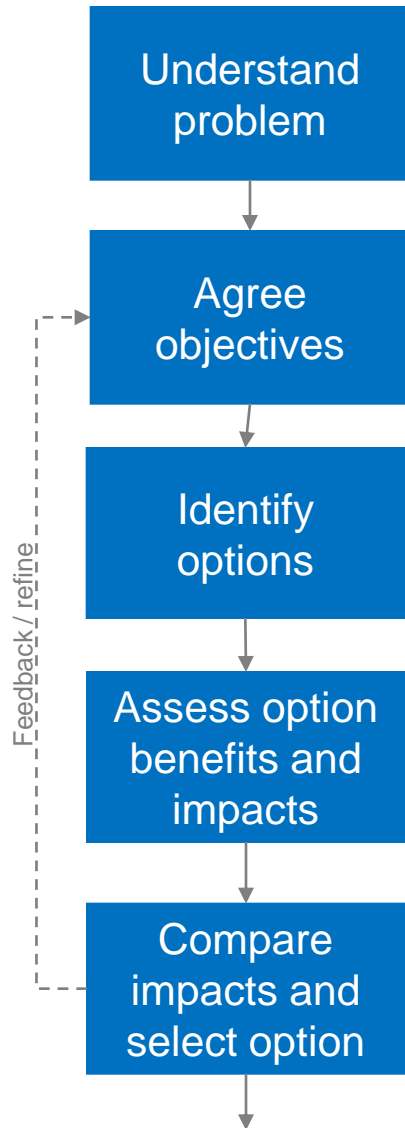


How flood option choice decisions are made in the Environment Agency

David Cotterell
Environment Agency
FCRM Investment & Portfolio
24th May 2016

The role of flood appraisals and our decision-making



Appraisal provides a framework to investigate problems, agree objectives and gain the information to make informed decisions.

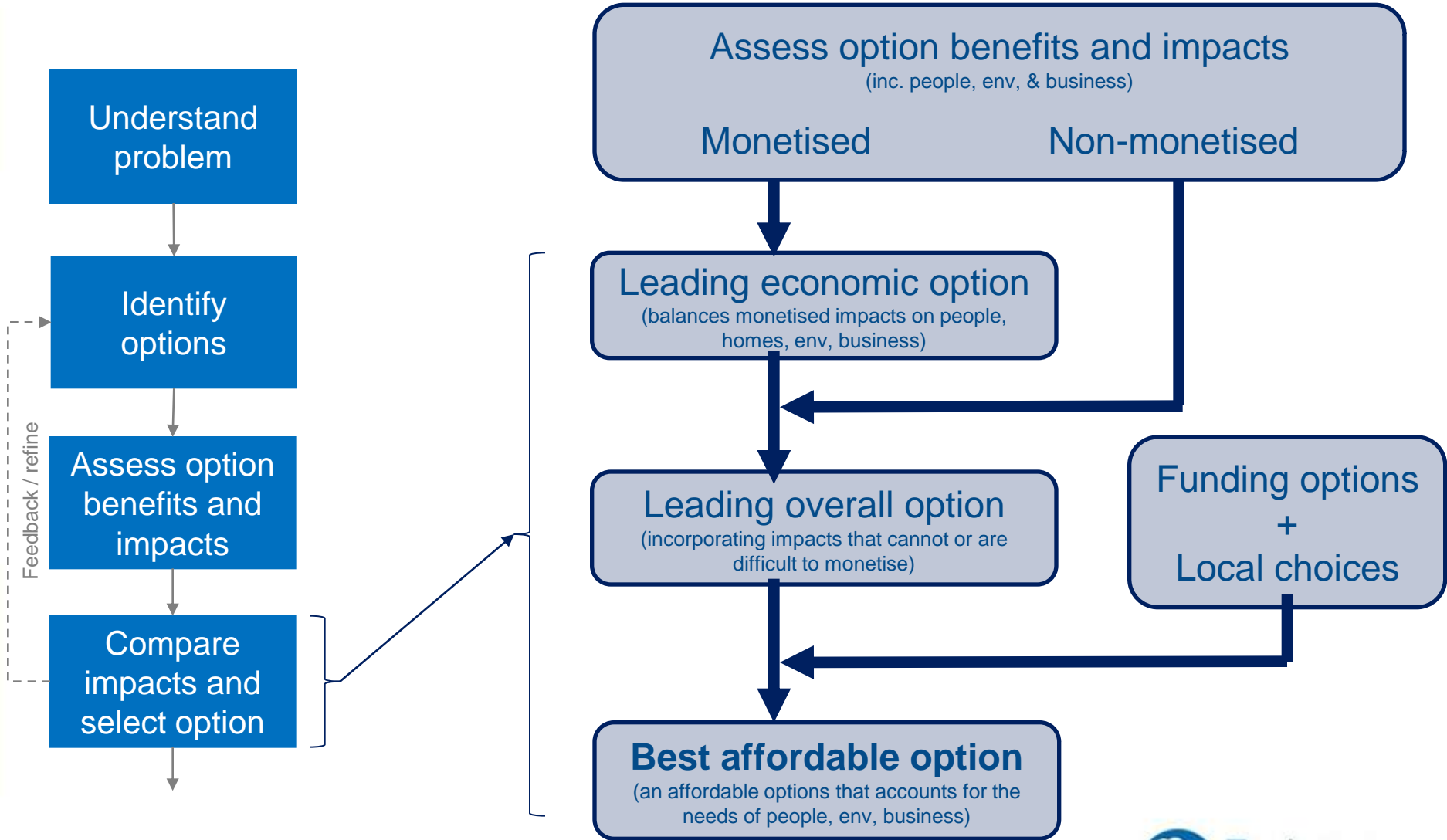
Our decisions should:

- *reduce flood risk to households, business and the environment and;*
- *deliver the best value for money, ensuring the next pound cannot deliver more benefit elsewhere.*

Relevant Defra and Environment Agency Guidance:

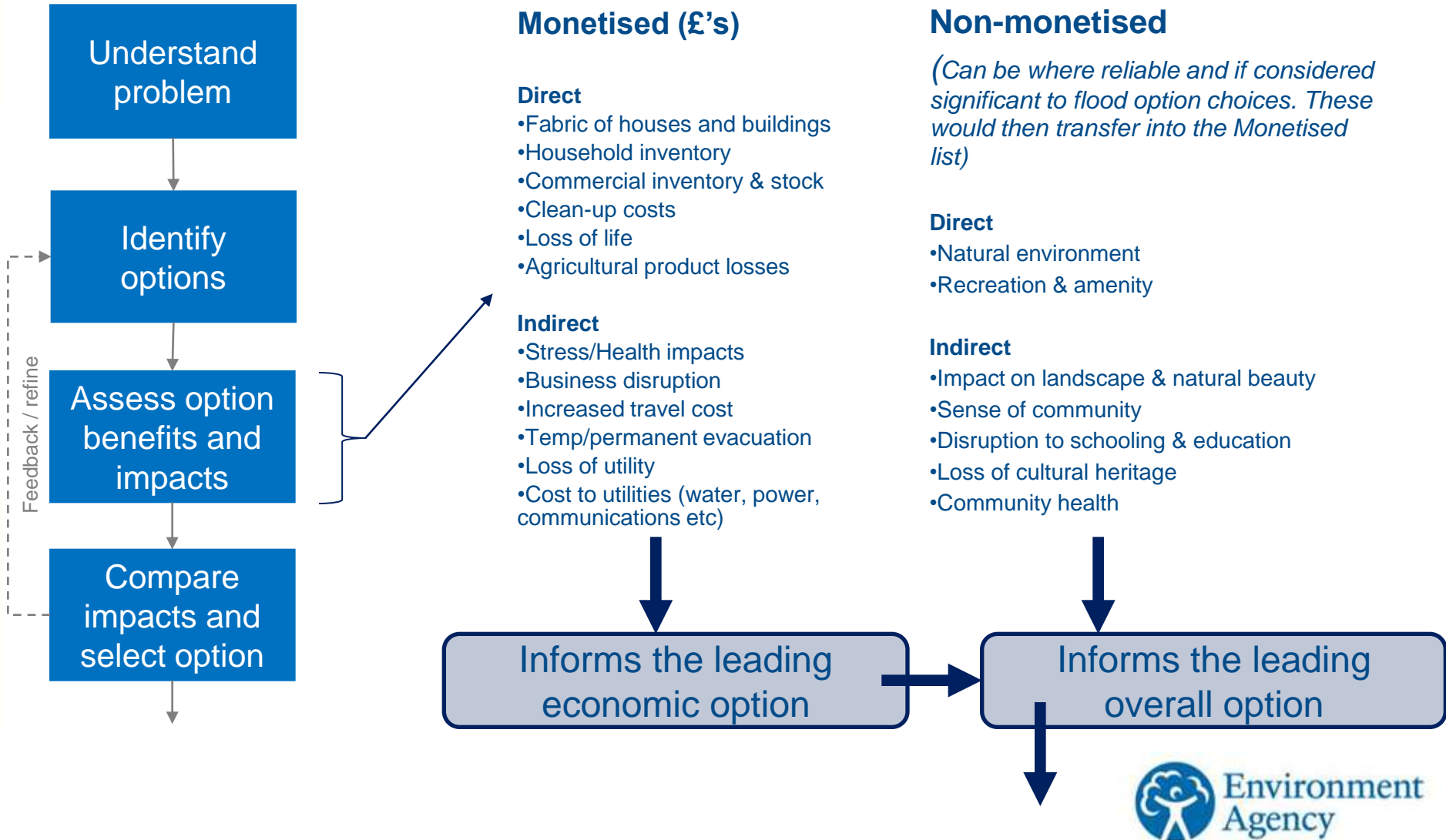
- Defra Policy Statement: Appraisal of FCERM [here](#)
- Defra Flood & Coastal Resilience Partnership Funding [here](#)
- EA FCERM Appraisal Guidance [here](#)
- EA Principles for Partnership Funding [here](#)

Approach to flood options choice



Approach to flood options choice

Typical benefits and impacts



Approach to flood options choice

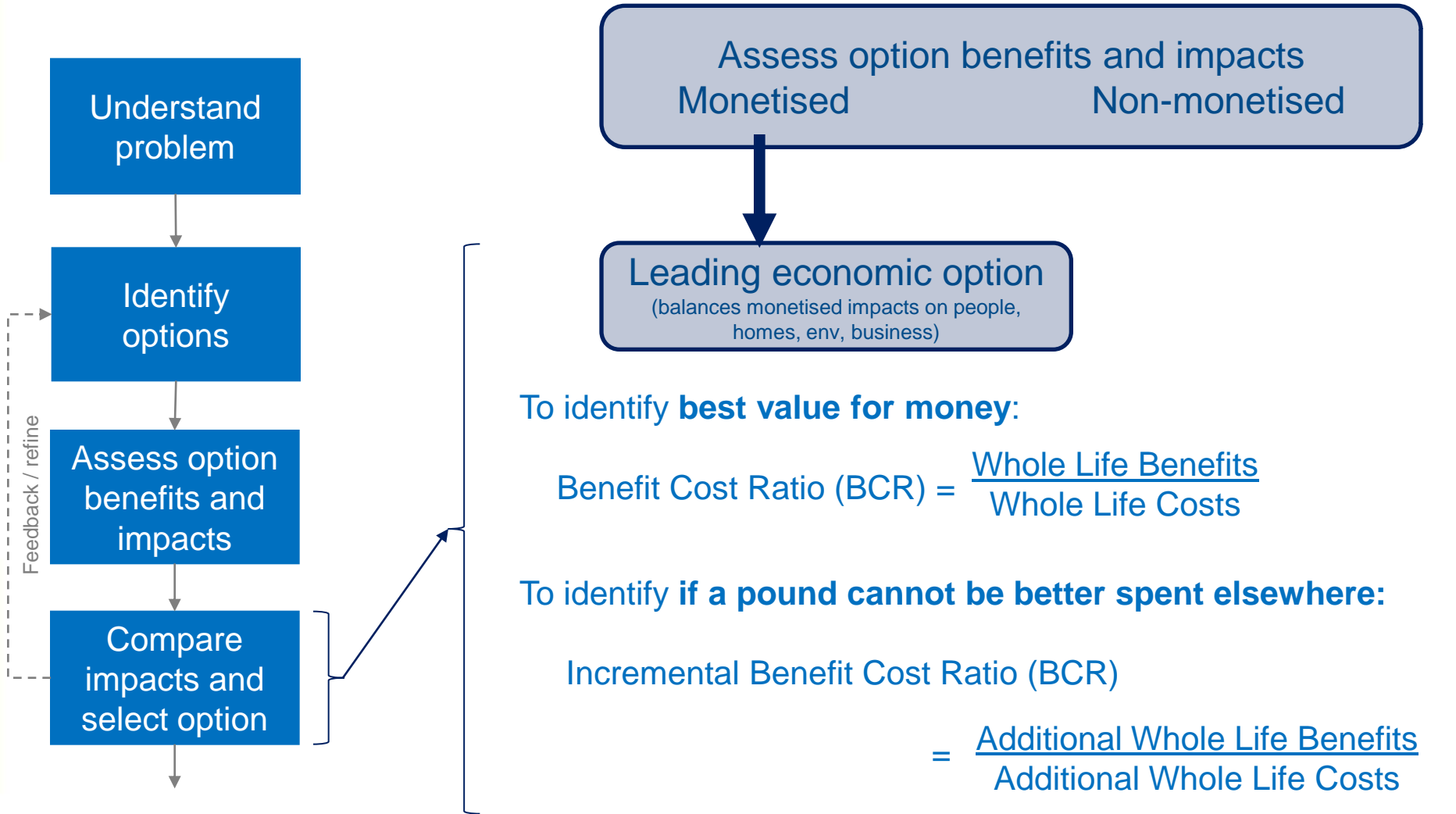


Illustration of the 'leading economic option'

Option	PV Costs (£m)	PV Benefit (£m)	abcr	ibcr	ibcr Threshold
Do Nothing	-	-	-	-	-
Do Minimum (10% AEP)	4	75	18.8	-	-
Raise Defences (5% AEP)	8	83	10.4	2.0	>1.0
Raise Defences (2% AEP)	11	93	8.5	3.4	>1.0
Raise Defences (1.33% AEP)	12	96	8.0	2.9	>1.0
Raise Defences (1% AEP)	14	104	7.4	4.0	>3.0
Raise Defences (0.5% AEP)	20	110	5.5	1.0	>3.0
Raise Defences (0.33% AEP)	23	111	4.8	0.3	>5.0

Best value for money but risk to community remains very significant

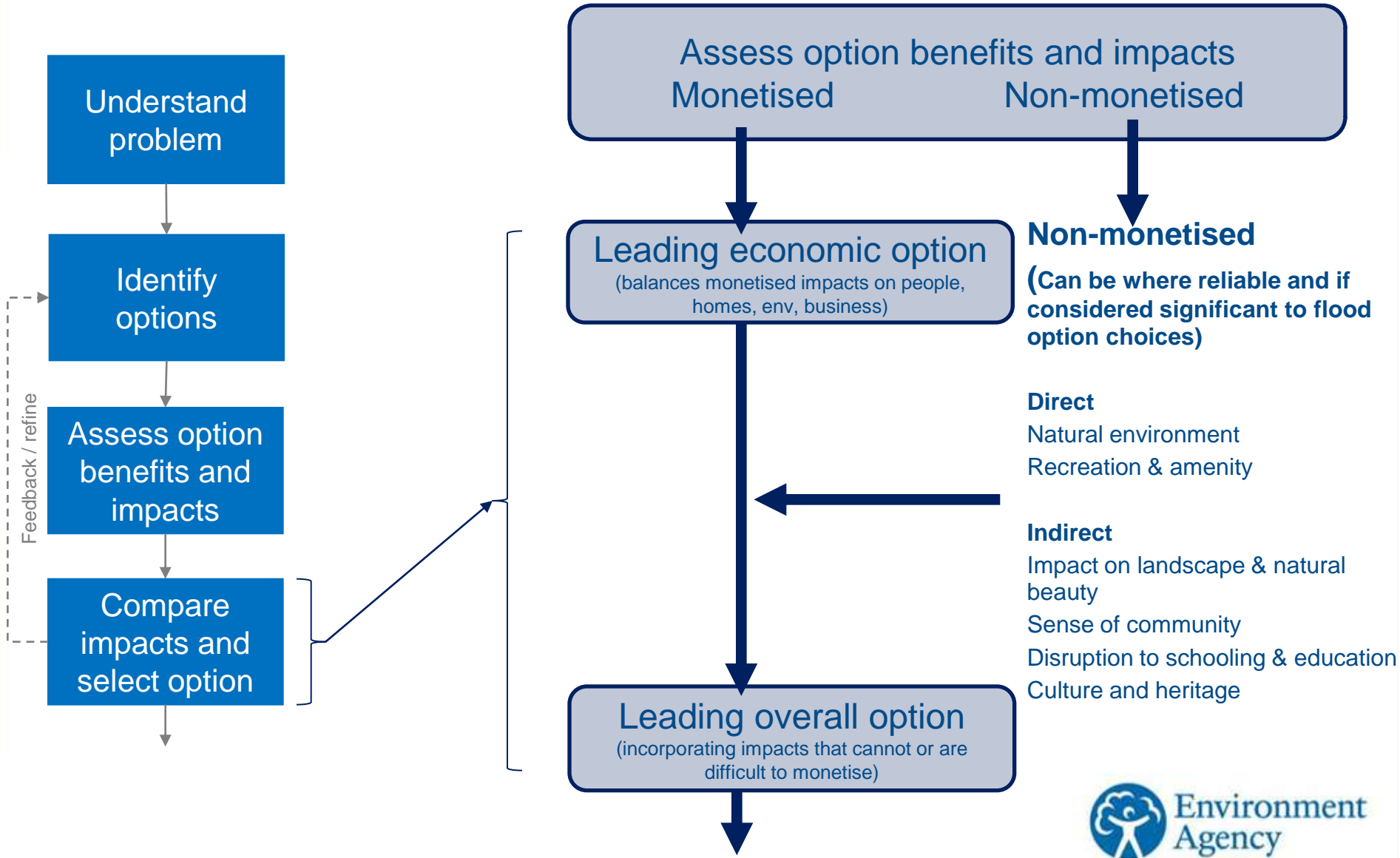
Risk reducing, ibcr above threshold and abcr good

Leading economic option

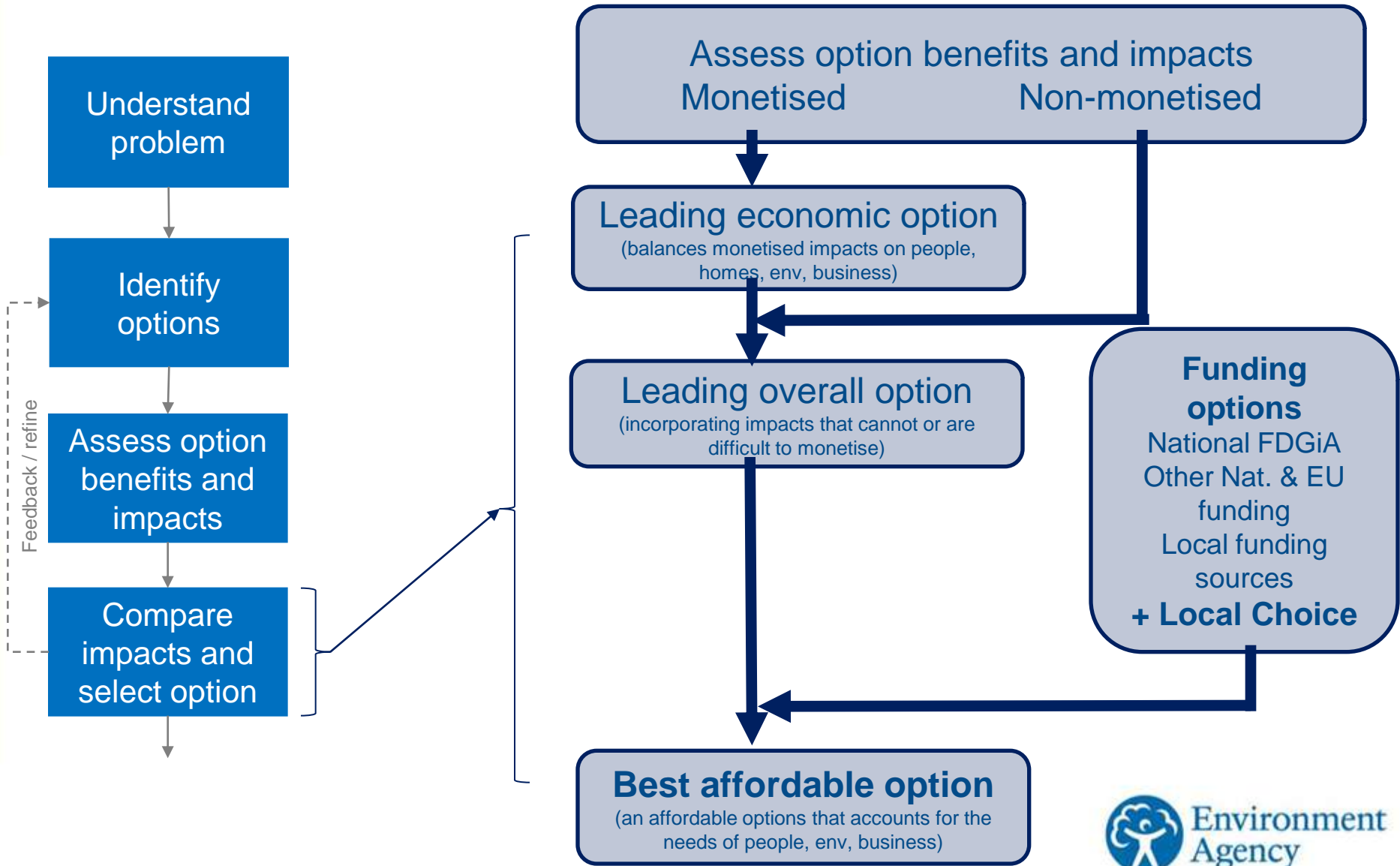
Additional costs for options would be much better spent elsewhere in programme

Use of iBCR more widely distributes limited national funds supporting delivery of effective risk reduction for more communities and avoids 'gold-plating' a fewer number of schemes.

Approach to flood options choice



Approach to flood options choice



Approach to flood options choice

In summary the approach is a mix of:

- Impacts on people, homes, env and business
- Community needs for effective risk reduction
- Wider (non-flood risk) benefits and objectives
- Value for money
- Economics
- Affordability
- Needs of local communities, national taxpayers and other funders



Thank you

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