



The Significance Spectrum

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Overview

- Where am I coming from?
- What is “significant”?
- The significance spectrum
- Drawing a line between EIA and regulatory processes

The Mackenzie Valley Environmental Impact Review Board

- Court-like tribunal in northern Canada
- Co-management tribunal (50% Aboriginal)
- Decision maker in EIAs for large scale or controversial projects
- Legally required to decide if a proposed project is likely to cause significant adverse impacts on the ecosystem and people
- If so, Review Board requires mitigation measures or rejects project

What is significant?

- Many criteria for significance:
 - Magnitude
 - Areal (geographic) extent
 - Duration
 - Likelihood
 - Reversibility
 - Nature of the impact
- Significance is not a strictly scientific determination
- Depends on the **subjective informed judgment** of decision makers
- Uses **evidence** to test for the public interest
- Reflects decision maker's **values** about predicted impacts

Is an impact significant?

**Does the impact matter
enough so that it
should be reduced or
prevented?**



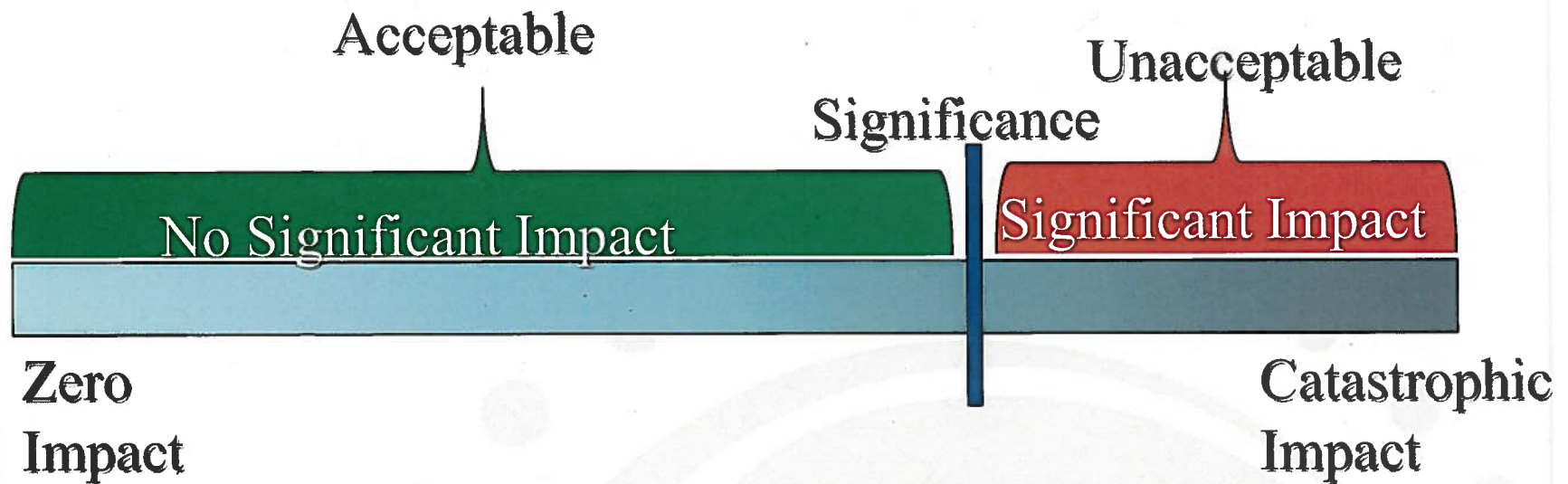
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Where this line goes

- is based on values
- changes for each impact

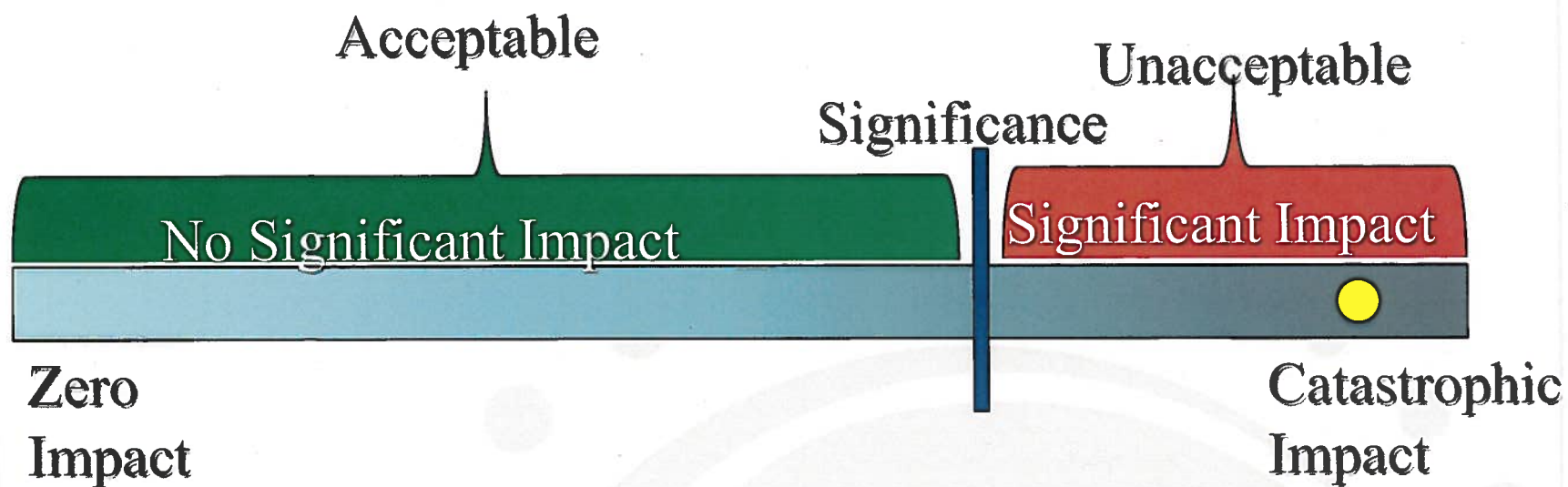
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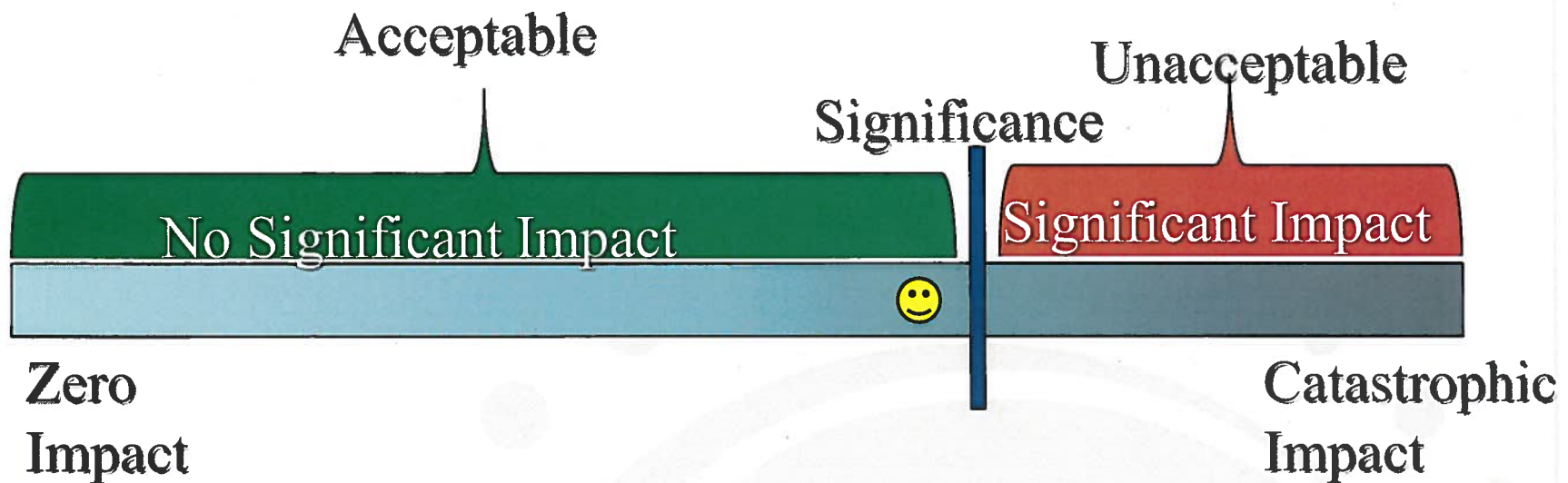
EIA decision maker decides which side an impact falls on





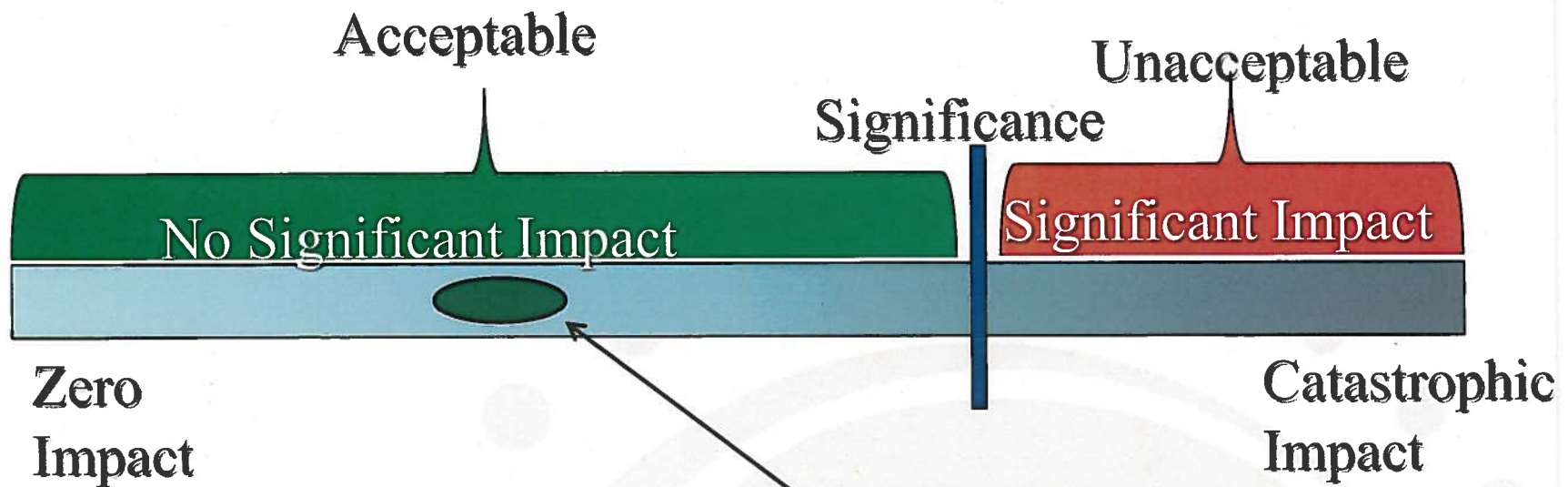
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EIA decision maker decides which side an impact falls on





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Regulators choose final limit only if EIA decision maker first decides residual impacts are acceptable (no significant impact)

Putting First Things First

- Regulators set limits and enforce them
- National standards may apply
- So ***why examine significance*** for these subjects?

The Driving Test Analogy

- Examiner has to decide if an applicant is an acceptable driver
- Regulations apply to driver
 - There are speed limits and traffic rules
 - Enforcement may penalize those who exceed limits
- *Does this mean that examiners **do not** need to apply the test?*
- Despite regulation, an unacceptable driver may still hurt other people
- The question of acceptability has to be decided before relying on speed limits and traffic police

Why not leave it to the regulators?

- Regulators **only** deal with impacts that are **not significant**
- Regulators can (almost) never say “no”
- National standards are the bare-bones floor, intended to be adapted to different settings
- Regulators cannot balance impacts against social or cultural issues
- Regulators’ mitigations are more constrained



Conclusions

- Significance depends on decision makers' subjective informed judgment
- Reflects the decision makers' values regarding impact acceptability
- Significance is a link between the EIA and regulators

