

Alluvial Fans and Regulated Land Use Planning

Alluvial Fan Task Force Plenary Meeting 2

Presentation by:

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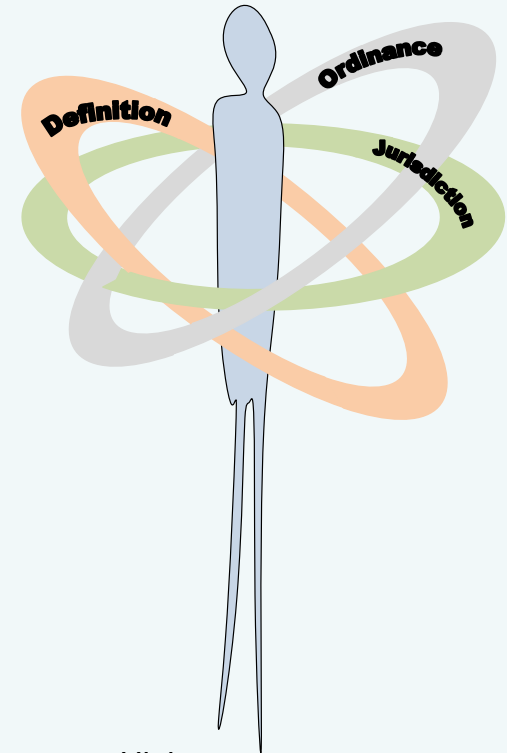
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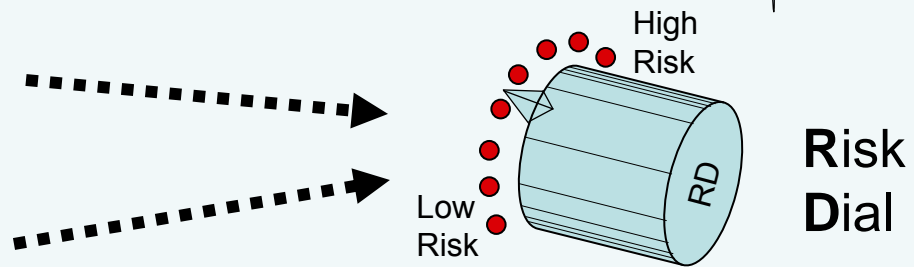


Introduction to today's exercise

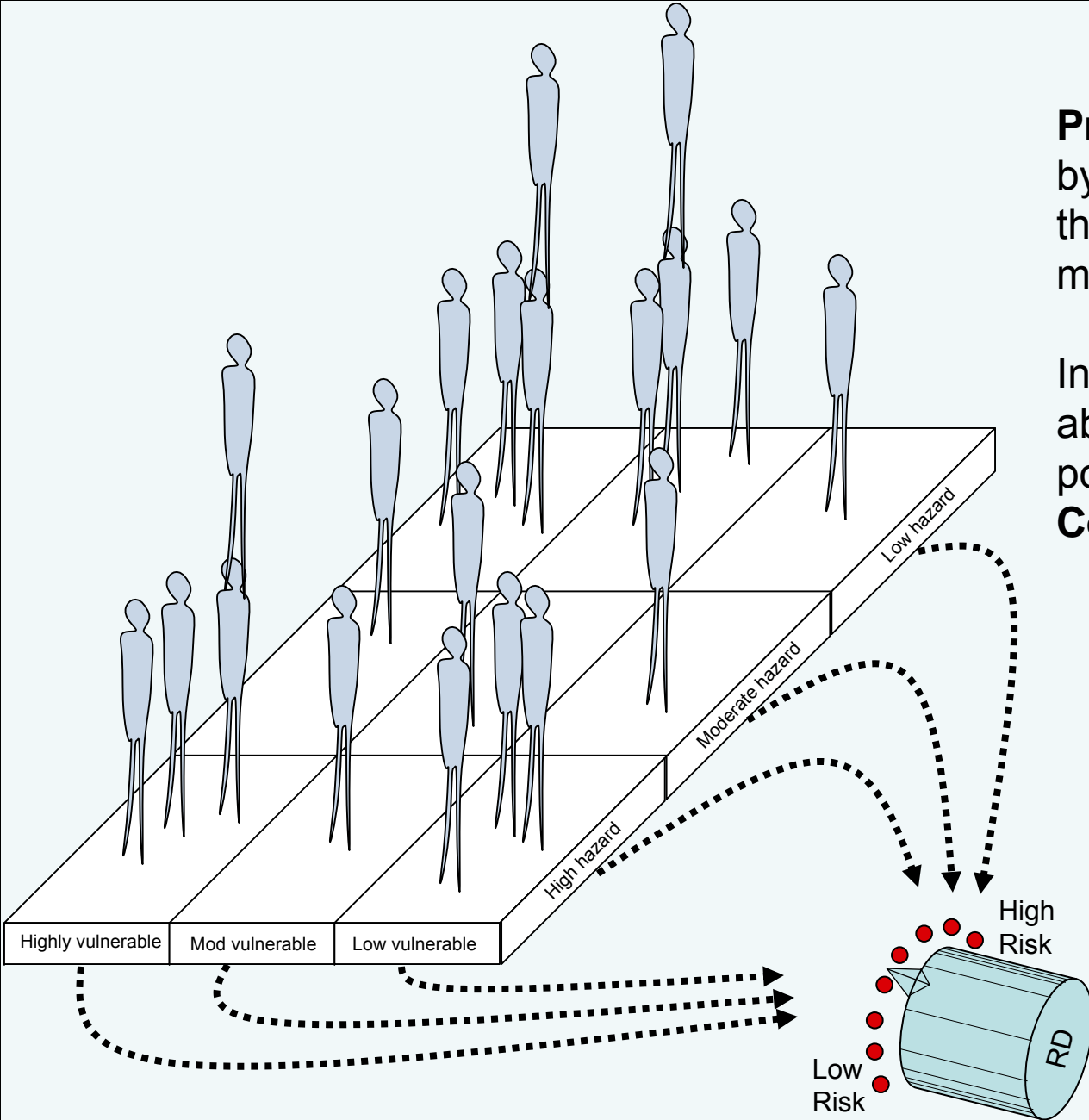


Risk = Probability x Consequences

- Probability is the percent chance of something happening in a given time period (generally measured as a percentage)
- Consequences can be economic loss, loss of life, loss of habitat (generally measured as \$ or loss of life)



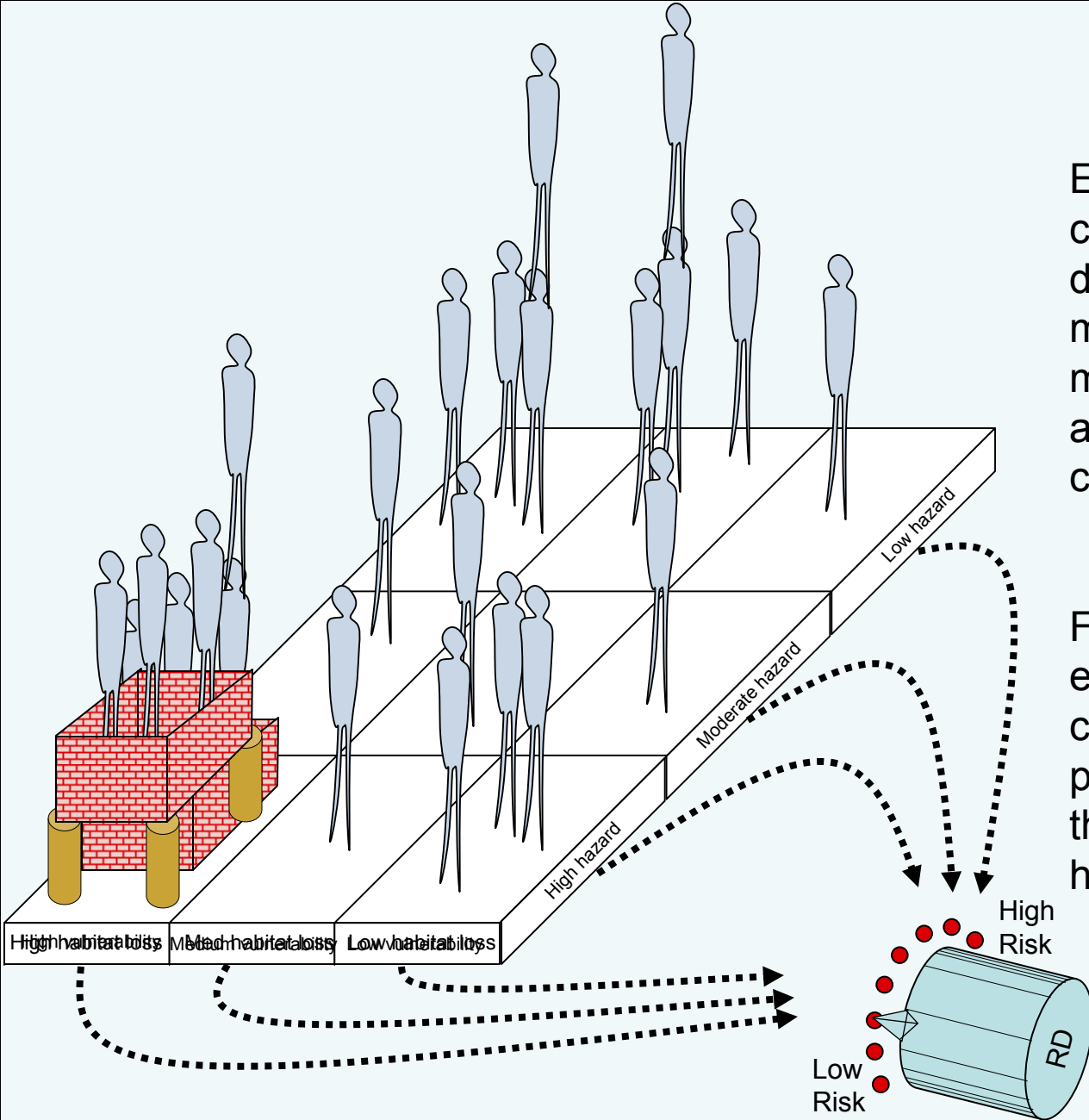
Source, <http://www.fpm.water.ca.gov/index.cfm>



Probability is largely defined by geography, we will explore that in more detail in later meetings.

In our previous example we abstractly portrayed vulnerable population as a “TYPE” of **Consequence**.

There are of course many, many types of consequence.



Each of these consequences may require differing programs and mitigation measures to minimize the specific risk associated with a specific consequence.

For example, the mitigation effort for reducing the consequence for vulnerable population may be different than the effort for mitigating habitat loss.

Samples of consequences that will be used in our exercise

Flooding: Impact to lives, property and environment	1
Private property rights: Impact on enjoyment of personal property	2
Earthquake: Impact to lives, property and environment	3
Cost to county/municipality: Flood management infrastructure, O&M and Disasters	4
Ecology and habitat: Impacts of development on watershed	5
Historical Lessons Learned: What about those high places that keep flooding?	6
Population growth: impact of cumulative and sustained growth	7
Water Quality/ Water Supply: Impact of future development	8
Mitigation Measures: Impact to developers and home owners	9
Vulnerability of population: impact to disadvantaged population i.e., age, race and income	10

These consequences intersect with geographies and determine our risk, we must then determine our tolerance for that risk.

This explicitly implies that our assessment of risk is both complex and compound. That usually means trade offs, not all of the mitigation measures and programs may be compatible, some may even be down right contradictory.

The goal of this exercise is not to determine our collective values and hold your feet to the fire for the rest of time.

The goal is to introduce a way, one way, to address complex compound relationships and to generate fuel for subsequent thought and conversation.

- This is anonymous
- This modified Delphi is not the method the method is consensus, this exercise is informative
- Its not a vote
- Next steps will be to introduce geography / location
- We will fill these out, I'll go away and perform summaries, come back later and tell you what we have.
- First I will go over each of the two ranking exercises instructions with examples.
- Each individual will then have 10 minutes fill out the forms. **DON'T FORGET YOUR GROUP NUMBER!**
- After lunch a brief review of the total result, then each group will be given a summary of the group results and a new blank group form and asked to create consensus version. Each group will then briefly present consensus version.

Degree of Risk

Ranking	Issue	Low	Med	High		
2	Flooding	1	2	3	4	5
	Private Property Rights	1	2	3	4	5
	Earthquakes	1	2	3	4	5
	Cost to County/Municipality	1	2	3	4	5
	Ecology and Habitat	1	2	3	4	5
	Historical Lessons Learned	1	2	3	4	5
	Population Growth	1	2	3	4	5
1	Water Quality/Supply	1	2	3	4	5
3	Mitigation Measures	1	2	3	4	5
	Vulnerability of Population	1	2	3	4	5
	(other?)	1	2	3	4	5
	(other?)	1	2	3	4	5