RISK NZ

RiskNZ gratefully acknowledges the support of our premier sponsor

We also thank our hosts for this event:
Beca, Trustpower, KPMG, Powerco, Christchurch City Council, 3R Group Ltd, Rinnai NZ Ltd, Mighty River Power

Developing and Implementing Effective Streamlined Project Risk Processes

Nigel Toms
MSc ACMA MIRM

Corporate Risk Manager
Watercare Services Ltd

Presentation Objectives

- Engaging project managers in the development process
- Key inclusions in the project risk processes and supporting templates to make them more user friendly and effective
- Implementing new risk processes in organisations

Scottish Parliament Building

Planned Completion 2001 – Completed 2004

Estimate £41M - Actual Cost **£431M**

Sino Iron Project Western Australia

Planned Completion 2009
Complete **2014?**

Estimate US$ 2.5BN
Actual Cost US$???

Main Reasons Why Project Risk Management Failed

Projects did not get the right people involved in the project risk process

A structured and comprehensive project risk management approach was not adopted

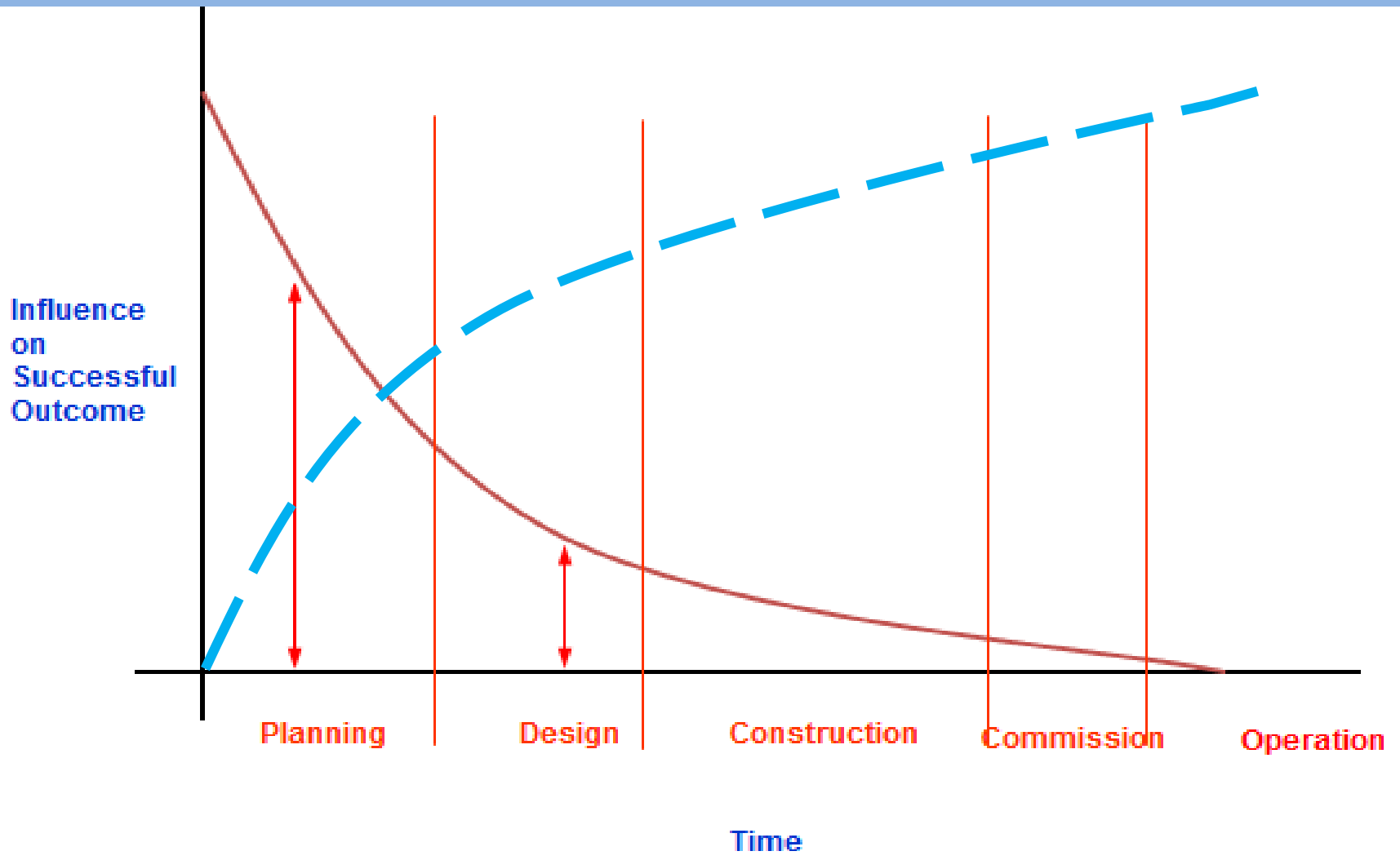
In 30% of projects, key risks were first identified after contract signing

Blake Dawson Report – Scope for Improvement 2011

When to commence Project Risk Management

Project Risk Management should be initiated at the start of a project and the process should continue throughout the life of the project

Where Project Risk Management has the most benefits



Project Risk Fundamentals

Support Management of the Project

OR

Provide Project Assurance

Your Choice!!!!!

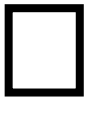
Engaging Project Managers

Ask for volunteers – all stakeholder groups

Form a Project Risk Working Group (Senior management – peer review)

Map the current project management process

Map the current project risk process



Making the Risk Group Work

Risk process – start with a clean sheet

Risk Manager does the heavy lifting

Working group supports and reviews

For each project stage ask:

How does risk management assist successful progression of the project ???

Challenge – keep it streamlined

Approach

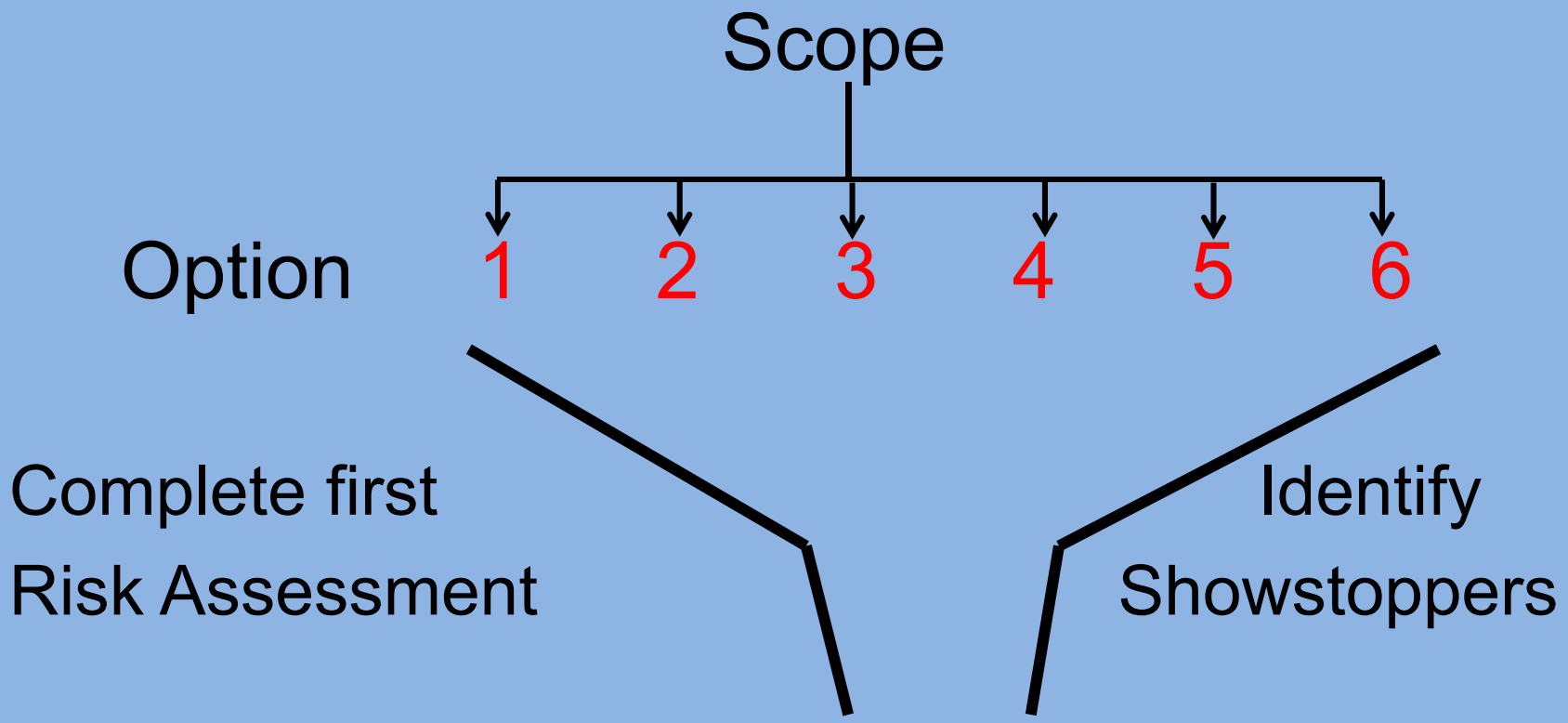
Complete risk processes first

Then the supporting templates/requirements

Limit supporting instructions - **training** is better

Complete a **presentation check**

Decide Options – First Assessment



Decide Project Risk Deliverables

Identify Options

- Complete first risk workshop
- Identify showstoppers
- Identify top risks for all viable options
- Separate risk register for each option**?**

Select Best Option

- How to represent options risk in IA
- How to represent risk in the Capex

Complete Capex and Investment Appraisal

Determining Project Scope/Objective

Continually changing the project scope during project development increases the risk

Time spent Peer Reviewing the scope always benefits the project in the longer term

Significant increases in project delivery schedules often indicate scope additions/changes

Assurance supporting risk

SCHEDULE COMPLETION DATE REVIEW

Project Phase	Jun 14	Sep 14	Dec 14
Planning	Jun 14	Sep 14	Commenced
Design	Aug 14	Nov 14	Mar 15
Construction	Nov 14	Feb 15	May 15
Commission	Nov 15	Nov 15	Dec 15
Operation	Dec 15	Dec 15	Dec 15

Key Decision:
Same Risk Process For All Projects

One size does <u>not</u> fit all

Standard process – most projects

Enhanced process – major/complex projects

Provide simple decision matrix to guide PMs

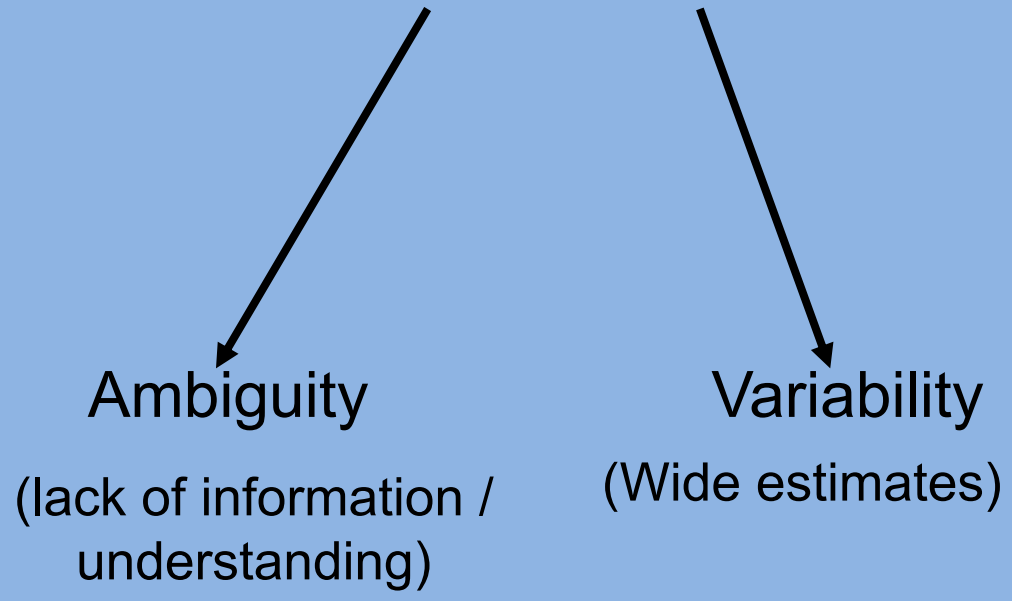
PROJECT RISK GOVERNANCE ASSESSMENT SHEET

CRITERIA	PROJECT SCORING	SCORE
Project Value	Less than $1M	1
	Less than $10M	3
	Greater than $10M	7
Constructability	Standard construction methodology	1
	Standard methodology, limited innovation	3
	Non-standard methodology, high levels of innovation	7
Business Complexity	No impact on other business areas	1
	Limited impact on other business areas	3
	High impact on other business areas	7
Impact on External Stakeholders	No impact on community and other external groups	1
	Limited and manageable impact	3
	High impact	7

Elements of Risk Management

Threats and Opportunities + Estimating

Uncertainty



Are Risks, Issues and Opportunities recorded on the same Register ?

NO!!! - Causes confusion

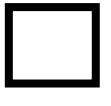
Provide **separate** registers to record the different sets of information.

The Toms Project Opportunity (aka **10:1**) Rule

10 Risks : 1 Opportunity

(Threats)

For every **10** risks you will be lucky to get **1** opportunity and the benefits of this opportunity will only be realised if it is acted on in the **<u>early stages</u>** of the project



Estimating/Uncertainty Format

WORK OR COST BREAKDOWN STRUCTURE	BASIS OF ESTIMATION	MINIMUM COST ESTIMATE $K	MOST LIKELY COST ESTIMATE $K	MAXIMUM COST ESTIMATE $K	LIKELIHOOD OF INCREASE ABOVE MOST LIKELY COST	REASON FOR COST INCREASE	COST ADDITION $K	PROPOSED COST ESTIMATE $K

Risk Register Format

Risk No.	Overall Rating	Probability	Consequence	Risk Title *	Project Phase	Risk Cause *	Risk Consequence *	Risk Treatment	Mitigation Action(s) *	Risk Owner	Due Date
	High	High	Medium					Treat			

Streamlined Risk Register

Project managers prefer simplicity

Don’t add information just because it is available

Apply the Toms Risk Register Test:
Print on A3 / Font 10 / No Scaling
Not clear/easy to read = **too many columns**

Risk Identification Techniques

There are a number of techniques that allow a Project Team to identify risks to their project:-

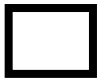
Risk Workshops - Group Thinking/Brainstorming

Previous experience / Structured interviews

Analysis of the project Work Breakdown Structure

Risk Identification Prompt Lists – **Danger !!!**

Is Longer Better ???



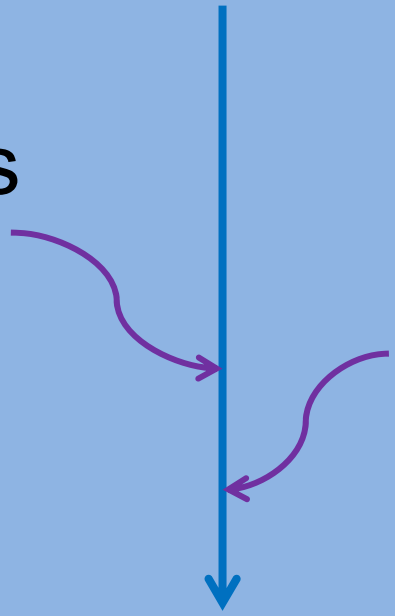
Creating the Risk Register

Complete the Risk Workshop

(Engage stakeholders & increase understanding)

Similar projects

Risk Prompt Lists



Project Risk Register

Risk Assessment Criteria

Use one corporate set of risk assessment criteria for all projects regardless of size /complexity

OR

Develop a set of specific risk assessment criteria which are appropriate for the size, scale and complexity of the project

Risk Assessment Criteria

RATING	PROBABILITY %	CONSEQUENCE	
		Cost $K	Time Weeks
VERY HIGH	> 75	> 200	> 8
HIGH	50 - 75	100 - 200	4 - 8
MEDIUM	20 - 50	50 - 99	2 - 4
LOW	5 - 20	10 - 49	1 - 2
VERY LOW	< 5	< 10	< 1

Risk Assessment Criteria

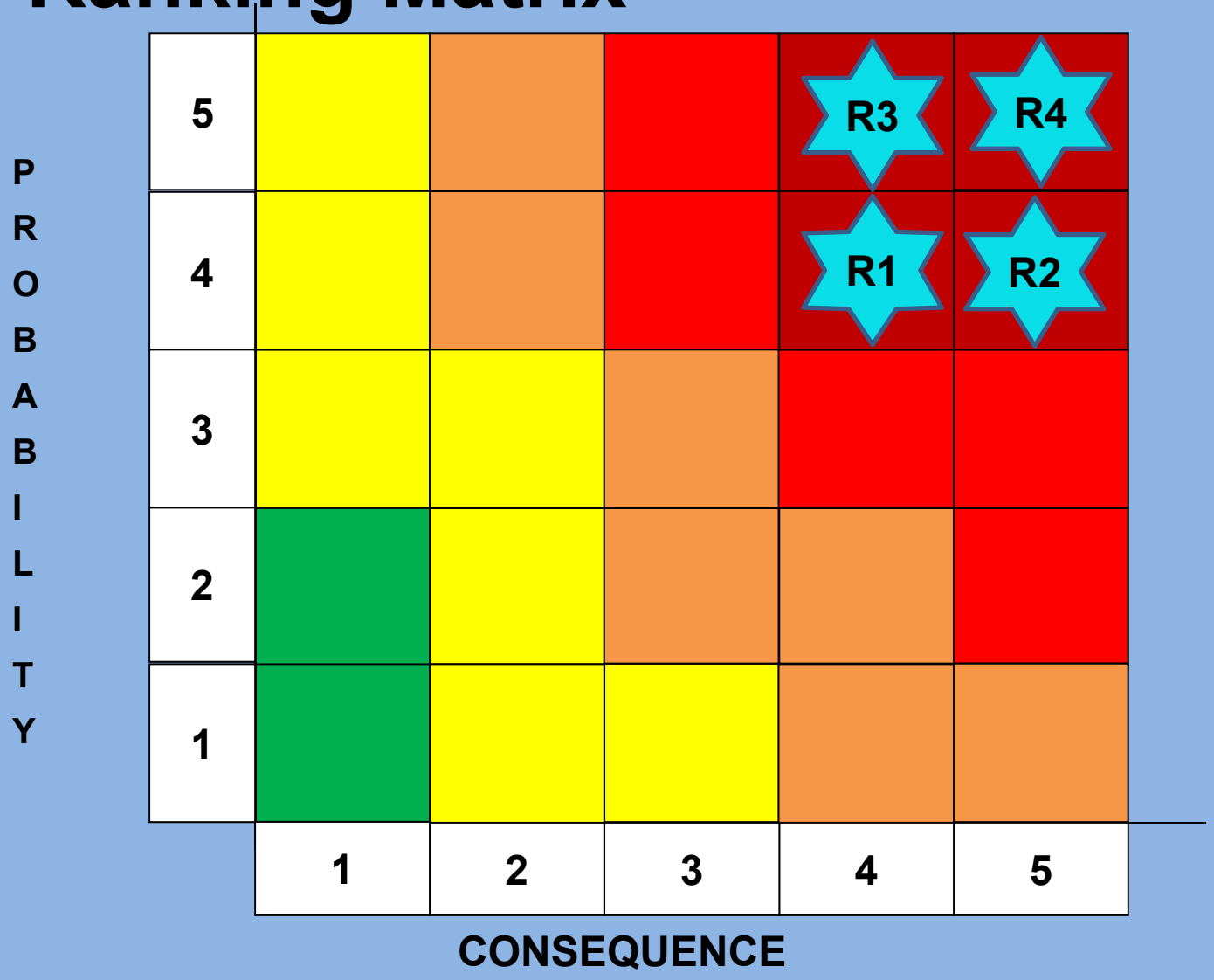
Develop a set of specific risk assessment criteria so the Project Manager understands the relevance

Use the **same** criteria to assess **all** project risks

Assessment criteria can be **re-adjusted** if required to fit the project

Plot the risks to decide priority order

Ranking Matrix



Selecting a Risk Owner

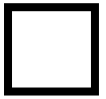
Having identified and defined the risks to a project, a Risk Owner must be identified to manage each risk.

This must be the person best placed to manage.

The Project Manager or Project Sponsor do **not** own all the risks

Mitigation Actions In Manageable Pieces

Risk Mitigation Actions	Review / Completion Date
Complete ground survey of alternate routes	June 2014
Assess survey results	July 2014
Calculate the cost and time impact of additional granite identified	September 2014
Incorporate in trenching methodology, work breakdown structure and schedule for the project	November 2014



Risk Mitigation

Pre - contract risk mitigation is **under utilised**

Projects can suffer delays as the pre – mitigation position is unacceptable

Contractors sometimes avoid completion of mitigation actions unless pressed

Why Mitigation Actions Not Completed

No risk owner

Contingency approach used

Not mitigating makes contractors higher profits

Ensuring Early Mitigation

Mitigation identified – planning/design

Surveys completed – level of risk quantified

Surveys included – tender information

Risk ownership – agreed with contractor

Progress monitored – tension maintained

Risk Allocation at Contract Award

Risk Ownership as defined on the **Project Risk Register**

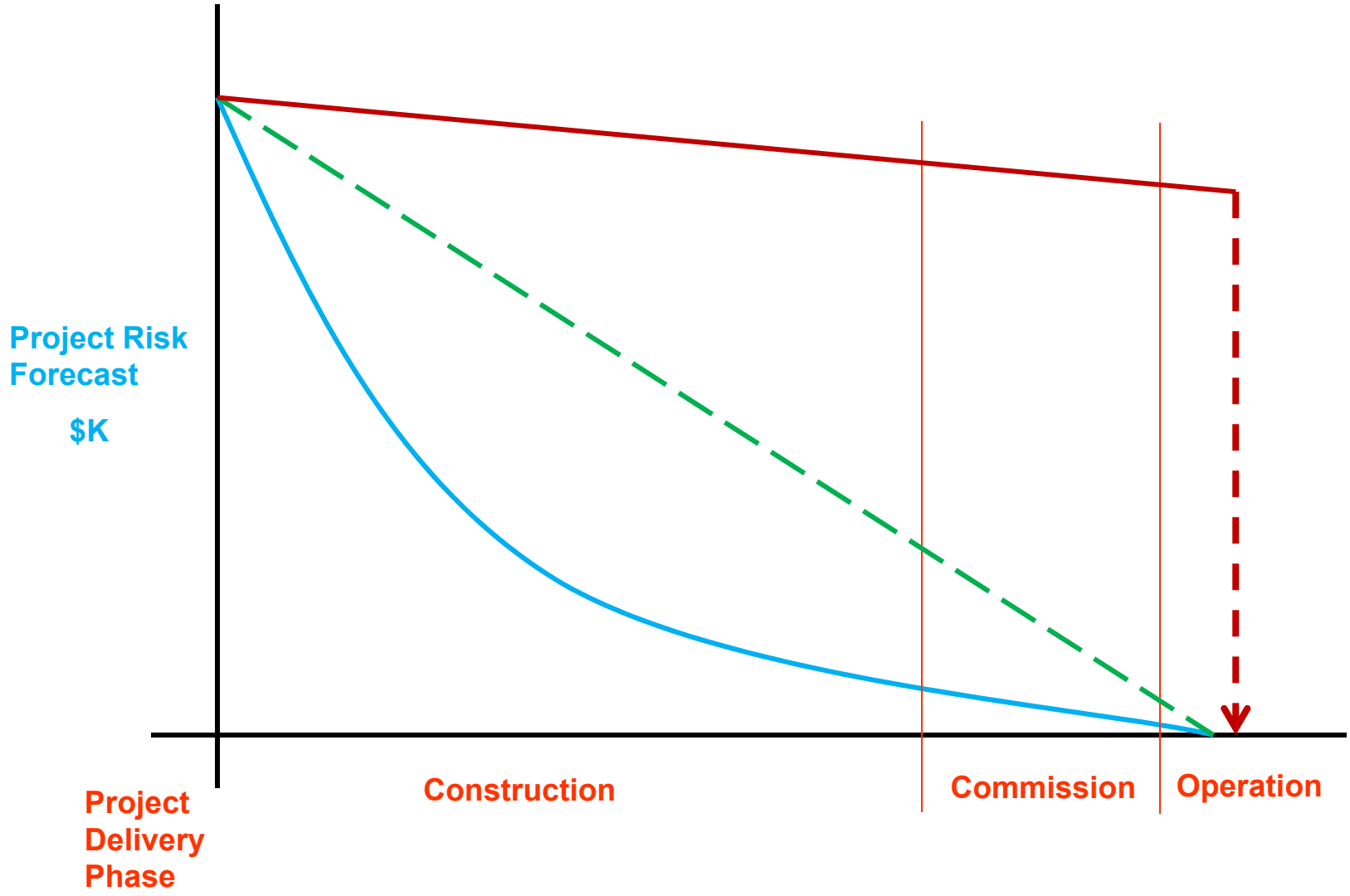
Versus

Risk ownership as defined under the **Contract Terms and Conditions**

If they are **not** the same = Terms and Conditions have **precedence**

Ownership must be **clear** to all

Likely Financial Project Risk Profile During Delivery



Managing the Implementation

Remove areas of contention:

What to do about **existing projects**

Remove potential for confusion:

Delete old risk processes, templates and instructions from systems and libraries

Implementation - What Comes First

Issue of the new processes, templates and Instructions

OR

Delivery of accompanying training

You Cannot Win

You Are Damned Either Way !!

Possible Approach

Basic project risk training for all relevant staff

Publish the new processes and templates

Create scenario based training modules

Lead risk workshops and reviews

Train managers, consultants and contractors

Questions

ntoms@water.co.nz