



Standardization and Innovation, Can They Coexist? Seeking the Best of Both Worlds for Stream Restoration

National Stream Restoration Conference

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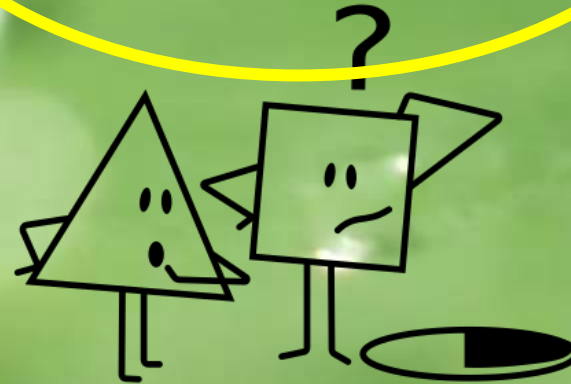
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Why are we here?

- Existentially...?
- Why Not?
- Wide Ranging Topic

Let's Go
O's

Design
Construction
Materials



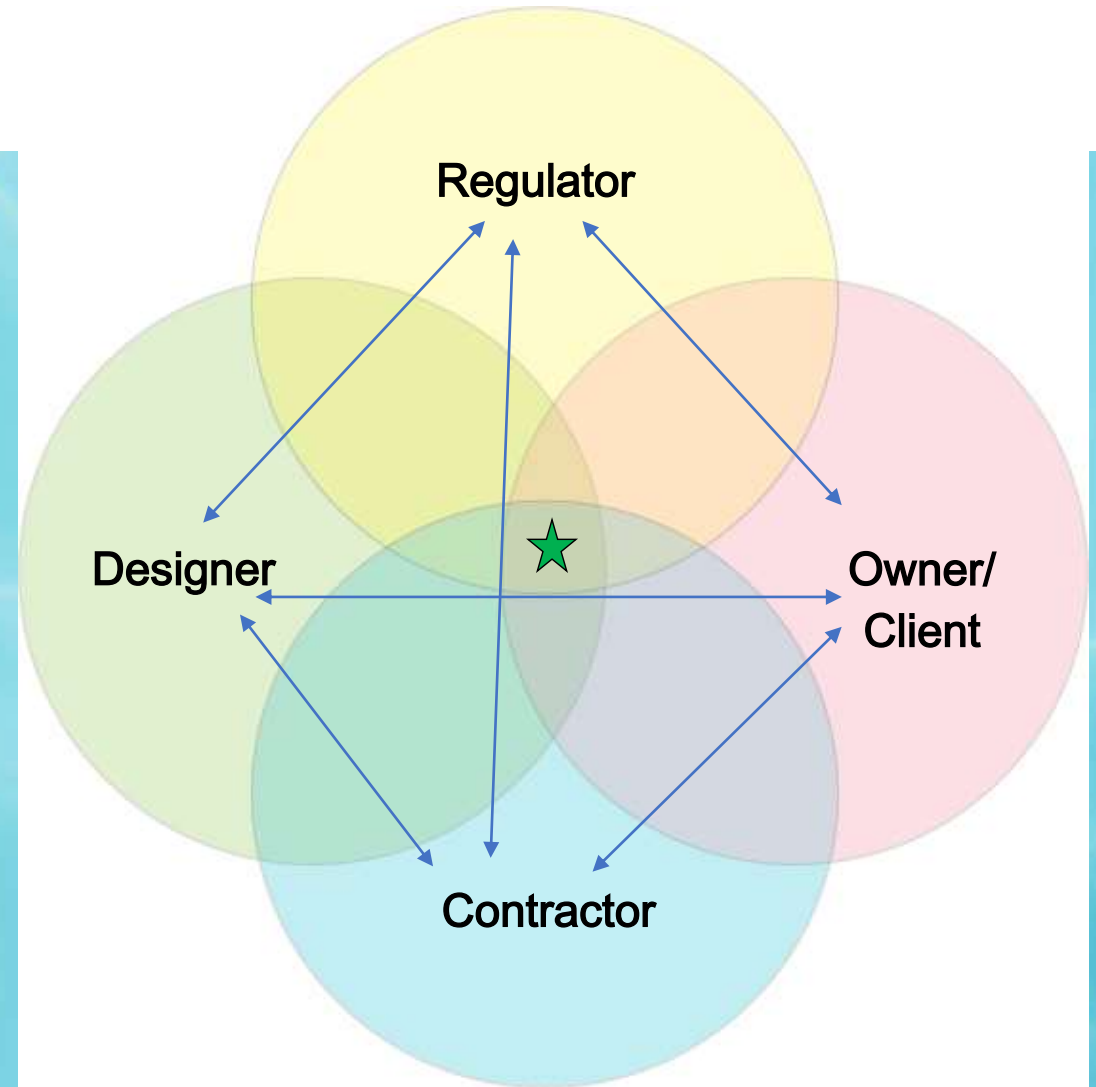
Standardization

Standardize

1: to bring into conformity with a standard especially in order to assure consistency and regularity

2: to compare with a standard: to determine the strength, value, or quality of (something) by comparison with a standard

Source: merriam-webster.com



Innovation

Innovation

- 1: a new idea, method, or device : Novelty
- 2: the introduction of something new

Source: merriam-webster.com



Clarifying Objectives

What are we seeking?

- Standardization to:
 - Produce familiarity, consistency in communication
 - Proven application
 - Avoid risk
 - Manage cost
- Innovation to:
 - Facilitate evolving practice
 - Continuous improvement and learning



Concerns

Innovation:

- Unproven/risk
- Lack of familiarity
- Cost
- Fear of failure

Standardization:

- Rigid
- Cost
- Prescriptive



I hope you didn't come for answers...

- Avoid prescriptive approach or seek it?
- How do you allow innovation without the wheels coming off?
- Answers...how about some pretty pictures and lessons learned?



Example: Live Fence

- Initial Application
 - Specific objective
 - Unintended Benefits



Live Fence 2.0

- Broad sweeping 'fences'



Live Fence 2.0

- Too effective?
- Careful what you wish for?
- Right site?



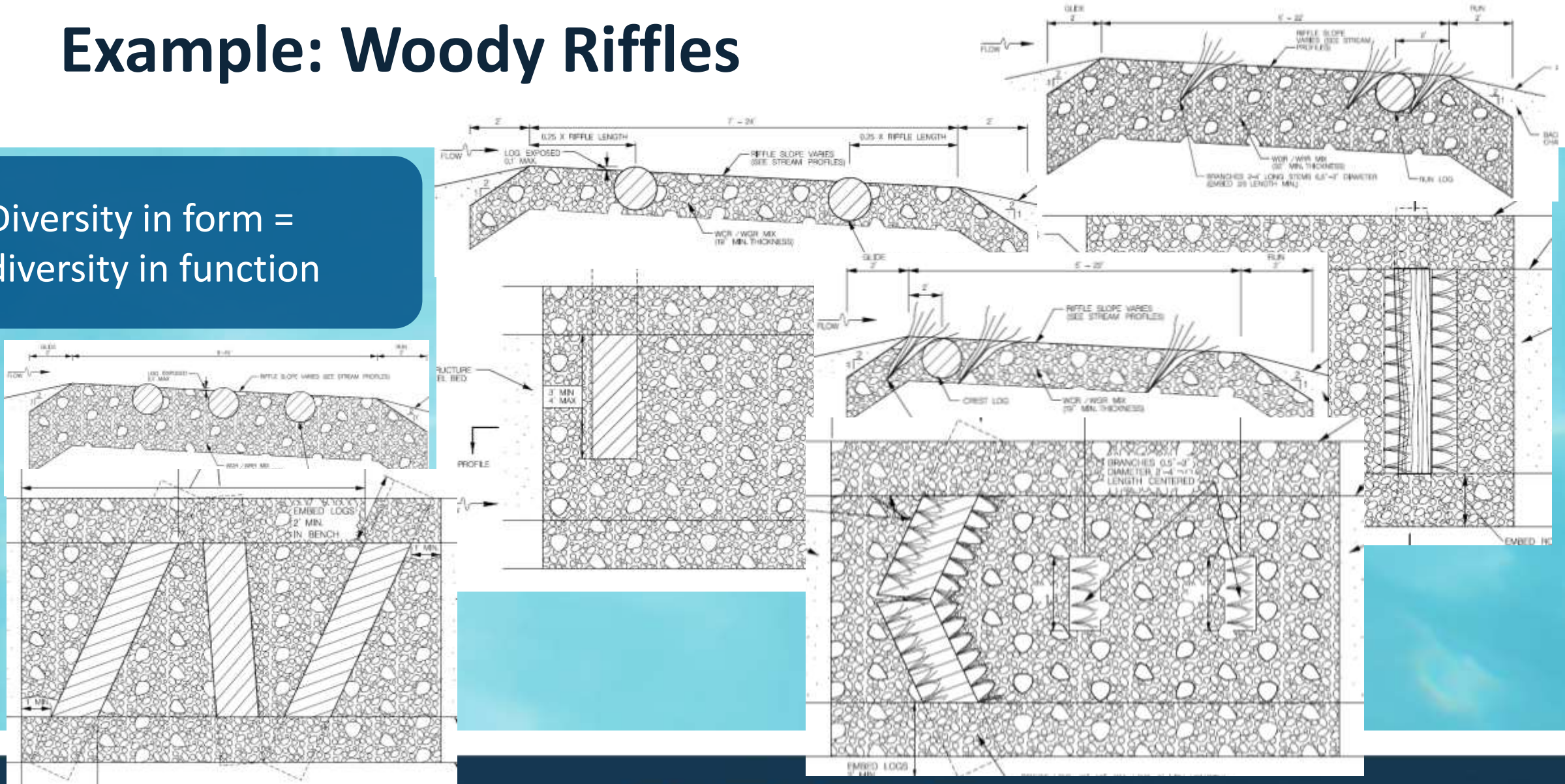
Live Fence 3.0.?

- Smaller individual 'fences'
- Offset placements
- Less dense
- All live material?



Example: Woody Riffles

Diversity in form =
diversity in function



Example: Woody Riffles



Typ. Pre-restoration Condition



Example: Woody Riffles



Typ. Post-restoration



Example: Woody Riffles



Woody Riffles 2.0?

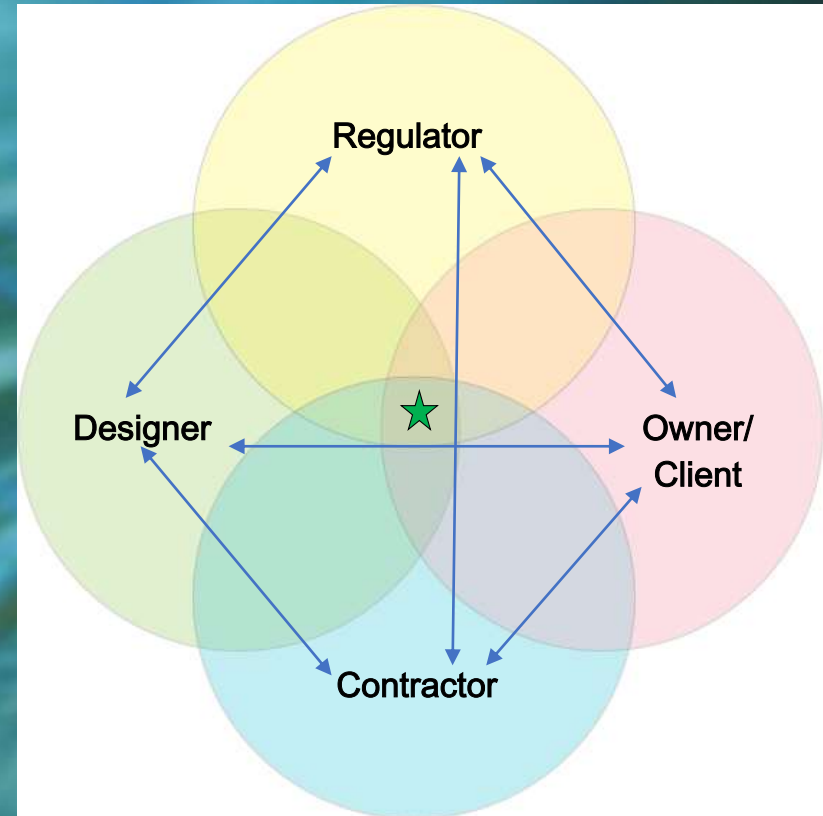
- Diameter, height, and density of above grade woody elements
- Allowable material ranges
- Leaf pack trapping dynamics



Best of Both Worlds?

When we standardize, allow for:

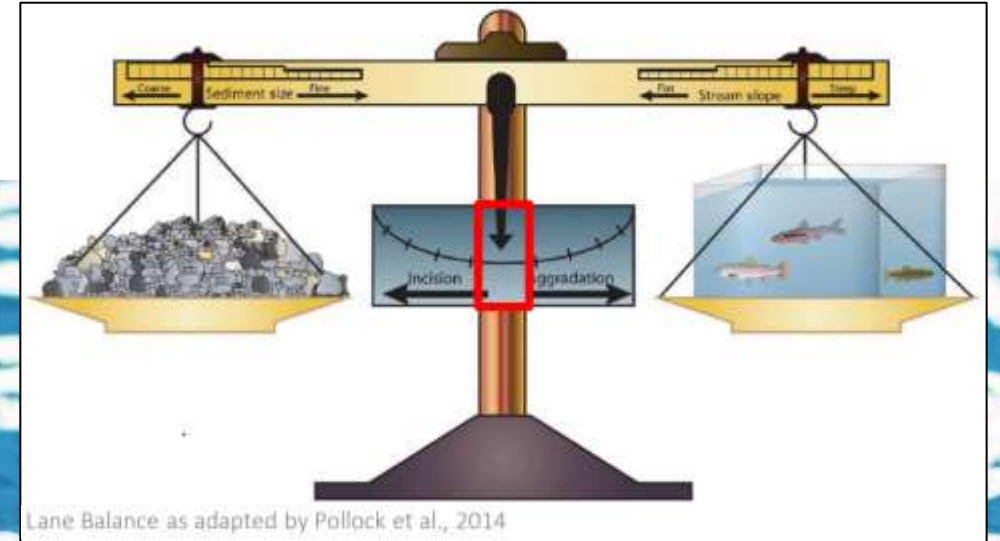
- Opportunity to apply lessons learned
- Flexibility for value-added contributions
- Site Specific Approach
- Consideration of all stakeholders
- What else???



Yes

Standardization and Innovation can Coexist!

- Standardize what makes sense to help streamline the process
- Find balance between standard and non-standard items
- Engage in dialogue around concerns and objectives (the why)



Thank You!



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