

Adaptive Management Program Lean Process



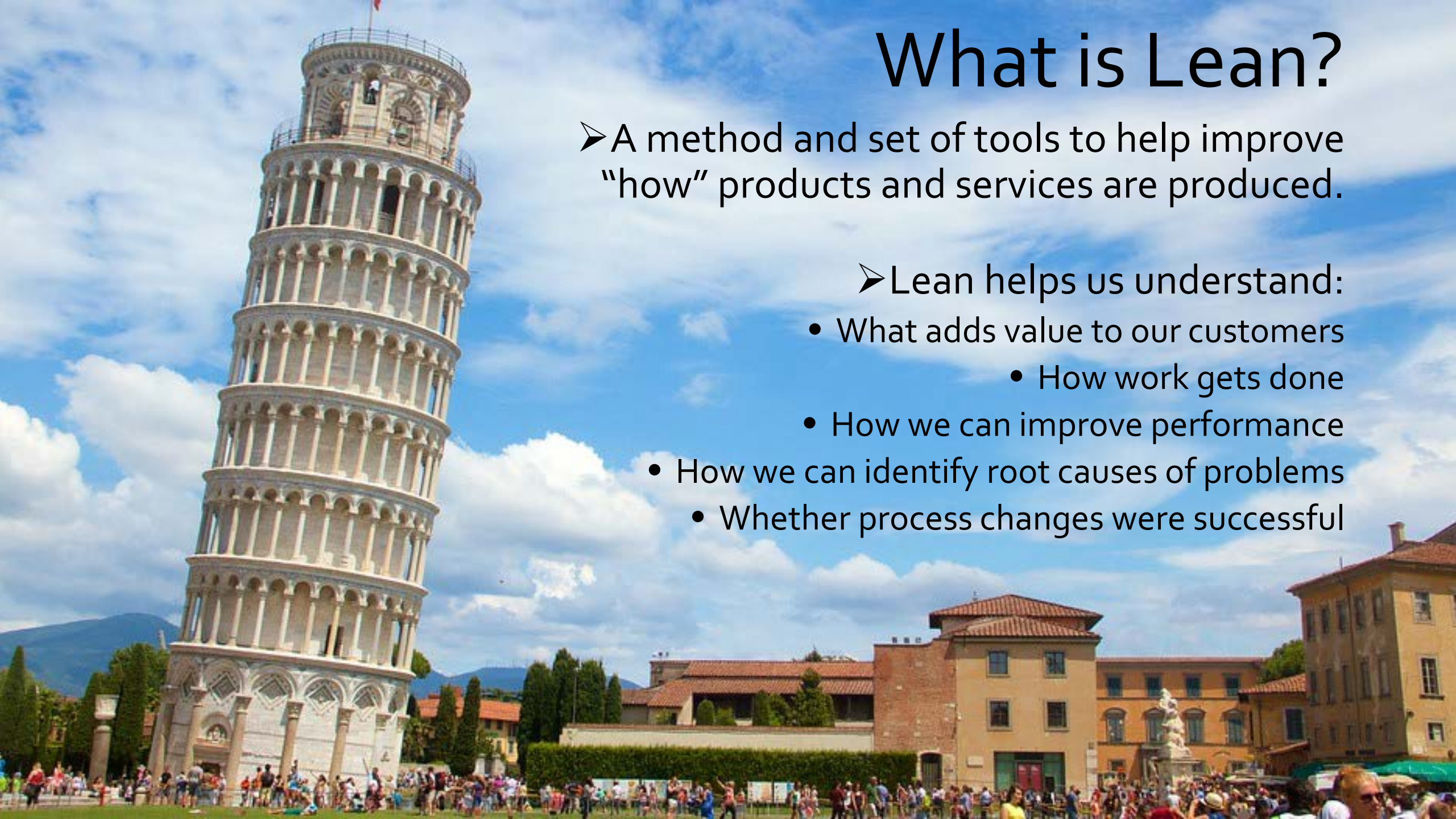
Forest Practices Board
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WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**

What is Lean?

- A method and set of tools to help improve “how” products and services are produced.
 - Lean helps us understand:
 - What adds value to our customers
 - How work gets done
 - How we can improve performance
 - How we can identify root causes of problems
 - Whether process changes were successful



Lean Vision

- The overall vision for the Adaptive Management Program (AMP)
Lean effort identified three goals:
 - Eliminate non-value added work or process steps (i.e., eliminate parts of the AMP process that fail to add value to the ultimate outcome of the process)
 - Reduce process cycle time (i.e., reduce the time required to undertake certain parts of the AMP process)
 - Maintain quality of AMP work products

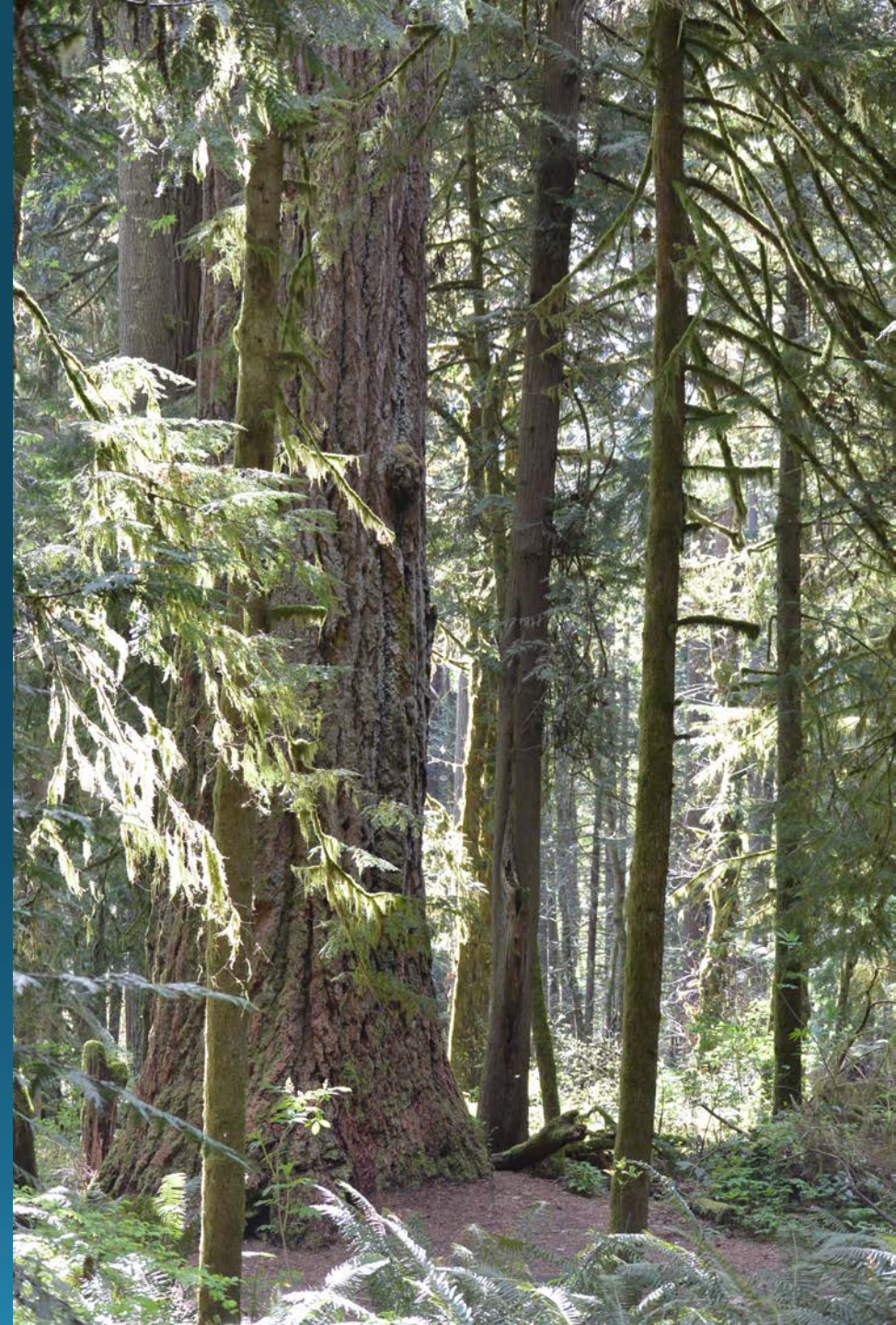
AMP Lean Process

A Lean assessment was requested by the Forest Practices Board (FPB) as part of a larger evaluation of the AMP.

- The Lean assessment looked at processes used by the Cooperative Monitoring, Evaluation and Research (CMER) Committee and Policy Committee.

Purpose

- To examine the AMP processes and use Lean improvement techniques to eliminate excessive time and cost by increasing program and process efficiency.



2012 Lean Review

- Representatives of both CMER and Policy met in March of 2012 with a consultant (Strategica).
- Used a variety of Lean tools including surveys and interviews of CMER, Policy, and AMP staff
- Value Stream Mapping (VSM)
 - “As-Is” Process
- Root Cause Analysis
- Development of Counter measures

Original Analysis Process Included Value Stream Mapping

Resulted in development of an **As-Is** (CMER) process for developing scoping papers and study designs, effort led by the consulting firm Strategica.

The contractor described characteristics of the **As-Is** process that included:

- Multiple review and approval steps by SAGs, CMER, and Policy.
- Excessive cycle times.
- The use of a one-size fits all approach irrelevant to complexity or potential impact.
- Scoping started without a clear definition of the problem.
- Distinction between CMER and Policy representation is fuzzy
- Excessive process
- Consensus voting to move projects forward contributes to long cycle times.



Using Lean techniques, the stakeholders redesigned a **To-Be** process for the scoping and study design phases of CMER projects.

- Key features of the redesigned **To-Be** process:
 - Fewer review and approval steps
 - More reliance on small teams of qualified experts
 - Fewer input/comment/decision points for CMER
 - Expedited peer review for projects with less potential for rule change
 - New process should be piloted



Consultant Compared the **As-Is** process to the **To-Be** Process

As-Is process:

- **74** months in cycle time
- **9** separate “do-loops” totaling **16** iterations
- **12** different approval points for five separate documents (e.g., study design, response matrix)

To-Be Process:

- **15** months in cycle time
 - » **80% reduction from As-Is process**
- **3** separate “do-loops”
- **5** different approval points for five separate documents
- Assumed appropriate scientific/technical expertise is available to compose the Team

Lean Projects

Project	Initiated*	Status
Eastside Type N Riparian Effectiveness Project (ENREP)	March 2013	Study Design at ISPR
Westside Type F Riparian Prescription Project	March 2013	Study Design at ISPR
Road Prescription Scale Effectiveness Monitoring Project	May 2014	Study Design at ISPR
Unstable Slopes Criteria Evaluation and Development Project	May 2014	Study Design under Development
Forested Wetlands Effectiveness Project (FWEP)	December 2014	Study Design under Development

* Date established using CMER Meeting Minutes

Evaluation of Lean Process

Several themes were identified during the evaluation:

1. + The expertise, technical skills, and experience needed on the TWIGs are being accurately established by the IWT to meet project needs.
2. + The size of the TWIGs is appropriately set at 4-5 members.
3. - The goal to reduce process cycle time is not being met.

All of the Lean projects have exceeded the 15 month process/schedule metric.

- The initial time estimates may not have been realistic.
- Urgency to get work completed does not appear to be as valued by CMER and Policy as is product quality.
 - Lack of commitment to meet schedule
 - This raises the question - is time the appropriate success metric?

Evaluation of Lean Process

4. - The roles and responsibilities of CMER and Policy appear to be indistinct.
 - Concern expressed that a firewall does not exist to protect the TWIGs from political agendas allowing them to maintain the quality of the science needed in AMP work products.
5. - The lack of a clear problem statement and research questions at the start of a project has impacted all Lean projects resulting in delays.
6. - Failure to follow established process
7. - Not understanding and appropriately utilizing Lean approach and tools.

Lean Projects

Project	Initiated*	Status	Total Time (months)
Eastside Type N Riparian Effectiveness Project (ENREP)	March 2013	Study Design at ISPR	49
Westside Type F Riparian Prescription Project	March 2013	Study Design at ISPR	49
Road Prescription Scale Effectiveness Monitoring Project	May 2014	Study Design at ISPR	35
Unstable Slopes Criteria Evaluation and Development Project	May 2014	BAS/Alternatives Document approved by Policy April 6, 2017 Development of Study Design to Start	35
Forested Wetlands Effectiveness Project (FWEP)	December 2014	Study Design in Development	28

* Date established using CMER Meeting Minutes

Recommendations

1. Incorporate components of the Lean Process into the AMP Project Development Process

- ❖ Small Team Approach
- ❖ Team Composed of Topic Experts
- ❖ Continuous Formal Monitoring and Evaluation of AMP Project Development Process
 - ❖ To ensure value by identifying waste and eliminating it whenever possible.
 - ❖ Focus on getting the right things to the right place at the right time to achieve efficient work flow, while minimizing waste and being flexible and able to change.
 - ❖ Application of Lean tools to monitor and evaluate AMP processes.

Recommendations

2. Review/Revise CMER Process.



This involves the need to consider three distinct, yet related components.

1. Decisions must derive from sound, transparent **processes** with clear links between science and management.
2. There must be productive **relationships** among the various participants (e.g., shared goals, shared risks).
3. Processes and relationships must lead to **outcomes**.
 - Results and decisions that are visible, grounded in science, and relevant.

Recommendations

2. Review/ Revise CMER Process.

- ❖ Identify clear roles and commitments on the part of all participants - CMER, SAG, AMPA, Policy, and Project Team (TWIG?) members.
 - Project Team: develops products
 - CMER/SAG: oversight responsibilities
 - CMER/Policy: approval responsibilities
- ❖ Establish specific timelines for completion of steps and stick to them.
 - Obtain commitment from participants to meeting timelines (signed agreements).
- ❖ Require all participants to work within the process.
- ❖ Protect Project Team from outside influence of SAGs, CMER, and Policy members during product development.
- ❖ When input requested by Project Team either as a point of clarification or document review - ensure that responses are clear, concise, and timely.

Recommendations

3. Structure of Project Team



- ❖ No more than two Project Team members should be from CMER, SAG, or CMER staff – remaining members from outside CMER.
- ❖ Develop guidelines to compensate outside participants compatible with Washington State contracting rules.
- ❖ Provide AMPA authority to restructure Project Team membership when necessary or appropriate (e.g., member needs to withdraw, additional expertise needed, member not meeting commitment).

Recommendations

4. Review and Revise the CMER Work Plan (CMER and Policy).

- ❖ AMPA/CMER work with Policy to establish clear and concise problem statement, objectives, and research questions (critical questions) prior to formation of Project Team.
- ❖ CMER incorporates these into CMER Work Plan.



Recommendations

5. Establish a monitoring group with the purpose of identifying and proposing corrective actions as needed.

- ❖ Lessons learned in conversations with CMER, Policy and the Project Team should be applied and the processes remapped in the spirit of continuous improvement.
- ❖ Make full use of CMER's guided decision making process when any issues arise that could delay completion of a project's deliverable.

6. Develop Success Criteria.

- ❖ Develop success criteria against which projects can be evaluated and lessons learned can be drawn and used to continually improve the process (a component of monitoring plan identified in Recommendation 1).

Questions?



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Hilary S. Franz, Commissioner of Public Lands