

Lessons Learnt in Coastal Adaptation

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Qcoast₂₁₀₀ Project Tasks

Task 1. Plan for life-of-project stakeholder communication and engagement

Task 2. Scope coastal hazard issues for the area of interest

Task 3. Identify areas exposed to current and future coastal hazards

Task 4. Identify key assets potentially impacted

Task 5. Risk assessment of key assets in coastal hazard areas

Task 6. Identify potential adaptation options

Task 7. Socio-economic appraisal of adaptation options

Task 8. Strategy development, implementation and review

Project scoping and engagement planning

Scoping by geography: Region? City? Community?

Scoping by Hazard: Inundation/sea level rise/flooding, erosion

Scoping by Asset: Public infrastructure?, housing?.....

Why is this important?

Why is this important

Different stakeholders,

Different methods,

Different ownership of assets

What problem are we trying to solve?

Project scoping and engagement planning

- Wanting to demonstrate that we are thinking about climate risks? (plan & forget approach?)
- Wanting to decide on specific adaptation options now? (plan, implement & forget approach?)
- Wanting to send signals to stakeholders & property market? (cautious approach?)
- Wanting only to protect people, buildings? (misguided approach?)
- Wanting to reduce our organisational liability? (realistic approach?)
- Combination of the above?

Project scoping and engagement planning

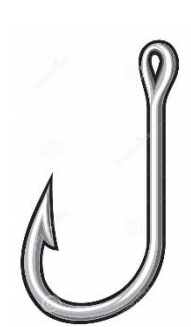
- Determines the key stakeholders
- Determines the methodology
- Determines the expectations



Many key stakeholders are not yet alive

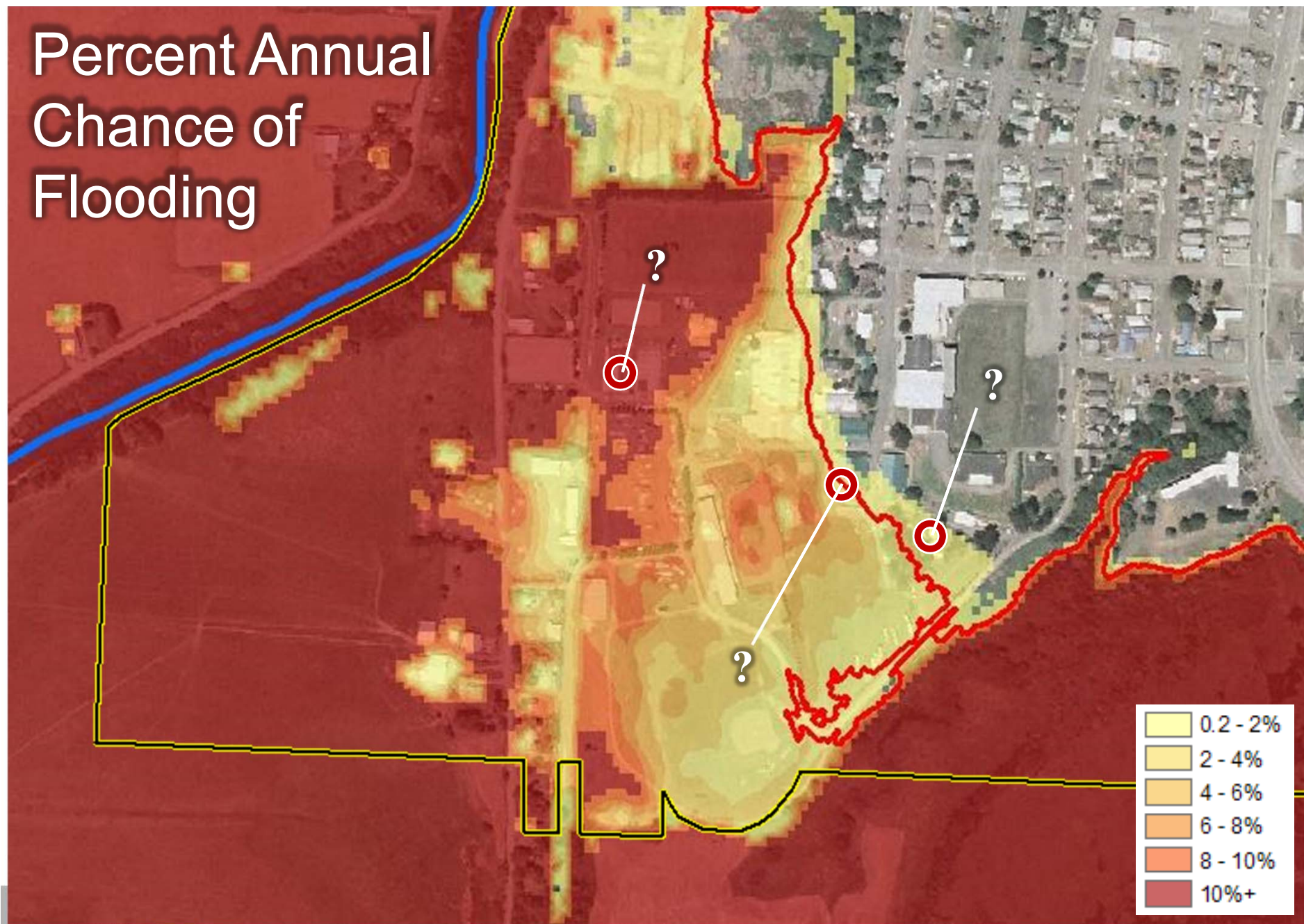
Hazard maps

Highly technical, but well-understood by consultants

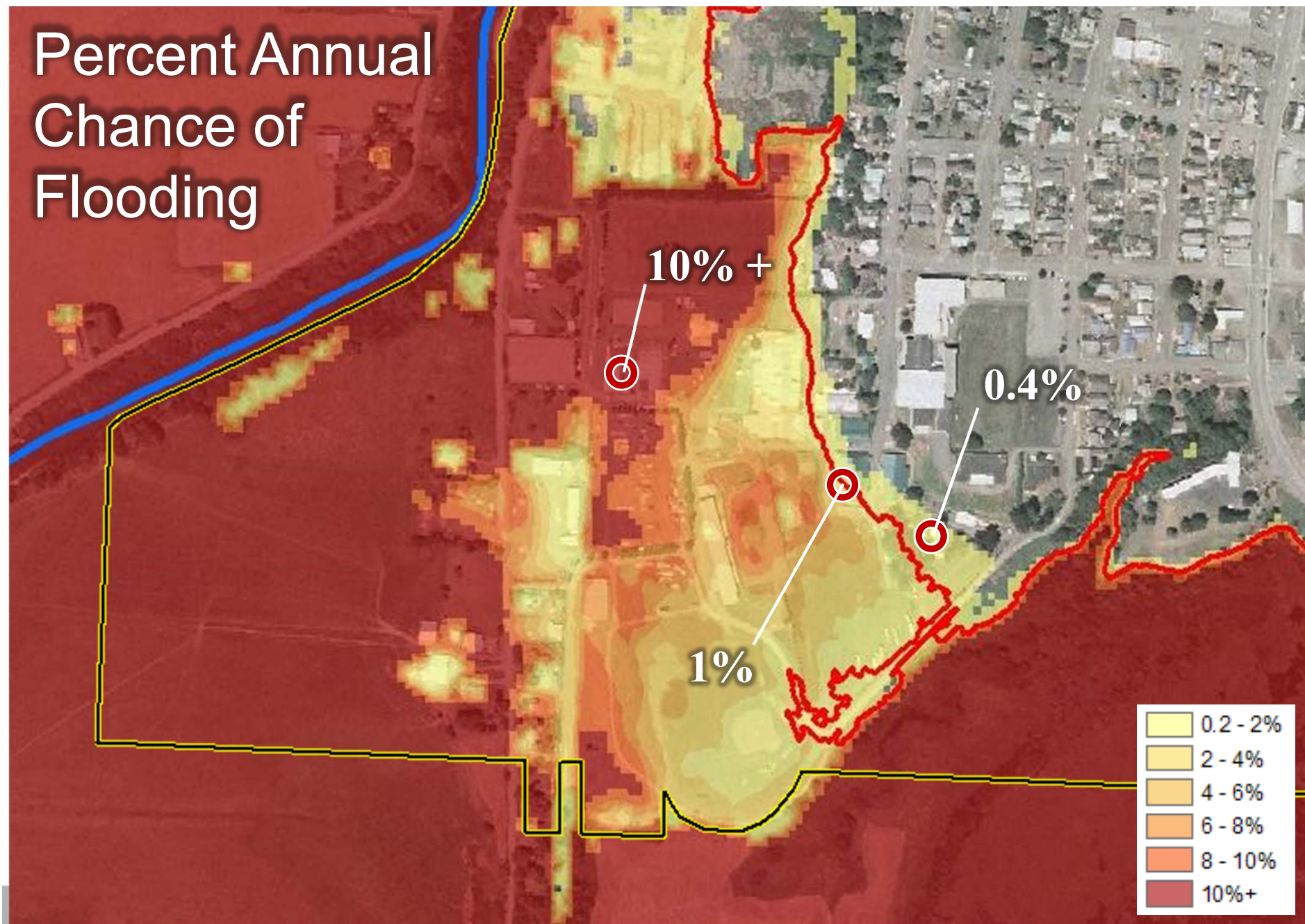


easily mis-understood by stakeholders

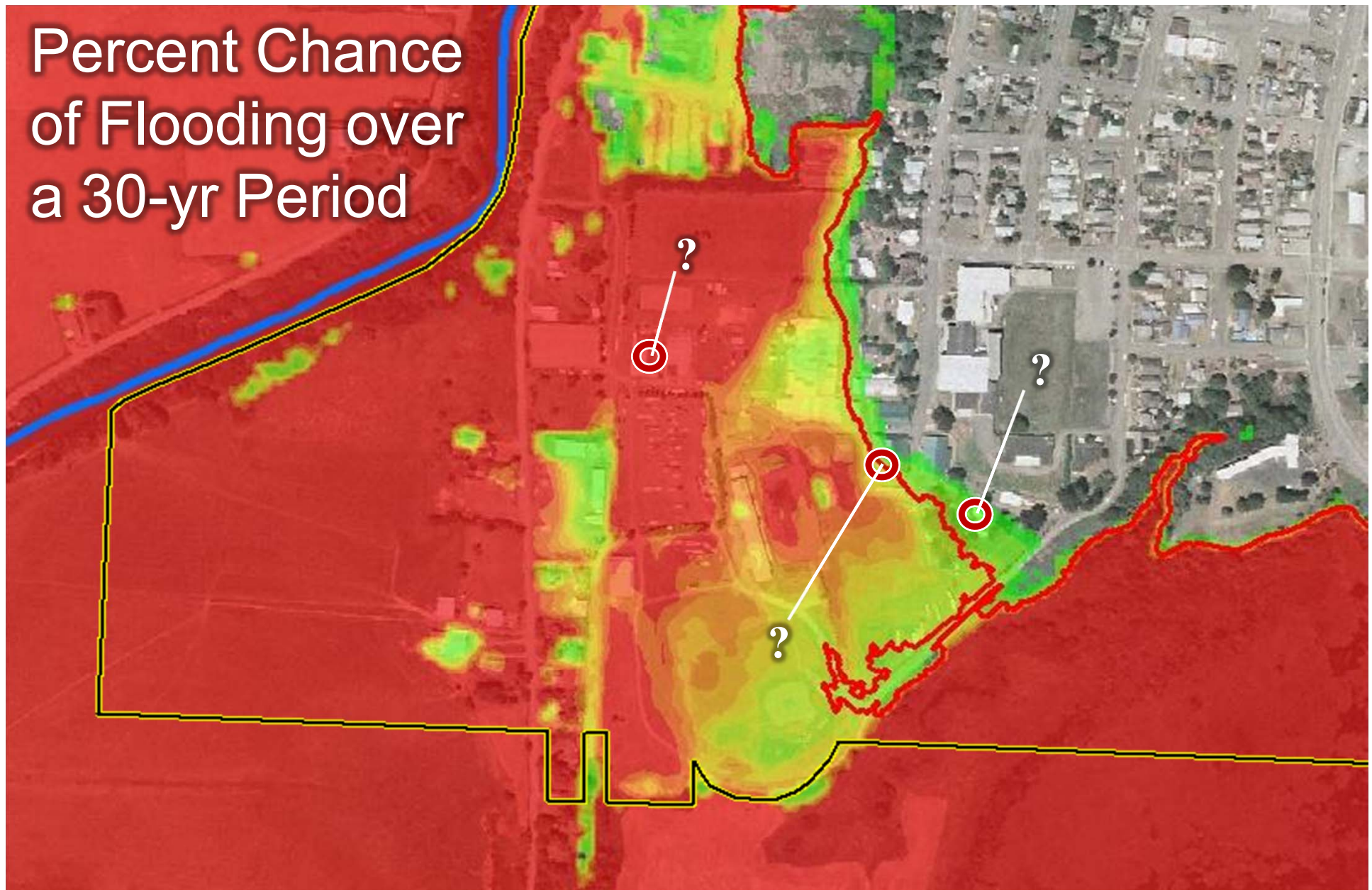
Percent Annual Chance of Flooding



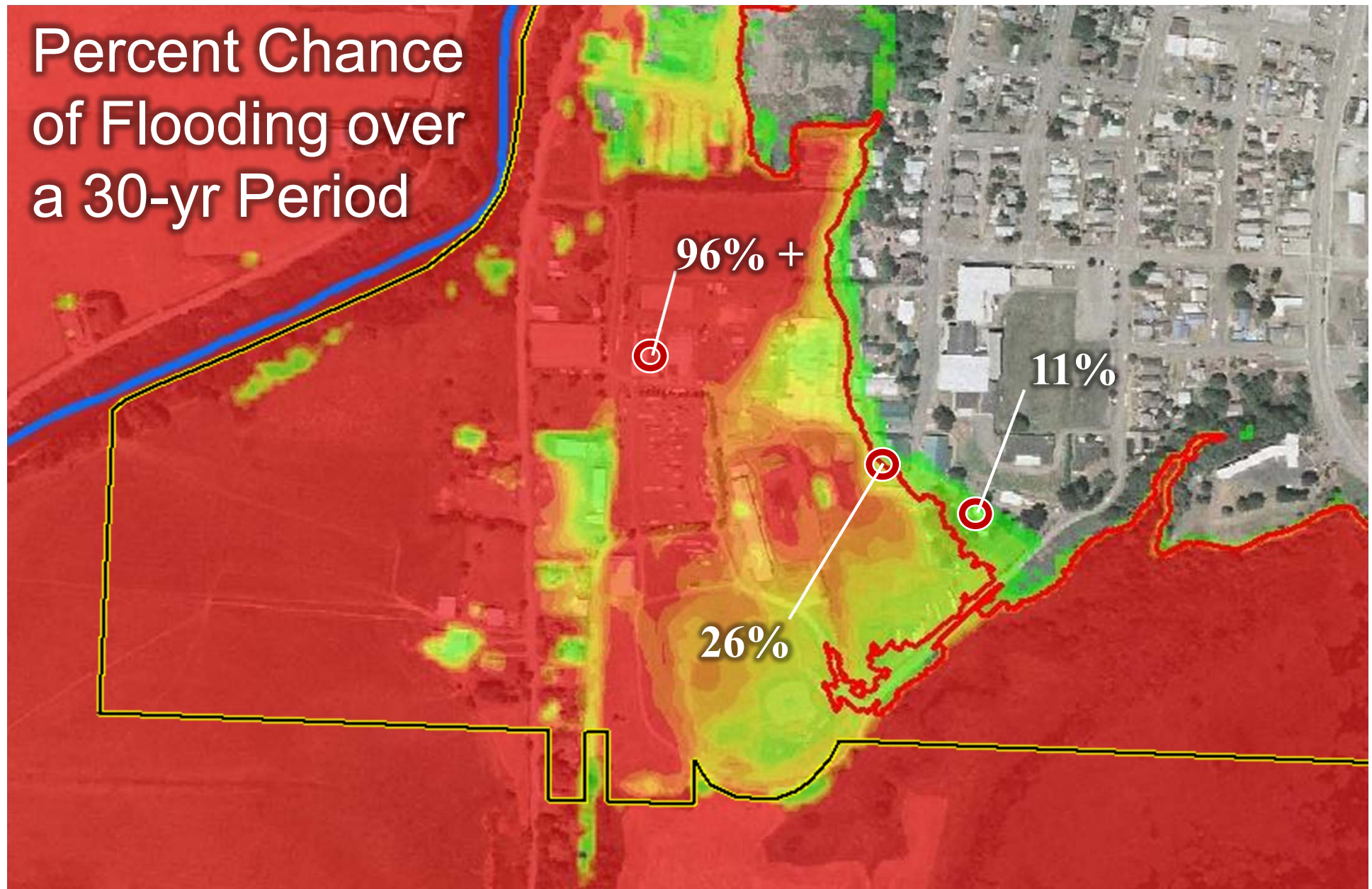
Percent Annual Chance of Flooding



Percent Chance of Flooding over a 30-yr Period



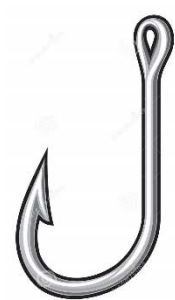
Percent Chance of Flooding over a 30-yr Period



Risk Assessment

Can be confusing, but need not be.

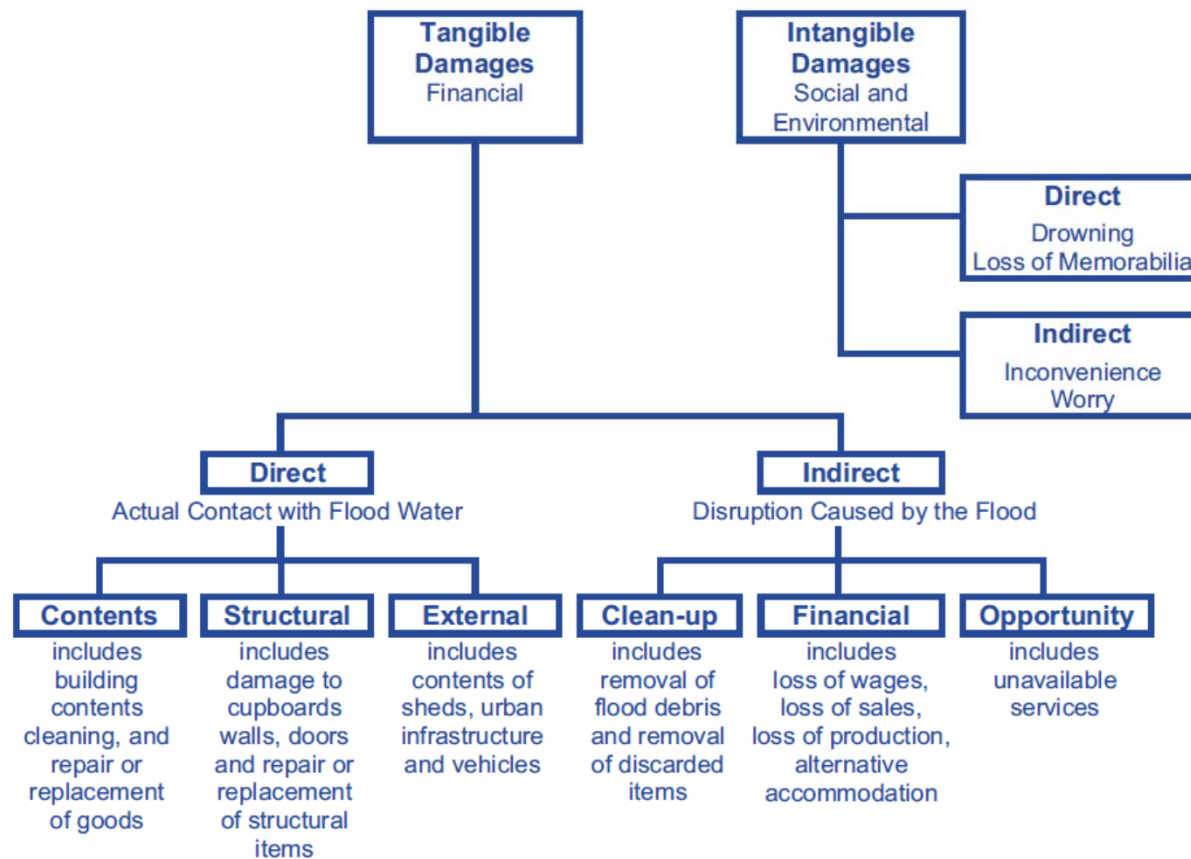
Use existing organizational risk frameworks



- perception of multiple definitions of risk.....,
- multiple ways to assess consequence

Consequences: Valuing assets

Need to be careful. But a number of existing resources



Consequences: Valuing assets



- using 'fair' value of houses can be problematic
- Consider separating hazard mapping from optioneering

Options selection

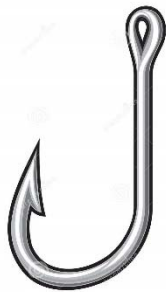
- Generally categorised into: retreat, protect, manage
- Consider staging (different adaptation pathways approach)



- Beware of perverse incentives.....
- Overlapping adaptation plans

Narrowing the options: MCA vs CBA

- MCA often appealing, engages stakeholders etc.
- Results in a values map of stakeholders in the room.
- Exposed to special interest groups



MCA's are not repeatable, exposed to bias from special interest groups

Narrowing the options: MCA vs CBA

Dealing with cost in MCA's can be problematic

CBA issues

- CBA is transparent, repeatable, defensible.....
- Generally involves little stakeholder engagement



non-market values can be problematic

Key points

- Be very clear on the scope and problem to be solved, stakeholders...
- Be aware of hazard map communication problems
- Where possible, align analysis to existing risk frameworks and approaches (i.e. flood management methods)
- For larger projects, use MCA to reduce long list of options, but apply CBA
- Be prepared to manage special interest groups

Good Luck!

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