

# Risk Management Best Practices and Case Studies

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# Risk Management Best Practices and Case Studies:

*The Value of Sharing Your Experiences  
and Business Knowledge*

Kurt Fraese, L.G.

# Bio and Agenda

## Kurt Fraese, LG

- ❑ President, Fraese and Associates, LLC
- ❑ Former CEO/President GeoEngineers, Inc. (retired 2017)
- ❑ Former GBA President
- ❑ 30 years in geoprofessional practice

## Presentation Topics

- ❑ Value of Sharing Case Studies
- ❑ PM Perspective
- ❑ CEO Perspective
- ❑ Lessons Learned “Finding the Holes in Your Bucket”

# Value Proposition

- ❑ Sharing lessons learned between peers, is a key risk management and loss prevention component.
- ❑ There is more to be gained than there is to be lost.
- ❑ You will find multiple catalysts for strengthening relationships, adaptation, growth and profit.



# Case Studies

- ❑ A centerpiece of GBA
- ❑ Can be based on a near-miss story
- ❑ Often are about negligence claims
- ❑ GBA can help you write them
- ❑ We need more (new) Case Studies

# Case Study: *PM Perspective*

- ❑ PM for environmental due diligence study
- ❑ Site/remedial assessment for major retailer
- ❑ Remedial cost estimate = environmental \$ holdback at purchase for future site remediation
- ❑ Actual remedial costs substantially exceeded the original cost estimate
- ❑ \$2m lawsuit filed against our firm for cost recovery
- ❑ Would my career survive?

# Case Study: *PM Perspective*

- ❑ Contract had limitation of liability (LOL) Clause (\$50k or amount of fees)
- ❑ Won a summary judgment upholding LOL
- ❑ Settled for \$55k
- ❑ Required by firm to present case study to national audience of peers (GBA)
- ❑ Became involved in GBA
- ❑ Established valuable relationship with legal team
- ❑ Eventually won the client back

# Case Study: *CEO Perspective*

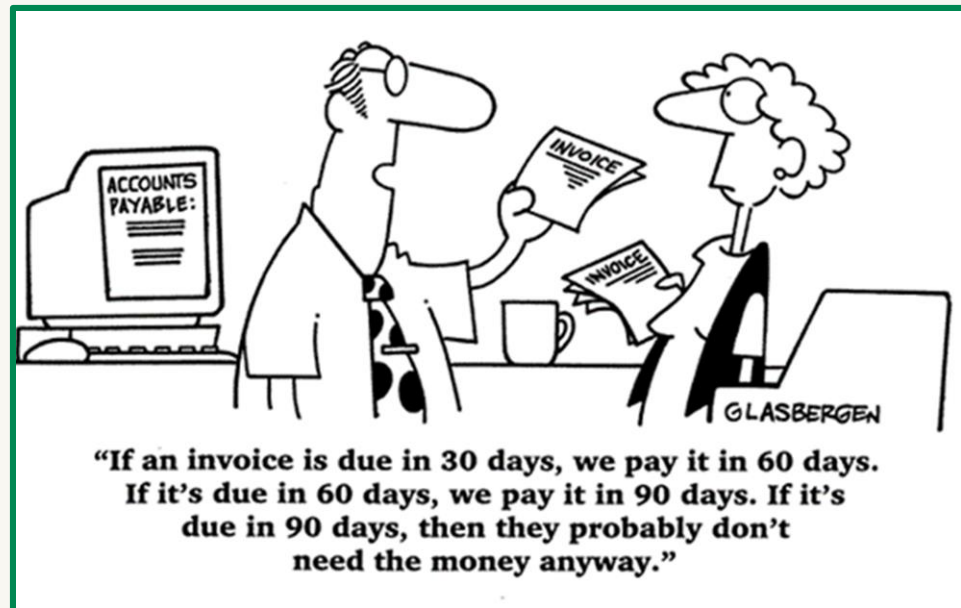
- ❑ Golf course housing development
- ❑ Residential lots with steep slopes
- ❑ Completed slope stability analysis/design





# Case Study: *CEO Perspective*

- ❑ Slope stabilization required costly mitigation
- ❑ Underfunded development plans caused other issues
- ❑ Client stopped paying our invoices: \$80k owed
- ❑ We leased the property and were sued



# Case Study: CEO Perspective

- ☐ Client selection and relationship is critical
- ☐ Economic evaluation of marginally viable sites: Go/No Go
- ☐ Evaluate credit rating/background check of a new client
- ☐ Get retainers/payment up front to reduce payment risks
- ☐ Carefully consider property lien risks
- ☐ Closely monitor legal costs in a lien action.
- ☐ Verbal and written promises to pay bills may be worthless.
- ☐ Legal expertise varies depending on the key issues.
- ☐ How far should you go to secure payment and justice?
- ☐ It cost us \$675k (labor and legal) to recover \$275k

# Key: *Find Holes in Your Bucket*

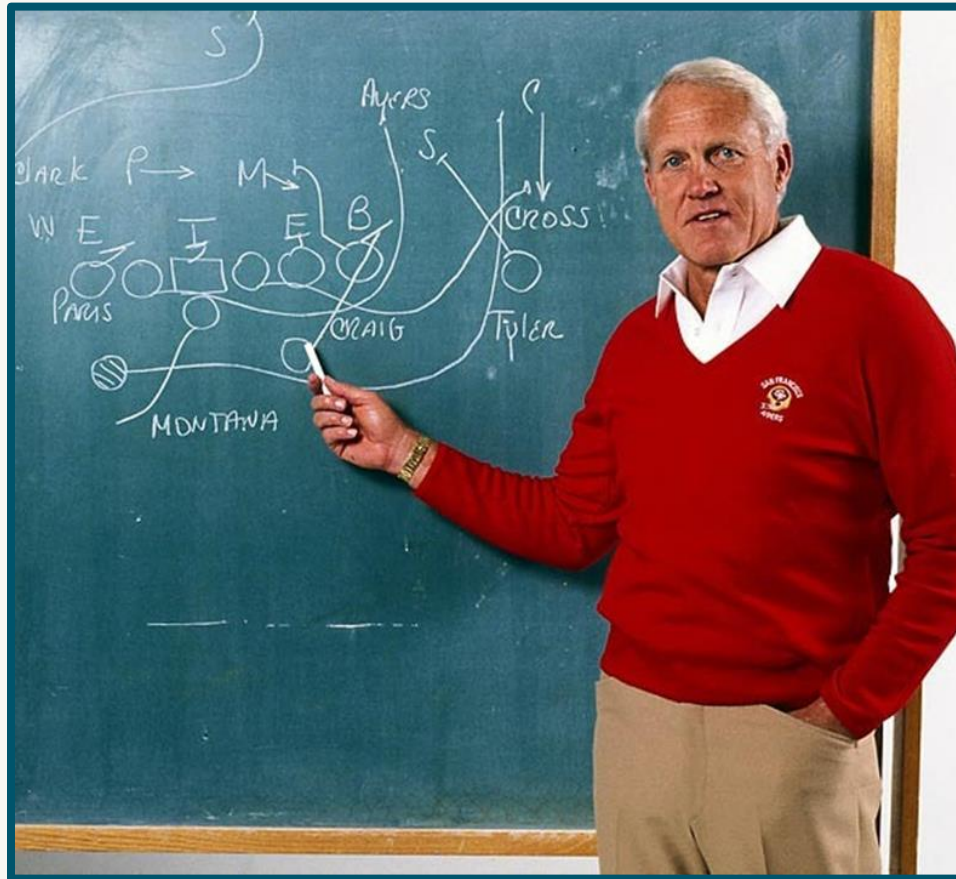


- Professional Liability Claims
- Misuse of Email
- Poor Project Management
- Unfavorable Contract Terms
- Personnel Changes
- Missed Deadlines
- Rushing
- Quality Control Short Cuts
- Communication Issues
- Unrealistic Budget Estimates
- Client/Project Not Screened
- Minimal Project Planning
- Change Order Avoidance
- Lack of Documentation
- Eating Time
- Bad Writing

# Other Sharing Avenues

- ☐ Strategic Partnership
- ☐ Public Testimony
- ☐ Elected Office
- ☐ Standard of Care Testimonials
- ☐ Peer Review
- ☐ Be a Catalyst and Convenor

# Confidence Not Paranoia



# Project Risk Management: Lessons Learned

John A. Buchheit, PE, PMI-RMP

# Bio and Agenda

## John Buchheit, PE, PMI-RMP

- ❑ Senior Vice President w/ Gannett Fleming, Inc.
- ❑ 30 years in design (Bridge), project management, and operations leadership roles
- ❑ Served as the Corporate Risk Officer since 2012

## Presentation Topics

- ❑ Project Risk Management: Need and Benefits
- ❑ Mechanics
- ❑ Lessons Learned

# PROJECT RISK MANAGEMENT

## Need and Benefits



# Why bother with this?

- ❑ Many risk management programs rise from the ashes of one (or a string) of bad projects
  - Failure traces back to having no controls in place to manage uncertainty



- ❑ In extreme cases such as a “shock loss” event establishment may be necessary to restore affordable Professional Liability coverage

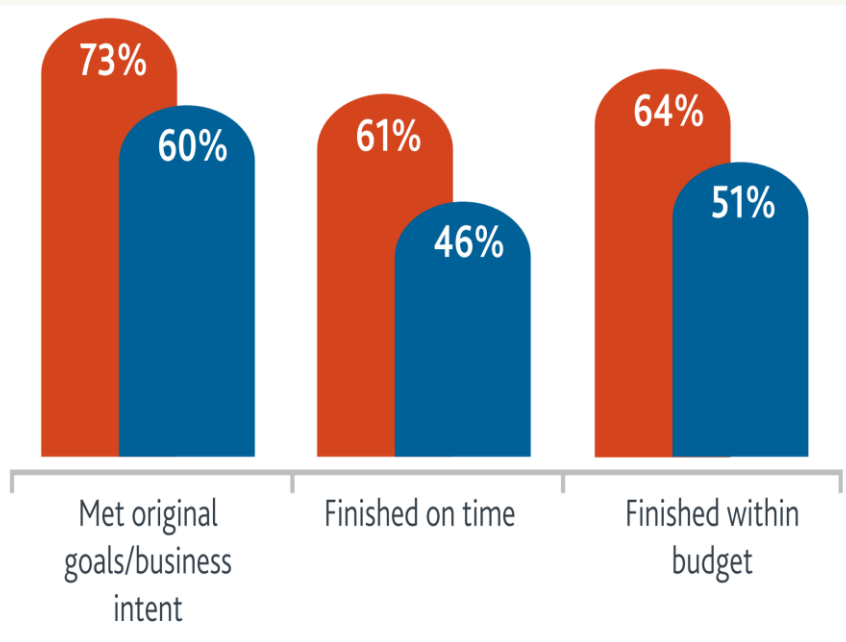
# There are multiple benefits



- ❑ **A well-executed and maintained project risk program provides:**
  - Increased probability in meeting project objectives – especially budget and schedule
  - Reduced claim liability
  - Close link with Quality Management Systems; especially those under ISO 9001-2015 compliance
  - Improved communication between Project Managers and their Legal / Insurance departments
  - More visibility and transparency to Top Management for informed decision making

# Evidence from other sources

Anecdotal Reasons 

Any Empirical Data? 



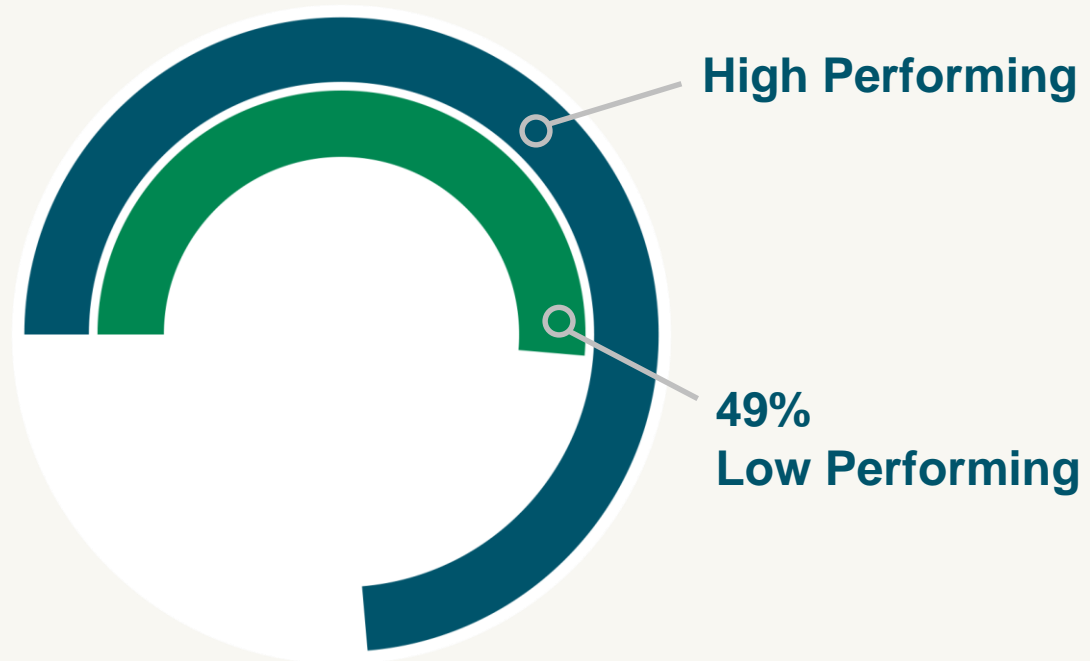
-  Organizations that always use risk management practices
-  Organizations that do not always use risk management practices

# Evidence from other sources

Anecdotal Reasons ☒

Any Empirical Data? ☒

- ☐ Percentages of High Performing and Low Performing Organizations that routinely use Risk Management

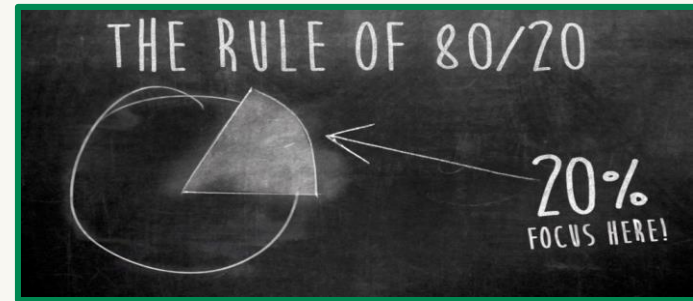


# PROJECT RISK MANAGEMENT

## Mechanics

# Critical Success Factors

- ❑ **Stay simple**
  - Pareto Principle highly applicable
- ❑ **Keep it actionable**
  - Provoke actions to reduce probability and impact
- ❑ **Make it scalable**
  - Many projects are in fact “low risk”
  - Over attention can be counterproductive

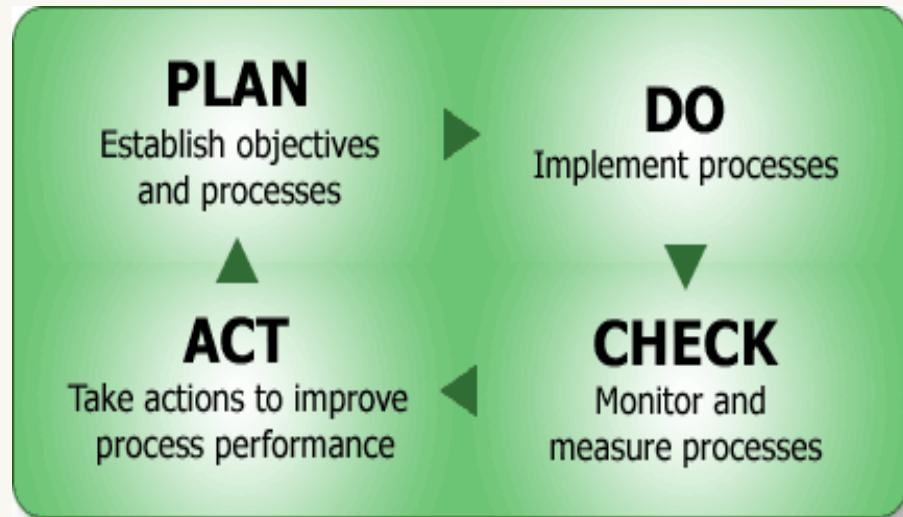


# DIMINISHING RETURNS vs. 80/20 RULE



# Risk Management Plan

- Framework for:
  - Approach
  - Roles and responsibilities
  - Defining level of detail



- Value is in the “act of planning” not the output itself
- On larger, complex projects formation of a Risk Committee including top management is valuable



# Risk Profiling

## ❑ Objectives

- Triage
- Establish level of risk management necessary
- Top management visibility

Severity	Medium	High	Critical
	Low	Medium	High
	Low	Low	Medium
Likelihood			

- ## ❑ Start process at Go-No Stage and refine going forward into proposal and project execution

# Risk Profiling

## ❑ How it works ?

- Rating of areas where risk typically resides
- Scale factor recognizes different project types and unusual circumstances

## ❑ Tables used to “grade” risk levels in:

- Budget and Schedule
- Technical and Quality
- External and Organizational

TABLE V Risk Profile		Rating
Low Risk		< 7
Medium Risk		7 - 12
High Risk		13 - 17
Extreme Risk		> 17

B&S	T&Q	O&E	SF	Rating
( 3	+ 4	+ 3 )	x 1.4	= 14
= <u>High Risk</u>				

# Risk Identification

- ❑ Focus on risks that directly affect the project objectives and that can be controlled or transferred
  - Forget worrying about asteroid strikes
- ❑ Checklists and prompt lists can be invaluable
- ❑ Assign ownership to distribute responsibilities
  - Don't pile everything on the Project Manager

**PROJECT RISK CHECKLIST**

#	FUNCTION	RISK ELEMENT
1	Principal	Client objectives for cost, time, scope, and quality are inconsistent
2	Principal	Funding sources not finalized or in jeopardy
3	Principal	Client manager does not have <u>direct</u> authority to increase budget
4	Principal	New client or owner
5	Principal	Difficult or litigious client / owner
6	Principal	Client or owner financial stability questionable
7	Principal	Client interferes with execution of technical work or production
8	Principal	Change in Client Project Manager over life of the project
9	Principal	Local communities or other factions opposed to project. Political factors "in play"
10	Principal	Potential for new or unidentified stakeholders to emerge
11	Principal	Lack of alignment amongst project stakeholders
12	Principal	High potential for claims or litigation coming from client or owner
13	Principal	Responsibility for quantity growth (design-build)
14	Principal	Lack of specialized technical expertise
15	Principal	Insufficient resources or inexperienced staff assigned
16	Principal	Changes in key staff during the project are expected
17	Principal	Key staff overcommitted
18	Principal	Client communication policy is "closed door"
19	Principal	GF Project Manager will operate remotely
20	Legal	Inequitable contract provisions or insurance requirements
21	Legal	Onerous provisions in MOU or Teaming Agreement
22	Management	Potential for conflicting direction within client's organization
23	Management	Complicated process or potential delays in obtaining approvals or decisions
24	Management	Subconsultants performing critical components of design
25	Management	Crashed or highly compressed schedule

# PROJECT RISK MANAGEMENT

## Lessons Learned

# Don't Let This Happen To You!

## ☐ No monitoring and control

- Risk Management Plan completed but never revisited
- No regular updates or review of risk register
- Information becomes obsolete



## ☐ Remedy:

- Recognize that the Project Manager may not have time to also serve as the Risk Manager
- Hardwire “risk” into progress meetings and status reporting

# Don't Let This Happen To You!

## ☐ Risks improperly characterized

- Descriptions too broad or generalized
- Can mislead priority or mitigation



## ☐ Remedy:

- “CRE Test” ... Define “Condition – Risk – Effect”
- SOW requires permits / Regulatory agency understaffed  
May not meet assumed review timeframes  
Late approval delays contract completion date

# Don't Let This Happen To You!

## ☐ Ownership set at the wrong level w/in project team

- Individuals have insufficient experience or authority to control the risk

## ☐ Remedy:

- Map risk priority to project team roles / responsibilities
- Example:



- Should be owned by Top Management



- Should be owned by Project Management



- Can be owned by Technical Team





# Don't Let This Happen To You!

## ❑ Improper risk transfer

- “Passing the buck” w/o acknowledgement
- Risks allocated to parties that are not in position to control them



## ❑ Remedy:

- Each party must accept responsibility for assigned risks
- Document this !!!
- Especially critical with subconsultants



# Don't Let This Happen To You!

## ❑ Don't just “check the box”

- Risk management treated as an afterthought
- Activities are sporadic
- Program is merely “bolted on”



## ❑ Remedy:

- Risk programs can run in the background but they must always be running
- Embed into the core project management practices
- Integrate into the daily life of the job

# Don't Let This Happen To You!

- ❑ A Final Note: Regarding Confidentiality
- ❑ Good risk management practice inherently requires us to acknowledge weaknesses and predict failure
  - *Our Project Manager is young*
  - *We're unsure if we have the right software to do this*
  - *Our resources are over allocated*
- ❑ The paradox is this can compromise claim defense and legal proceedings should the failure actually occur
- ❑ Remedy:
  - Engage General Counsel when setting up a risk program
  - Pay close attention to filing and archiving protocols

# Risk Management in the 21<sup>st</sup> Century

Michael J. Yost  
VP/General Counsel  
Terracon Consultants, Inc.

# Bio and Agenda

## Michael Yost, Esq.

- ❑ 15 yrs at Terracon:  
SVP/General Counsel
- ❑ Geoprofessional  
Business Association –  
Legal Affairs Committee  
(past Chair)
- ❑ ACEC Legal Counsels  
Forum
- ❑ Lexington Insurance A/E  
Advisory Board

## Presentation Topics

- ❑ Why do we struggle  
with consulting?
- ❑ Best ways to prevent  
risk
- ❑ What is consulting?
- ❑ Value of consulting

# Risk Management – Roots of GBA

- ❑ Created to address risk issues in geoprofession
- ❑ 50 years of being industry leader on risk issues
- ❑ Championed cause of contractual risk mitigation
- ❑ Published some of the most recognizable risk resources in our industry

# Tackling Risk in New Era....

- ❑ Continued publications: reliance, responding to claims/litigation, corruption risks
- ❑ Presented on ethics & culture, deposition tips, client focused contract negotiations

# Tackling Risk in New Era....

## GBA Legal Affairs Committee

- ❑ Advises GBA on risk issues
- ❑ Focus on collaboration
- ❑ Competitors become colleagues
- ❑ Assess 21<sup>st</sup> century risk in real time



# Tackling Risk in New Era....

Emphasis on proactive risk management through consulting



# ***Why Do We Struggle With Consulting?***

**TWO FUNDAMENTAL  
FLAWS IN OUR  
PROCESSES**

# *Flaw # 1*

## *Over-Reliant on Risk Management*

- Contracts
- Insurance
- Report Limitations

**DEFENSIVE MEASURES –  
NOT PREVENTATIVE**

## *Flaw #2:*

Project Efforts Focus on  
**THE REPORT...**

# ***Fundamental Flaw #2:***

**THAT NOBODY**  
**READS!**

# Report language does NOT:

- ☐ effectively influence decisions.
- ☐ prevent problems.

# ***The Reality of Prevention:***

**Best Way to Address Risk and  
Prevent Problems:**

**Consult with Clients on Risks  
Associated with Decisions**

# *View of Geoprofessionals*

- ❑ Clients believe they are hiring Uber.
- ❑ We are providing them with Google Maps.



There is a gap between these differing views.



# *Client's View of Geoprofessionals*

CONSULTING BRIDGES THIS GAP





# *Key Components of Consulting*

- ❑ Understand and Anticipate risk from your client's perspective.
- ❑ Communicate and Influence regarding issues that impact risks.

# *Value of Consulting*

Project risk is an opportunity to send your client a valuable message through consulting:

**I CARE ABOUT THE SUCCESS OF YOUR PROJECT!**

(What Does Not Consulting Communicate?)

# ***What Message Do You Send?***



***OR***



# Questions - Comments