives regarding Alluvial Fan Methodology in Maricopa County

Maricopa County's intent is to be consistent with current FEMA regulations and guidelines by working cooperatively and collaboratively with FEMA to address alluvial fan flood hazard delineation and mitigation. Maricopa County is interested in ensuring that appropriate engineering methods are applied correctly to the determination of the hazard so that misapplication of any delineation method can be avoided. Our intent is not to ask FEMA to develop new nation-wide approaches nor ask other agencies to use Maricopa County's method.

Clint Roos [clintwroos@mrllc.net](mailto:clintwroos@mrllc.net)

I envision the Alluvial Fan Committee as an unique opportunity to be involved with a diverse group of talent and viewpoints whose goal is to work together to further the understanding and knowledge of alluvial fans, and the extreme risk that they pose. Having a consortium of individuals from both the public and private sector is instrumental to a productive committee. I believe such a committee would first examine the basics of alluvial fans and how they are currently examined (i.e. FEMA Appendix G and NRC 1996). After a review of existing regulations (including a history of regulations) is made, the committee can begin setting goals and objectives on how to best use everyone's time on the committee. Fundamentally, alluvial fan parameters have not changed so it is of utmost importance that the committee understand them so the merit of recommendations from the "discussion" paper can be properly examined.

Massoud Rezhkani [massoud rezakhani \[mrezakhani@mrcllc.net\]](mailto:massoud_rezakhani@mrcllc.net)

My experience and understanding of alluvial fans and their hazard is unparalleled as I have witnessed firsthand their destruction when not properly mapped and/or mitigated. It is of utmost importance that everyone involved with the committee understand the nature of the beast and the key parameters involved with alluvial fan hazards; such as avulsion, flow path uncertainty, erosion and sedimentation. Many "new" methodologies do not take into account these fundamental parameters, and truly underestimate the hazards associated with alluvial fans placing public well-being in jeopardy. Understanding the reasoning behind current regulations and policy is paramount prior to defining goals and objectives for the committee.

Richard French [[richardhfrench@sbcglobal.net](mailto:richardhfrench@sbcglobal.net)]

Julianne Miller [Julie.miller@dri.edu](mailto:Julie.miller@dri.edu)

I would very much be interested in participating in the alluvial fan working group. I've spent a lot of my career at the Desert Research Institute working on alluvial fan specific issues, as well as arid land hydrology and hydraulics in general.

Neil Jordon [neil Jordan \[neiljordan@cox.net\]](mailto:neiljordan@cox.net)

I have been participating in the committee teleconferences and other committee activities for some time, principally in the background, but would now like to directly participate in the committee work. My understanding of the Committee is a group of impartial professionals with diverse experiences related to the problems and often under-appreciated risks of alluvial fan flow. I would think that the Committee would carefully evaluate these problems and risks and formulate recommendations that enable others to properly estimate flood risks. A principal goal of the committee would be to convey the concept of flow path uncertainty and how failure to recognize or appreciate uncertainty could result in underestimating flood risk.

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