# New tools and a use-inspired approach for impact evaluation

5th European Environmental Evaluators Network Forum

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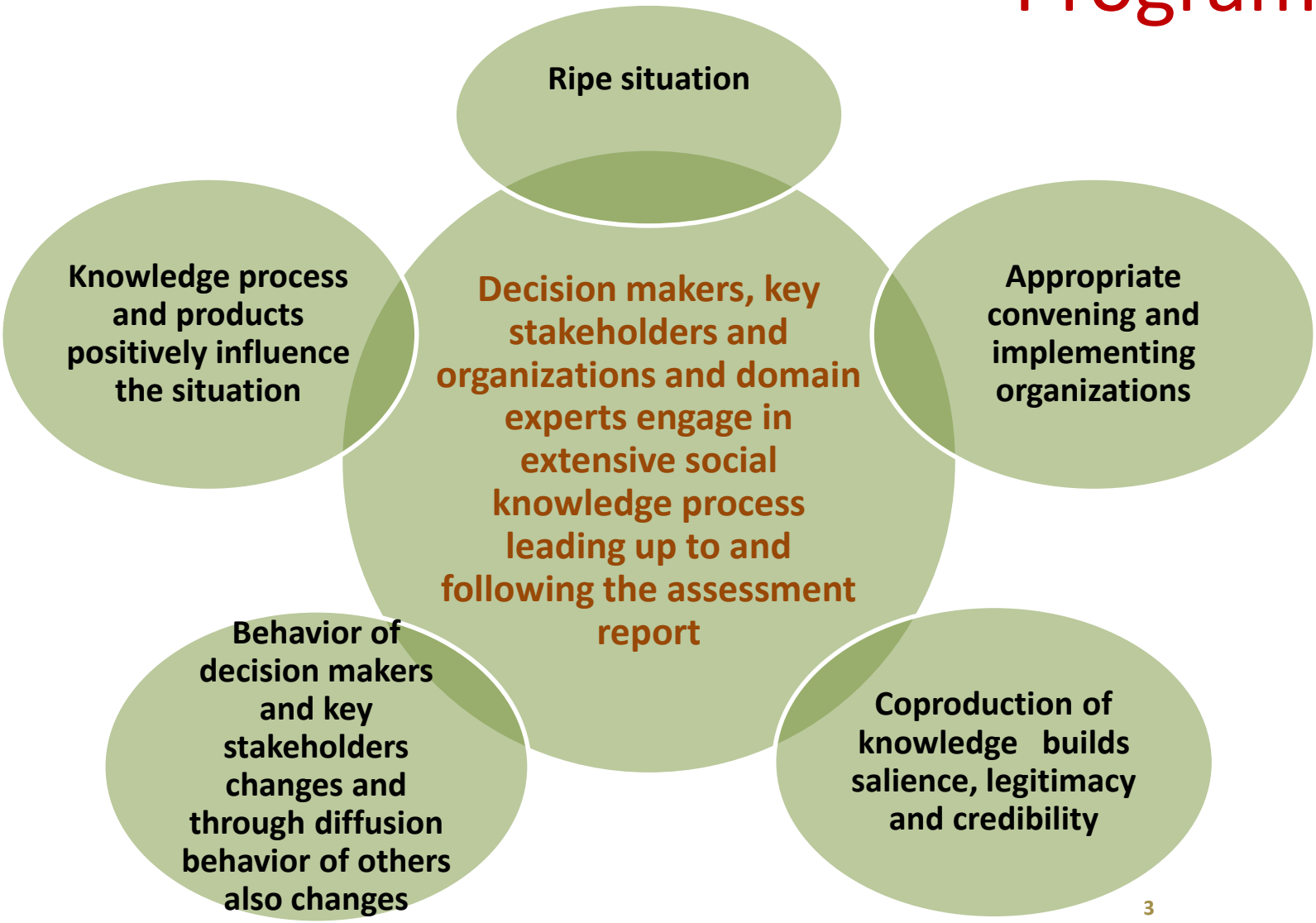
# Outline

1. Rapid Impact Evaluation and Use-seeking evaluation, briefly
2. Overview of three of new methods
3. Combining new methods into a use-seeking evaluation approach
4. Applications of new methods and use-seeking approach

# ToC for Packard Foundation Science Program



# Product vs. Use

Applied researchers tend to allocate majority of budget to rigor

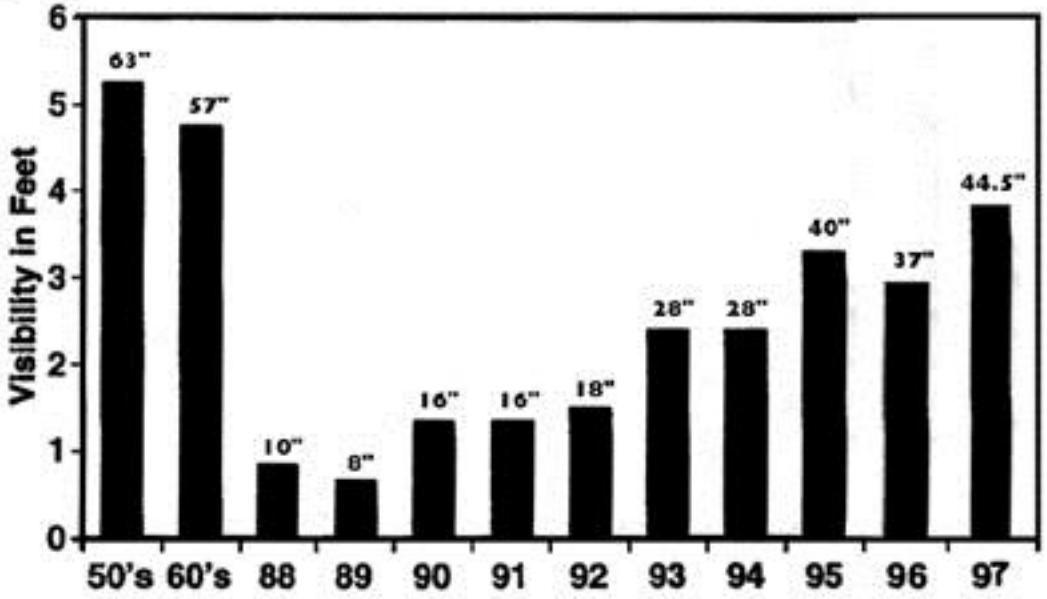
*I think I have a measure*
*That can't be beat*
*You just wade out in the river*
*And look down to see your feet.*
*From Tom Wisner poem* Bernie Fowler Day: A Guide to Wading in the Southern Maryland Waters.

Research on use should be spent

*Percentage of Budget Allocated*
*Science knowledge*

*Percentage of Bu*
*Knowle*

*An approximate answer to the right question is worth a good deal more than the exact answer to an approximate problem.* John W. Tukey




Source: Senator C. Bernard Fowler, 1992-1993 Chair of the Chesapeake Bay Commission; Kent Mountford, U.S. EPA Chesapeake Bay Program.

# Is Evaluation Serious about Use?

Evaluation in the US tends towards rigorous methods, away from evaluation questions that are salient to the public interest.

# Rapid Impact Evaluation (RIE)

- RIE is founded on several new evaluation methods that can be used individually or in combination and as part of mixed methods evaluations
- RIE embeds these methods in a use-seeking approach
- Most recent and current applications:
  - Mixed methods – Treasury Board of Canada pilot in three Departments
  - RIE – component of an ongoing GEF evaluation of programmatic approaches by the GEF
  - Earlier applications in US environmental agencies

# RIE Targets the Impact Gap

- Evaluating impacts in ex ante settings
- Evaluating impacts in data-poor settings
- Evaluating impacts in complex multi-system settings
- Evaluating impacts of smaller project settings

# RIE Has Three Phases

**I** Create the Program Summary

**II** Triangulate assessments of effects for program and alternative

**III** Analysis, verification and reporting

Working with key stakeholders to enumerate and describe:

- Program design and implementation
- Negotiated alternative(s)
- Direct effects
- Key stakeholders
- Time and location

Triangulate Measures (different experts and knowledge, same procedures)

- Key stakeholders (e.g. web survey)
- Panel of experts (e.g. facilitated workshop)
- Technical advisors (e.g. impact questions)

Key stakeholder assessments weighted

Synthesis and verification

- Synthesis of triangulated assessments
- Test internal validity and reliability
- Test external validity

Reporting

# Phase I

- Main output is the program summary which is the outline design of the RIE evaluation
- Main outcome is initiation of the evaluation process and engagement of interests in the process
  - Nested outcome – salience – interests contribute to all key elements in the design (identification of interests and appropriate representatives, and of effects, ToC, scenario based counterfactual
  - Nested outcome – legitimacy – perceptions of fairness and balance fostered by inclusive approach to Phase I that only ends once each has indicated that the summary is satisfactory
  - Nested outcome – right timing – solicit when evaluation results are needed and discuss/secure agreements from selected interests in communicating results

# Scenario-based Counterfactual

- Scenario-Based Counterfactuals are alternatives to the program that are efficacious, plausible, legal, feasible and which the interests involved assess as very likely
  - When designing an intervention several options are usually considered
  - These often include some that have been applied elsewhere
- Interests in the evaluation need to agree that the counterfactual is reasonable and plausible, even if not their top choice.

# REI metrics to estimate impacts?

- The main sources of variation for each outcome are:
  - Probability of it occurring
  - Magnitude of the change
- Importance of relative weights of outcomes and impacts is also important
- *An approximate answer to the right question is worth a good deal more than the exact answer to an approximate problem.* John W. Tukey

# Interest-based concept of stakeholders

- This is a third element of RIE that I think should be universal in evaluation.
- Sometimes we see evaluations where the responses of stakeholders are combined in a mean or other statistic
- And sometimes we see unbalanced reach to different stakeholders
  - Program stakeholders are often privileged.
- Doing either creates bias
- Focusing on interests helps flag the risk

# Treasury Board of Canada Pilots

- RIE was piloted for consideration of inclusion as a recommended evaluation approach under the National Evaluation Policy
- Pilot sponsored by the Center of Excellence for Evaluation in Treasury Board of Canada
- Pilots in three departments:
  - Natural Resources Canada
  - Public Health Agency of Canada and Health Canada / Government of Canada
  - Public Safety Canada

# Treasury Board of Canada Pilots

| | RIE | Pilot |
|---|---|---|
| ***Main sources of information for an evaluative understanding of program*** | | |
| Interview representatives of all key interests | | |
| Contributions of technical advisor | | |
| Research literature/subject matter knowledge | | |
| ***Important elements for evaluation approach*** | | |
| Counterfactual | | |
| Theory of Change | | |
| ***Expert assessments of impacts*** | | |
| Program stakeholder group (program interests) | | |
| Subject matter experts | | |
| Technical advisor(s) | | |
| ***Metrics*** | | |
| Workshop process | | |
| Probability | | |
| Magnitude | | |
| Importance (weights and priorities) | | |
| ***Results*** | | |
| Assessment of change in impacts from program | | |
| Reliable responses | | |
| Triangulated assessments | | |

# Main challenges in Pilots

- Learning curve
  - A more focused learning through doing and introduction to RIE would have been beneficial
- Adapting RIE to fit established procedures and namings
  - RIE intervention summary is very different from the usual evaluation summary that briefs and seeks authorisation for the evaluation
- Small external contracts are challenging
  - For technical advisors, workshops
- Time to do things differently

# To What Extent was RIE Implemented?

| | RIE | Pilot |
|---|---|---|
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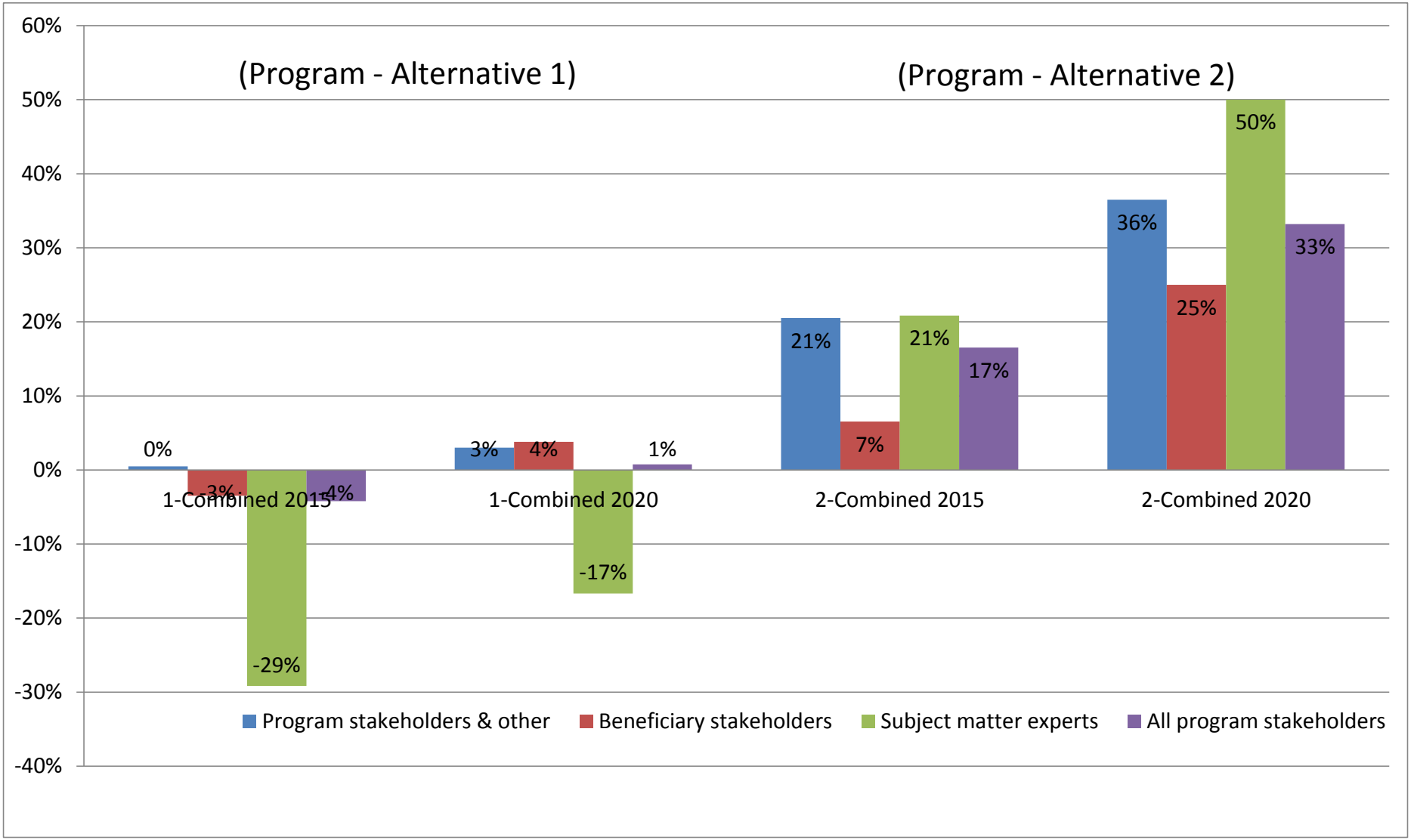
| Reliable responses | | |
| Triangulated assessments | | |

| Core/done fully | Not always core/done somewhat | Not done |
|---|---|---|

# What worked?

- RIE counterfactal and metrics as part of mixed methods approach
  - Generated impact measures which would not otherwise have happened
  - Results were positively received, regarded as legitimate and credible
  - Results tested very positively for reliability
    - Reliability tested using Cronbach's Alpha where values >0.7 are considered acceptable levels of internal reliability, >0.8 good levels, >0.9 excellent levels
    - *Our calculations have alpha values of 0.91. 0.96 and 0.96 for the three programs*
    - Limited information provides some support for external validity

# Metrics generated useful outputs



# RIE in Current GEF Evaluation

- Evaluation of programmatic approaches in the GEF
- Led by GEF IEO
- Team leader started with a good grasp and interest in RIE
- Collaborate in applying RIE
- Still in Phase I
- Similar challenges to TBS pilot but aware of these challenges in advance and GEF better able to address them

# Acknowledgements


Funders

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European Environment Agency