Managing Programs for Cross-Program Efficiencies

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Hart Crowser

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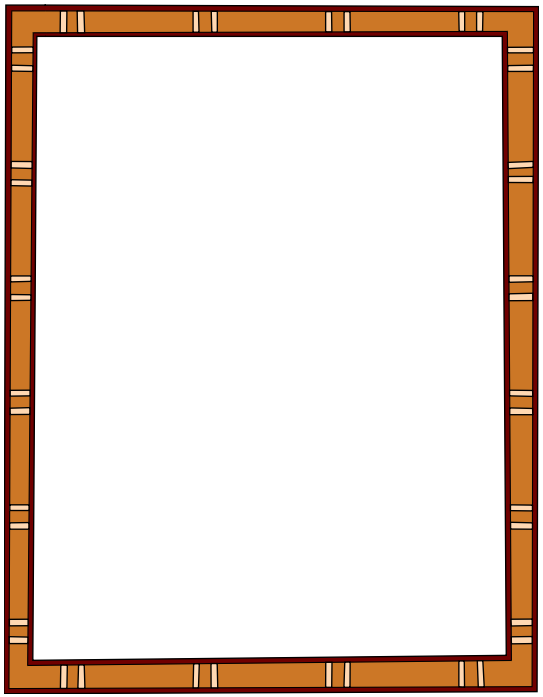
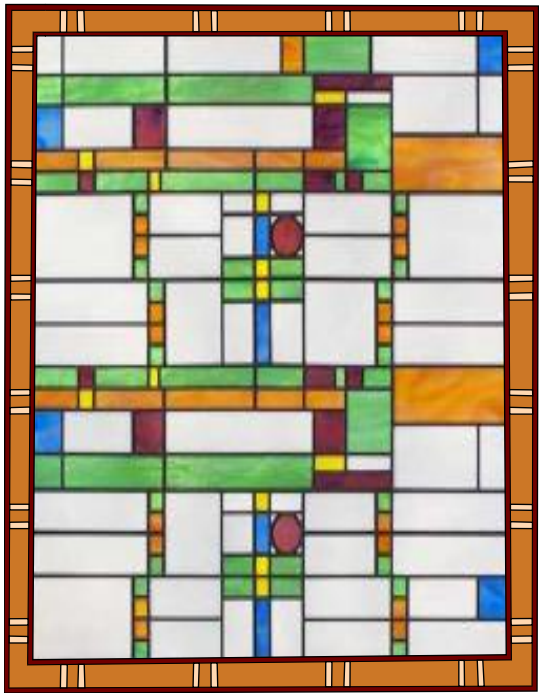
We All Have Mental "Frames" – They Affect Our Views on Portland Harbor



The bounds we place – our limit of focus



Filters we see through – the "leaded glass"

Organization of the Presentation

1. Frame the project management story
2. Portland Harbor has entered a new project management category
3. Program and project risks, including permitting and CWA-CERCLA
4. What do we do?
5. Summary

1. Frame the Project Management Story

When You Hear "Project Management," What Do You Think….?

Geeks With Gantt Charts?

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Over Time I Learned to Think of Project Management Differently

Current State

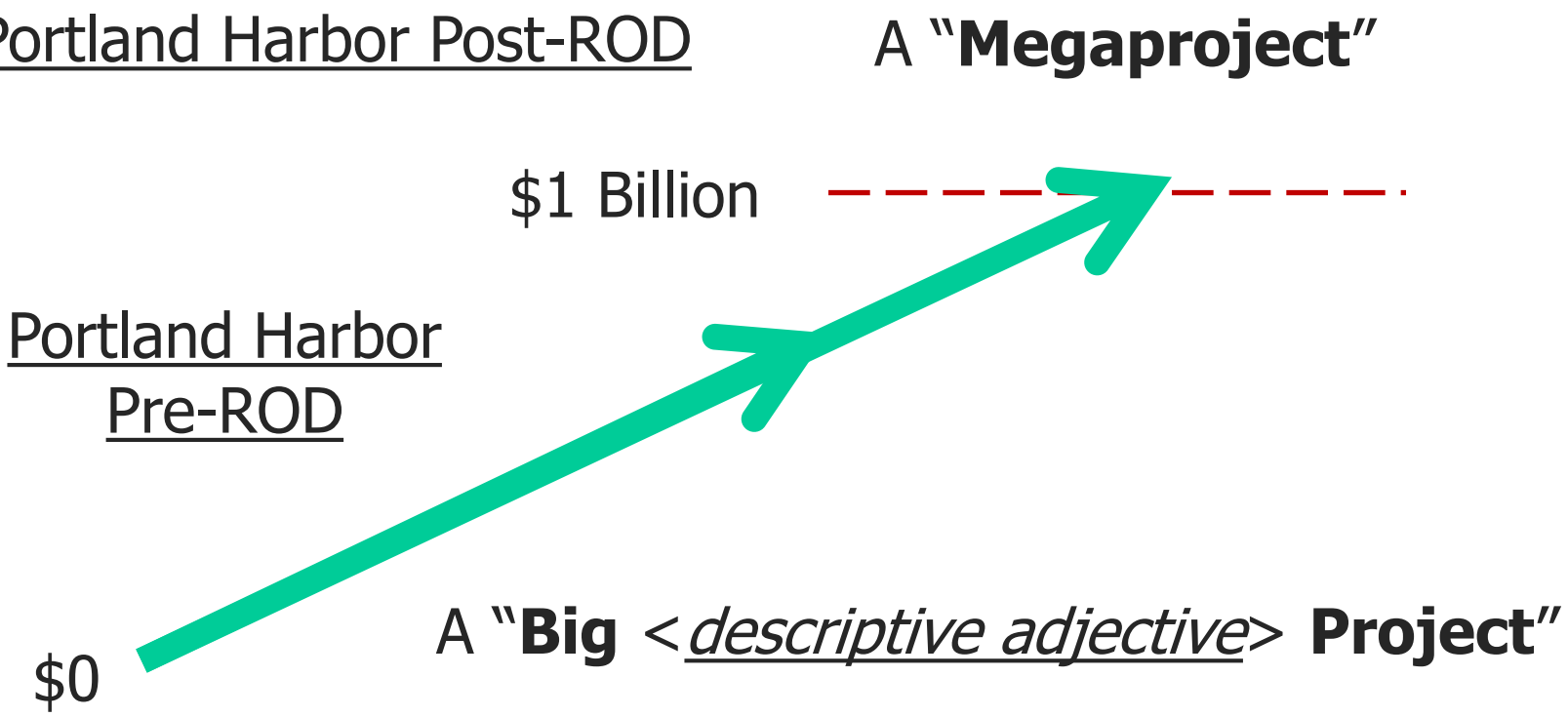
Project

Project Management

Desired Future State

2. Portland Harbor Has Entered a New Project Management Category

Portland Harbor is Now Way More Than Just a Big ___ Project



“Megaprojects” Have Been the Subject of Intensive Research

Dr. Bent Flyvbjerg is a professor of Major Program Management at Oxford University's Saïd Business School.

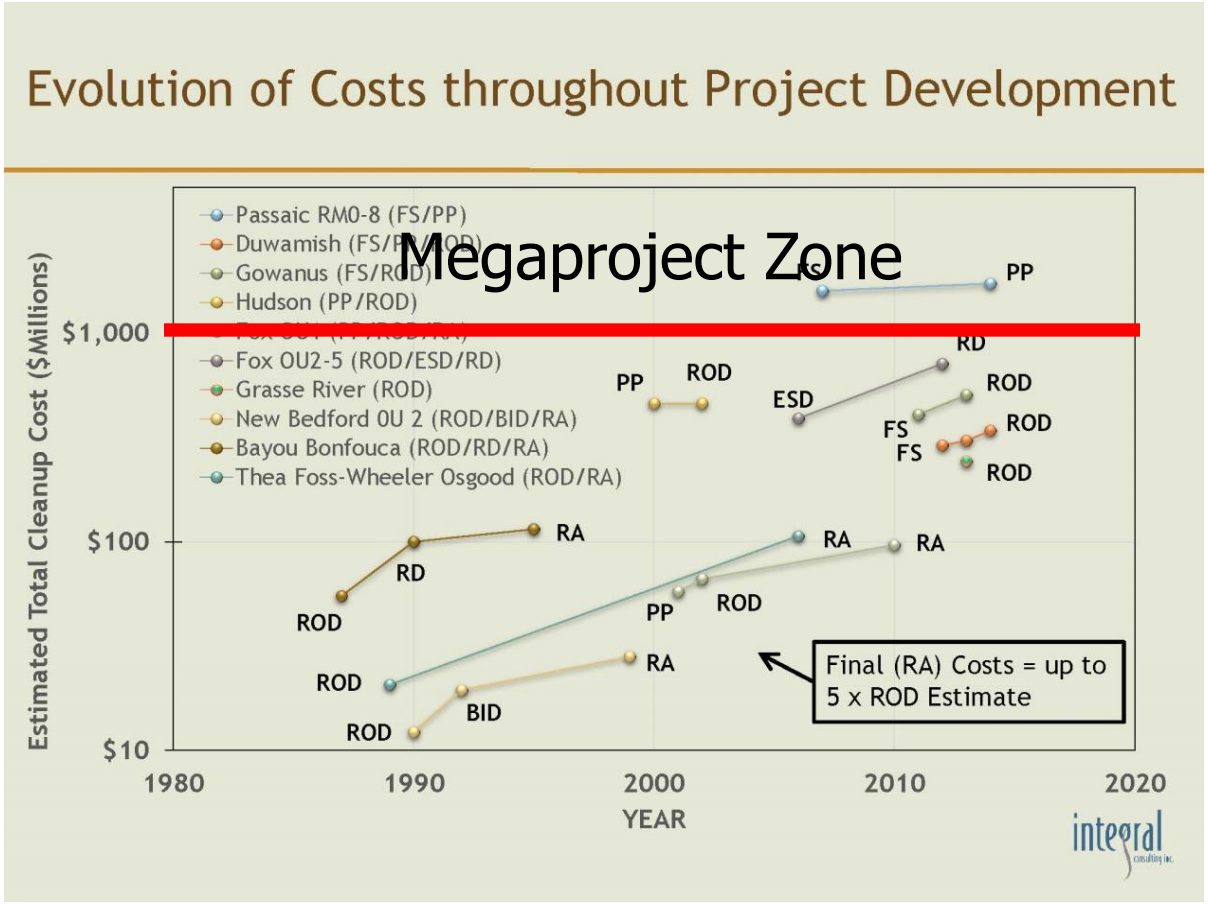
His specialty: the performance (mostly failure) of megaprojects.

Flybberg: Megaprojects Almost Never Cost or Take Less Time than Projected

"The iron law of megaprojects is that **they are over budget, over time, over and over again**. Nine out of ten megaprojects experience cost overruns, and most take much longer than expected."

From "What You Should Know about Megaprojects and Why: An Overview," Bent Flyvbjerg, Project Management Journal, Volume 45, Number 2, April/May 2014

Sadly, This Is Consistent with Trends Already Observed for Sediment Sites



Why Do Megaprojects Perform Poorly? "Optimism Bias" is Clearly a Factor

"**Overly optimistic forecasts of the outcomes of projects are found <u>everywhere</u>.**

Daniel Kahneman and Amos Tversky

"Amos and I coined the term **planning fallacy** to describe plans and forecasts that…

- Are unrealistically close to <u>best-case</u> scenarios
- Could be improved by consulting the statistics of similar cases"

Daniel Kahneman, <u>Thinking, Fast and Slow</u>, 2012

Other (Mostly Predictable) Reasons for Poor Mega-Project Performance

1. Inherent risks due to complexities, time
2. Led by managers without deep domain experience who keep changing due to long project cycles, leaving leadership weak
3. Tendency to use a "Break-Fix" delivery model: leaders do not know how to deliver, so at some point projects require a complete reorganization (sometimes over and over)
4. Many stakeholders with conflicting interests

Derived from "What You Should Know about Megaprojects and Why: An Overview," Bent Flyvbjerg, Project Management Journal, Volume 45, Number 2, April/May 2014

Other (Mostly Predictable) Reasons for Poor Mega-Project Performance (cont'd)

4. "Uniqueness bias" that impedes learning – the feeling that the project and team are so unique nothing new can be learned
5. Early stage overcommitment that prevents later change and results in "failing slow"
6. Long timeframes, optimism bias result in increased costs that financially benefit delivery teams so they have little incentive to improve things

Derived from "What You Should Know About Megaprojects and Why: An Overview," Bent Flyvbjerg, Project Management Journal, Volume 45, Number 2, April/May 2014

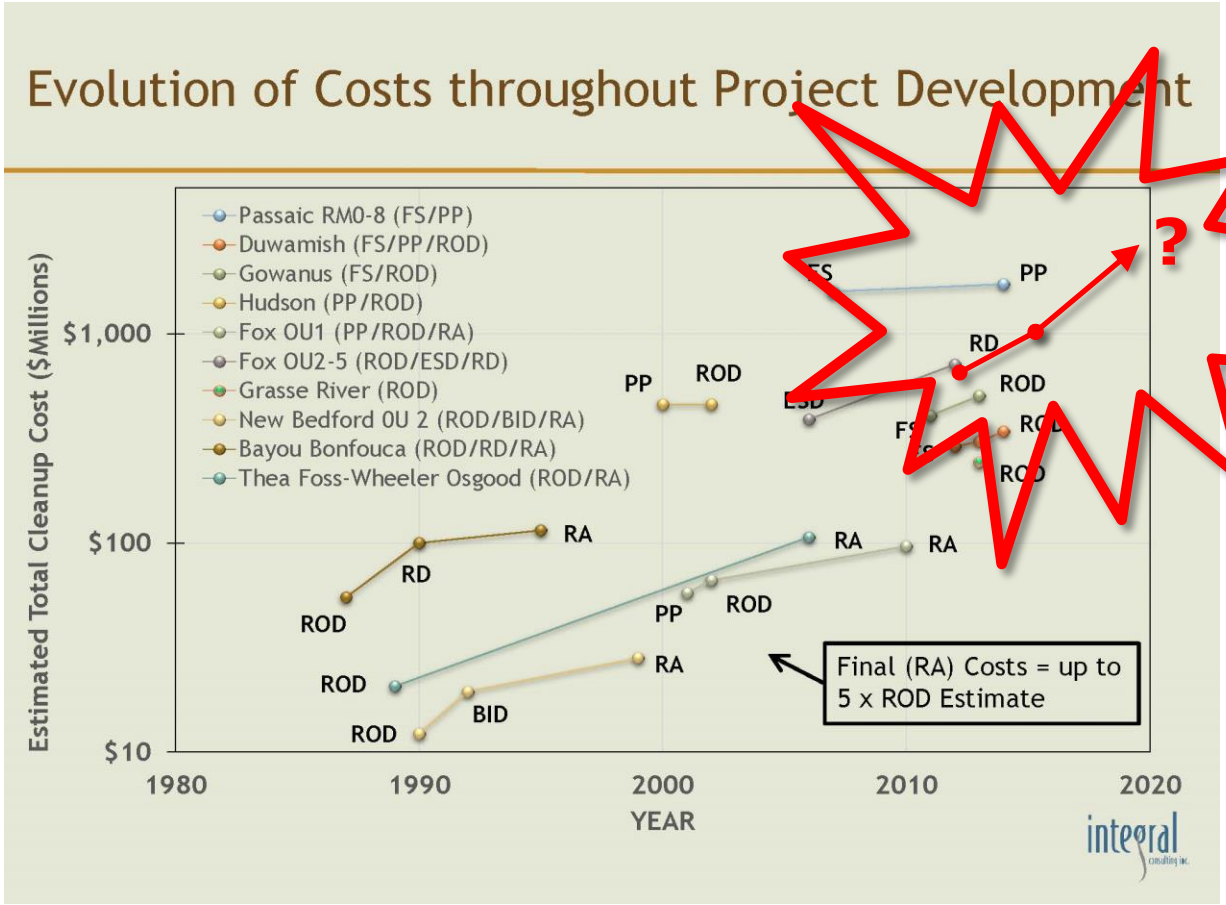
Other (Mostly Predictable) Reasons for Poor Mega-Project Performance (cont'd)

7. Project scope or ambition level change significantly over time
8. Delivery is high-risk, with overexposure to "black swans" (hugely negative outcomes)
9. Unaccounted complexity, unplanned events
10. Overstated benefits that can't be realized

Unique for CERCLA projects: cost increases are not the basis for an "Explanation of Significant Differences" (ESD) ROD Re-Opener

Derived from "What You Should Know About Megaprojects and Why: An Overview," Bent Flyvbjerg, Project Management Journal, Volume 45, Number 2, April/May 2014

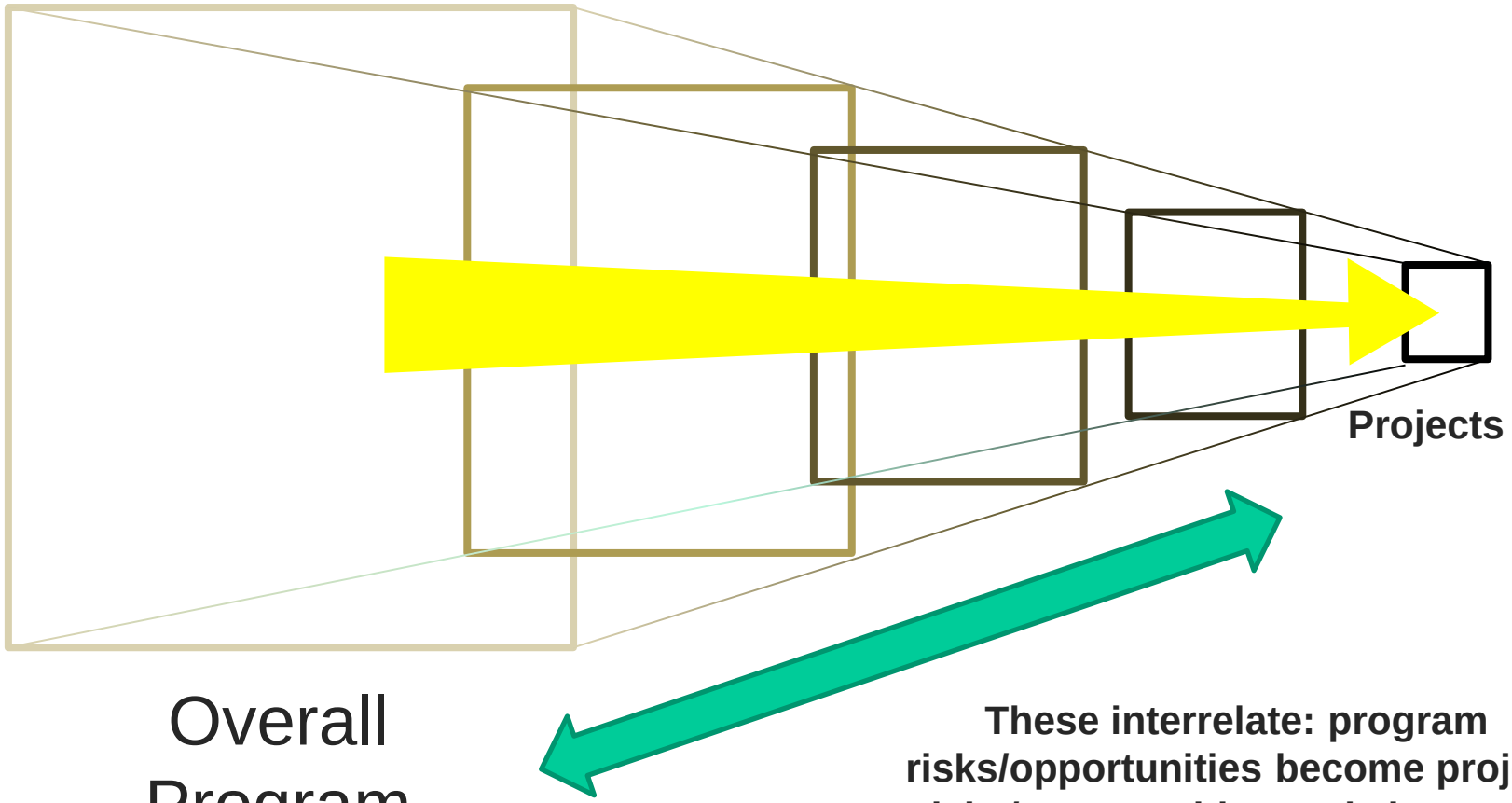
Unless Changed, This Leads to a Strong Likelihood that We'll See The Same Here



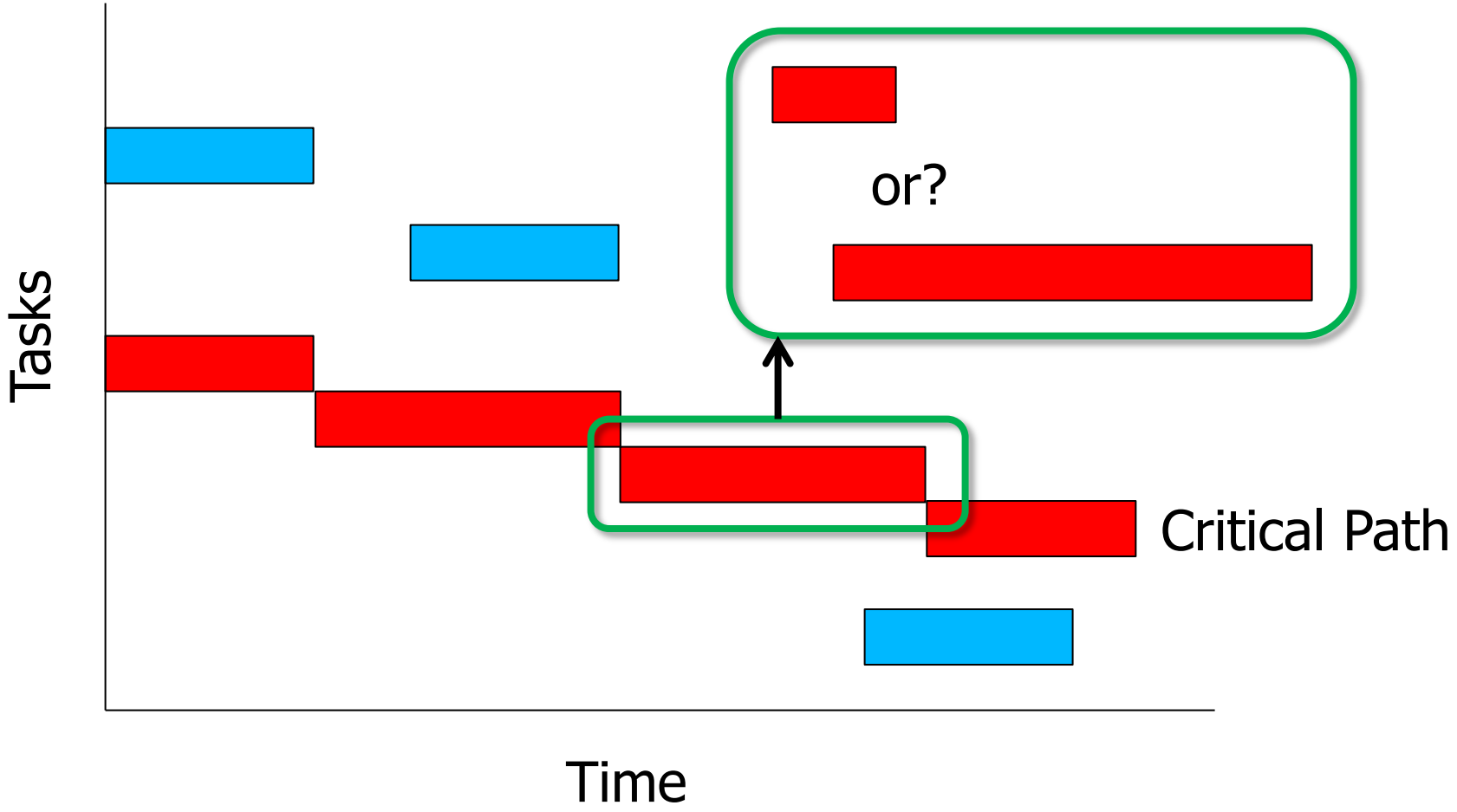
Portland Harbor?

3. Program and Project Risks, Including Permitting and CWA-CERCLA

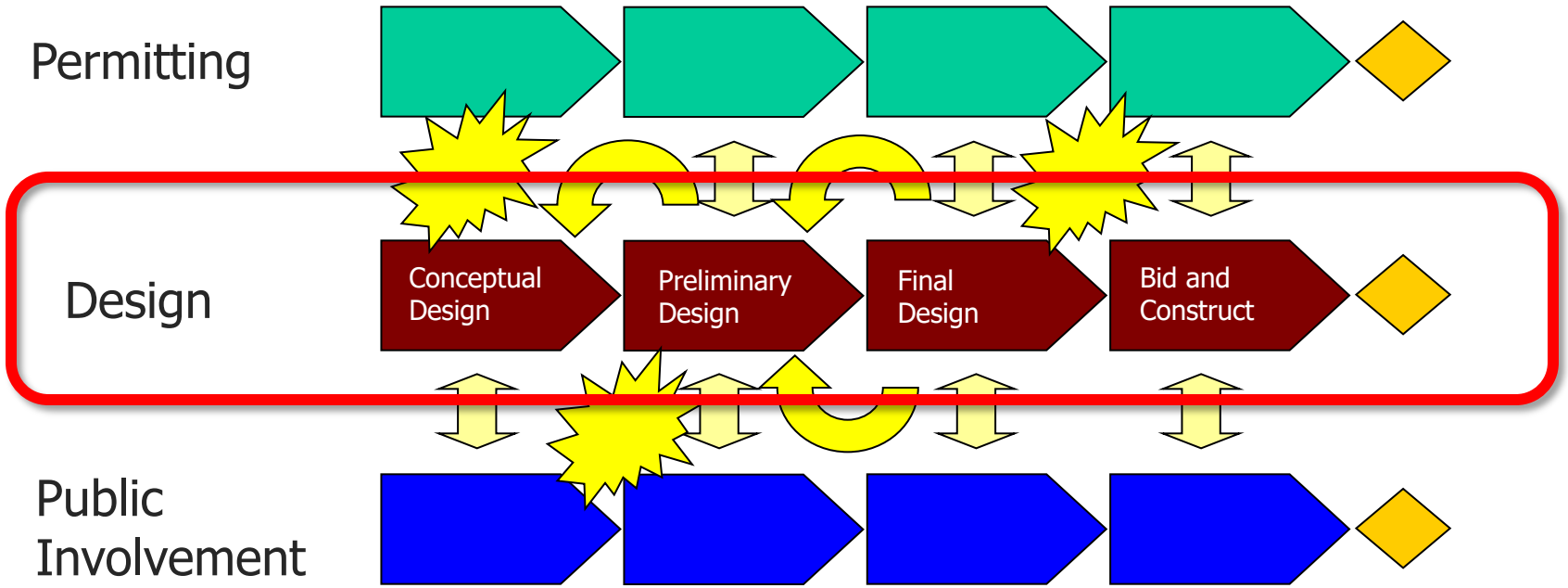
Programs and Their Projects Have Connected Risks/Opportunities (and Goals)



Basic Project Management Advice: Avoid Major Risks on the "Critical Path"



Regulatory and Interaction Issues Will Create Delivery Risks and Inefficiencies



Permitting Has Been a Major Delivery Risk at Sediment Remediation Projects

"The permitting process was **substantially more complex and extensive** than anticipated, requiring significantly more preparatory effort, regulatory involvement, and cost than identified in the initial permitting inquiries."

"A Slough of Challenges: Navigating Columbia Slough Sediment Remediation Permitting Hurdles," Adam Reese/Apex, Battelle Sediment Conference, 2017

The CWA-CERCLA Interaction Is a Huge Program Risk

"CWA is largely blind to sediments, which creates huge problems with recontamination, failed remedy expectations, etc. And it's more than ARARs: if one of your controlling statutes is blind to the other, no amount of program coordination will get you anywhere.

"CWA only focuses on meeting water column-based standards, and rarely directly deals with sediment-related risks of interest to CERCLA. This creates a **regulatory "layer cake"** with CWA blind to the lower layer, and CERCLA only tangentially dealing with the upper layer via surface water related ARARs, and if we are lucky, some source control efforts."

Bob Gensemer, personal correspondence, 4 May 2017

It Isn't Hard to Come Up with Even More Risks and Risk Amplifying Interactions

Public, Media

Regulatory Agencies

Legal

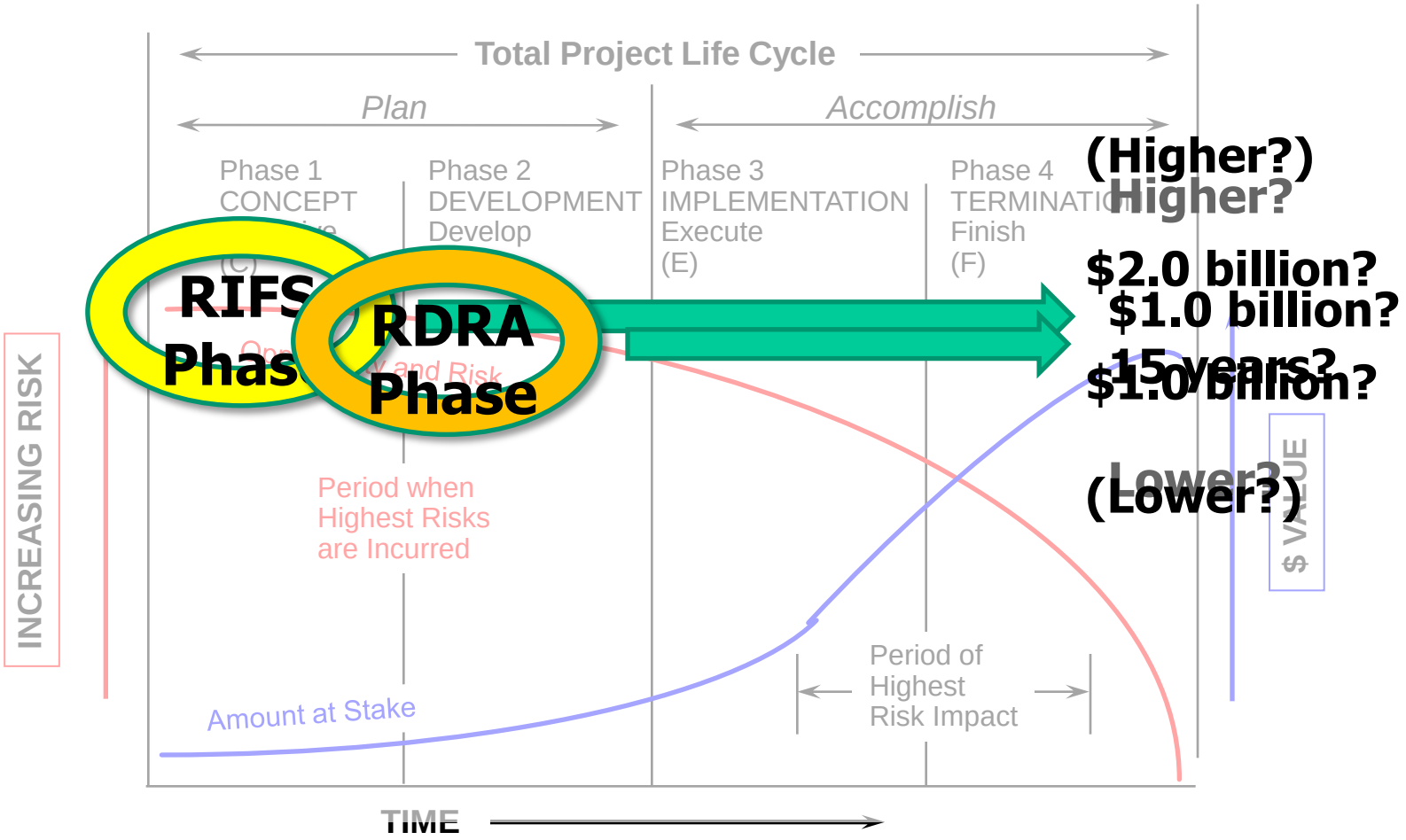
Cleanup Costs

Investigations, Consulting

4. What Do We Do?

There Are a Lot of Ways to Get Through a Project

The Front End Is Your Most Important Time to Address Things



For Portland Harbor, Apply Principles of "Wicked Problem" Project Management

1. Get high-level commitment to success
2. Do a thorough project analysis, using careful decision framing to identify problems
3. Develop an appropriate organization that balances "wicked" and "tame" aspects
4. Evaluate different project approaches, including a "fast response team" approach
5. Communicate carefully – try to develop a common understanding of the problems

Brad Hermanson, "Management of Wicked Problem Projects," 2002 to current

What's a "Fast Response Team" Approach? Deliberate Early Learning

Consider Use of a "Fast Response Team" to Define Issues, Process

Fast Response Team

Pick one chunk of the project that represents the entire effort, run it through entire project process, then fine-tune the overall process based on what is learned

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Above All, Think Carefully about How Project Management Should Be Done

"[I]f managers of conventional projects need the equivalent of a driver's license to do what they do, then managers of megaprojects need the equivalent of a pilot's jumbo jet license."

"And just like you wouldn't want someone with just a driver's license to fly a jumbo jet, you wouldn't want conventional project managers to manage megaprojects."

From "What You Should Know about Megaprojects and Why: An Overview," Bent Flyvbjerg, Project Management Journal, Volume 45, Numbe 2, April/May 2014

5. Summary

In Summary

1. Portland Harbor, like some other recent major CERCLA sediment sites, has entered the realm of the megaproject.
2. Megaprojects virtually always take longer and cost (much) more than expected.
3. Regulatory complexity, such as CWA-CERCLA, is one of many problems.
4. Now is the time to pull back, think of how to address this, and manage the program.

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