Eastern Oregon – Siskiyou Region: Monitoring of Forest Practices Act Streamside Protections

Oregon Board of Forestry, 3 January 2018

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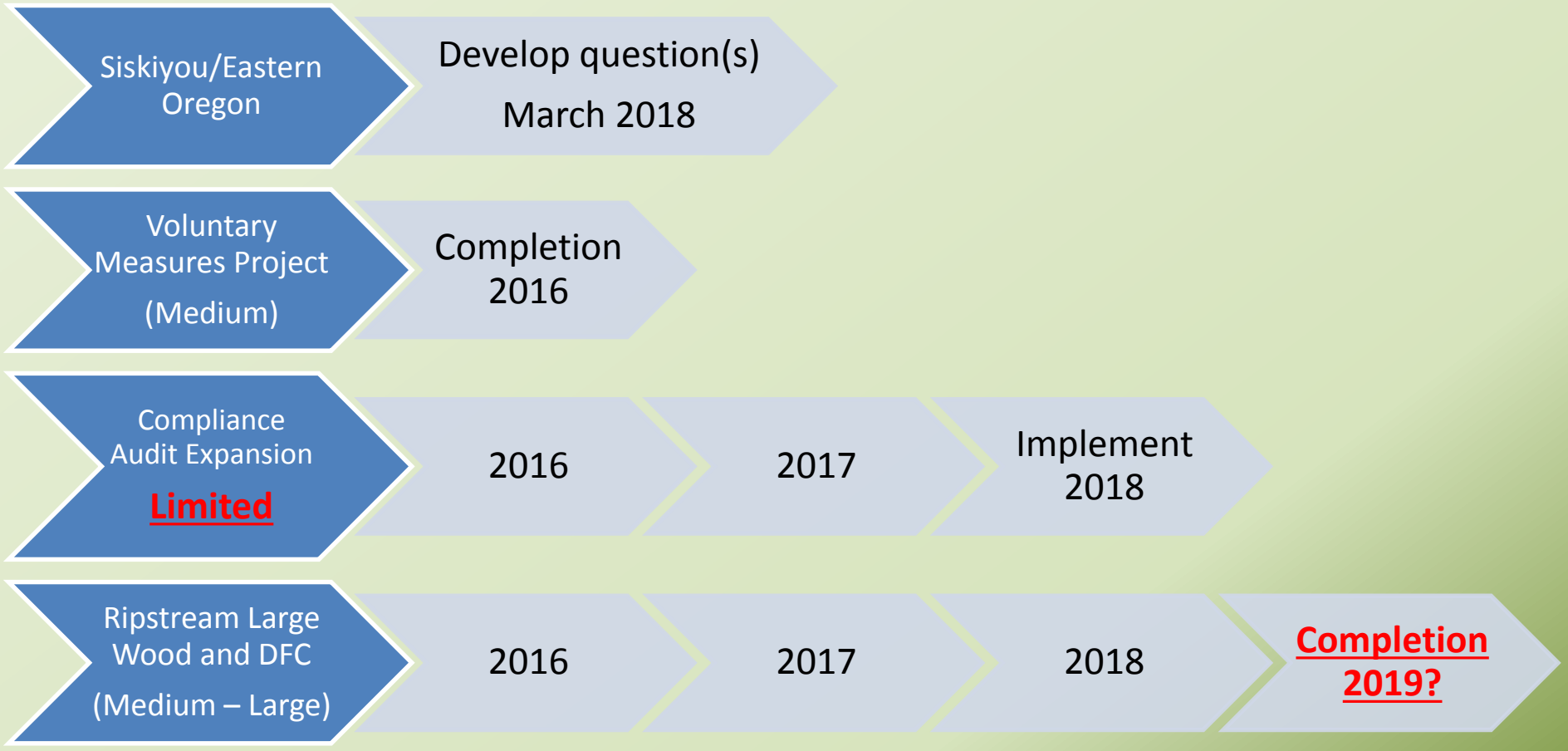
Why do effectiveness monitoring?

Quality control of our process

Modified Implementation of Monitoring Strategy



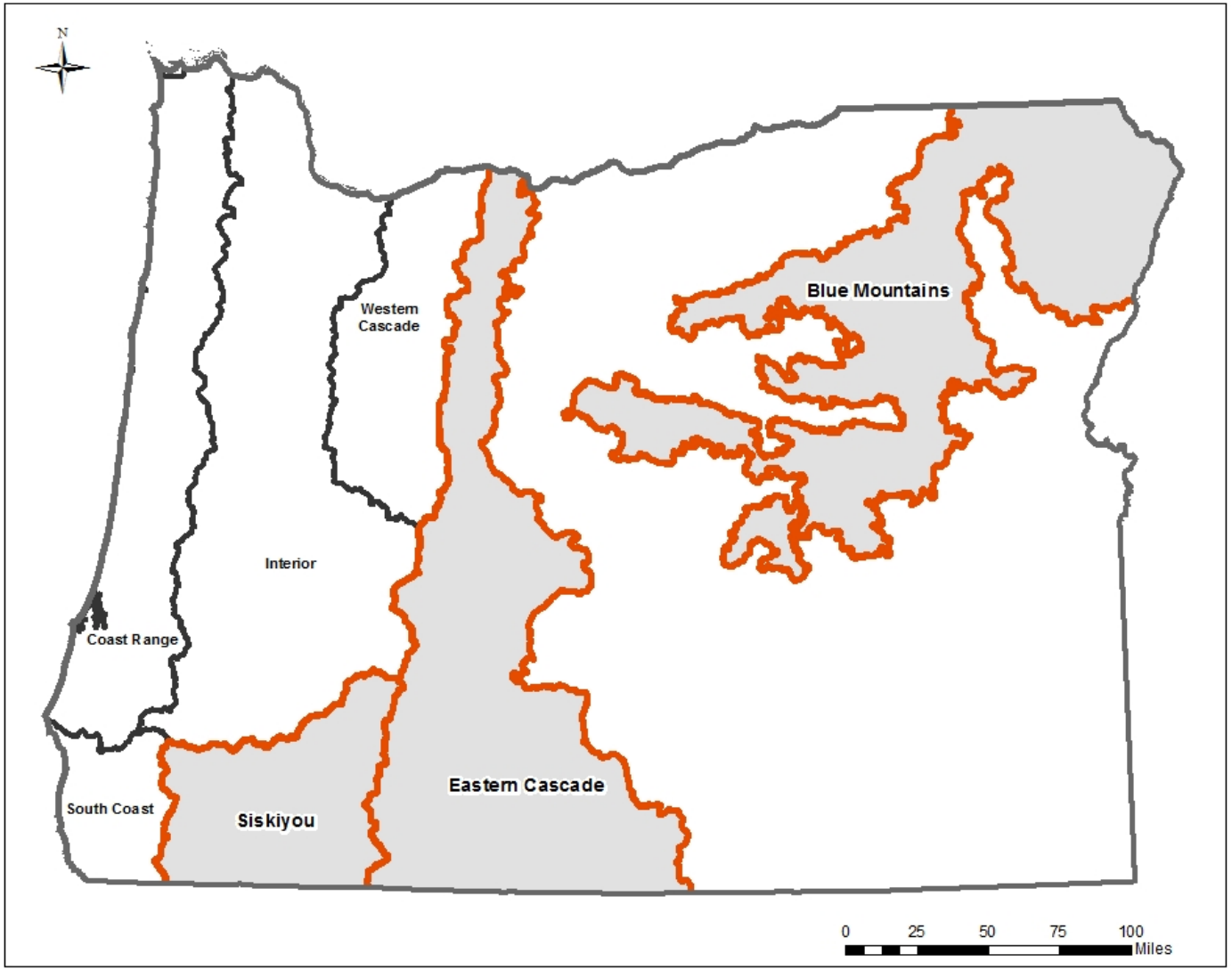
Why review streamside protections in the eastern Oregon/Siskiyou regions?

<u>Oregon Board of Forestry decision (November 2016)</u>

- Desire to review areas outside SSBT rule regions
- Part of implementing Monitoring Strategy

- Specific Board direction
  - Work with stakeholders
  - Propose one or more monitoring questions to address
  - Propose methods, timelines to answer question(s)
  - Report to the Board in July 2017

Map of eastern Oregon/Siskiyou regions



End in mind: Board decisions

Monitoring question elements:

- **Where:**
  - **Which Georegions (Siskiyou, Eastern Cascade, Blue Mountains)**
  - **Which stream types (F, N, D)**
  - **Which stream sizes (S, M, L)**
- **Which FPA goal(s) or purpose: water quality, healthy riparian forest, fish habitat, wildlife habitat**
  - **Relating to: stream temp., WQ-other, rip. management, shade, large wood**
- **How: what type of information to assist with study**

Approach and timeframe

Stakeholder input: methods

Survey

-Purpose: input on monitoring question elements

-Targeted outreach to >50 parties + their associates

-Online survey, 16 questions (multiple choice, narrative) – directly related to FPA

→ Caveat: not ballot stuffing, but range of opinions

-Describe who responded (by self-selected group)

Written input

Allow for another method of input

Stakeholder input: results

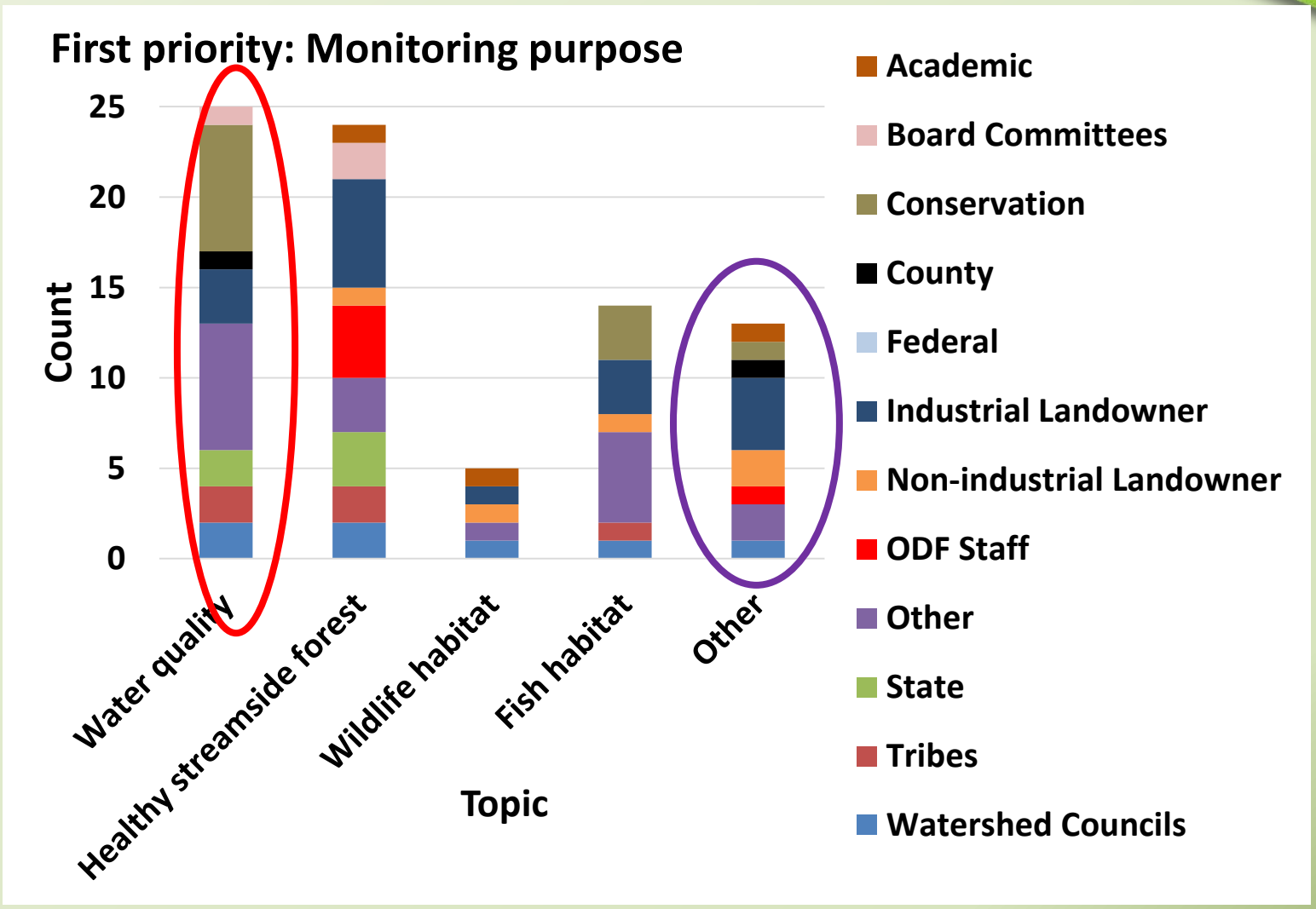
<u>Interpreting data</u>

-Complicated charts

-Different ways of looking at data to extract the range:

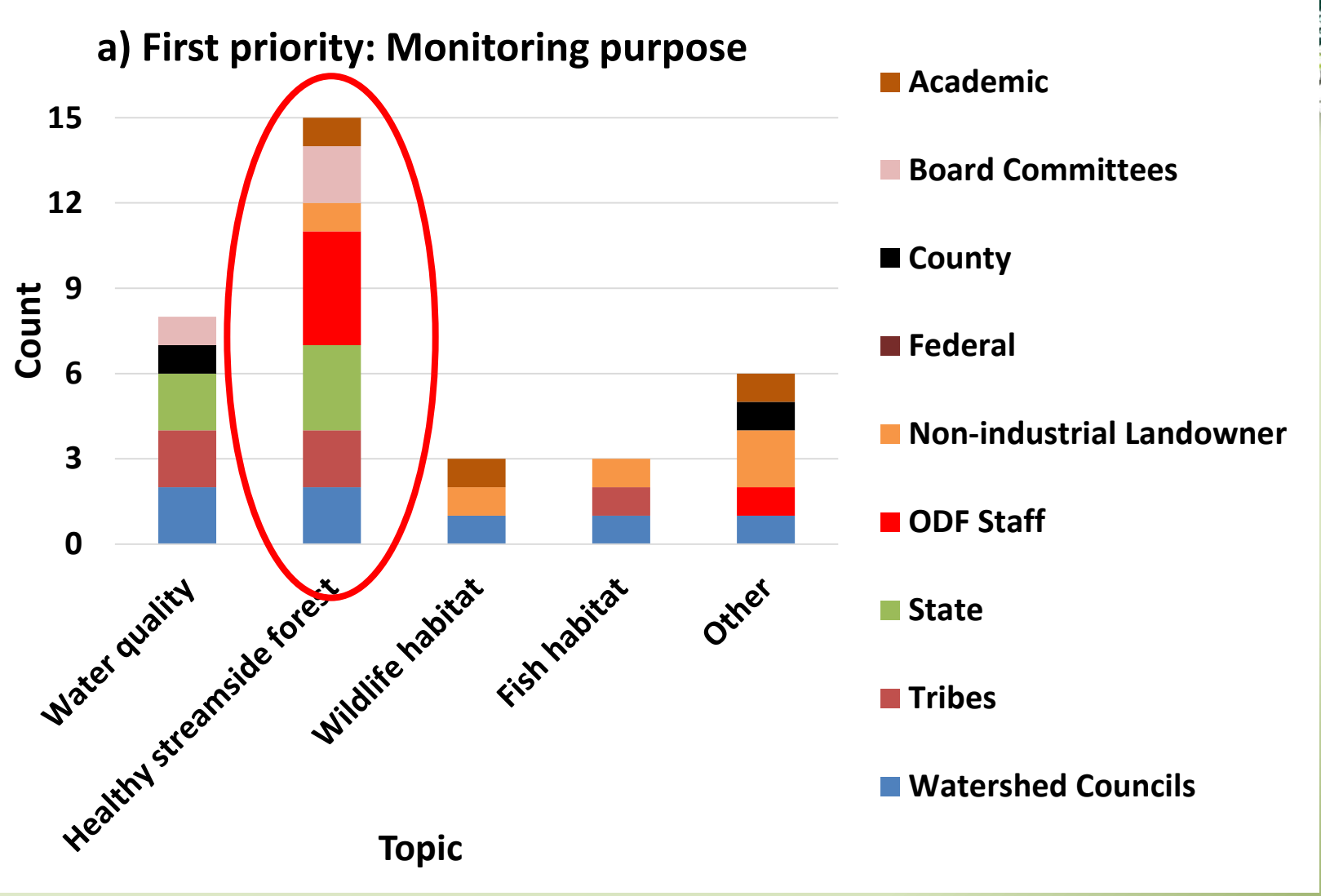
- Simple majority
- Overall majority
- Remove largest groups
- Narrative responses (survey & written comments)

Survey results: example



Wide range of respondents, priorities

Survey results: example



Remove groups > 10 respondents (Conservation, Private Industrial, “Other”)

Survey narrative ("Other") results: examples

Wide range of responses

"Design monitoring to determine the effectiveness of the forest practices act."

"Wastes from illegal mining" [should be the focus]

"I find current streamside protections to be adequate."

"I believe that the findings of the RIPSTREAM study are applicable to these areas, and could be considered the minimum effect of current buffer widths in these areas."

"These [stream sizes] are all very important. Ranking them seems to diminish the value of important natural resources."

Example interpretation of stakeholder input

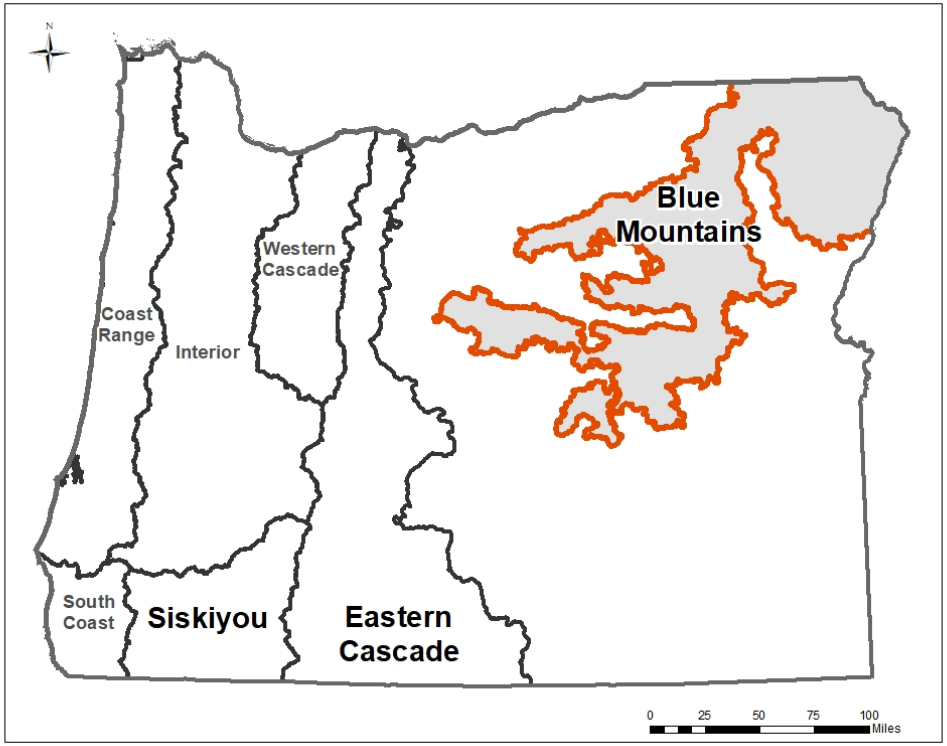
Question theme	Basis for theme	Question element: monitoring goal
1. No action	Some narrative responses ("Other")	No study
2. Simple majority	Count selections	Water quality
3. Overall majority	Larger picture of counting selections	Water quality + healthy streamside forests
4. Domestic water	Second-most selections (stream type)	Water quality
5. Holistic	Some narrative responses ("Other")	Water quality + healthy streamside forests
6. Siskiyou	Written comments	Water quality

Question elements:
Details for each question theme

Question elements:
No Action

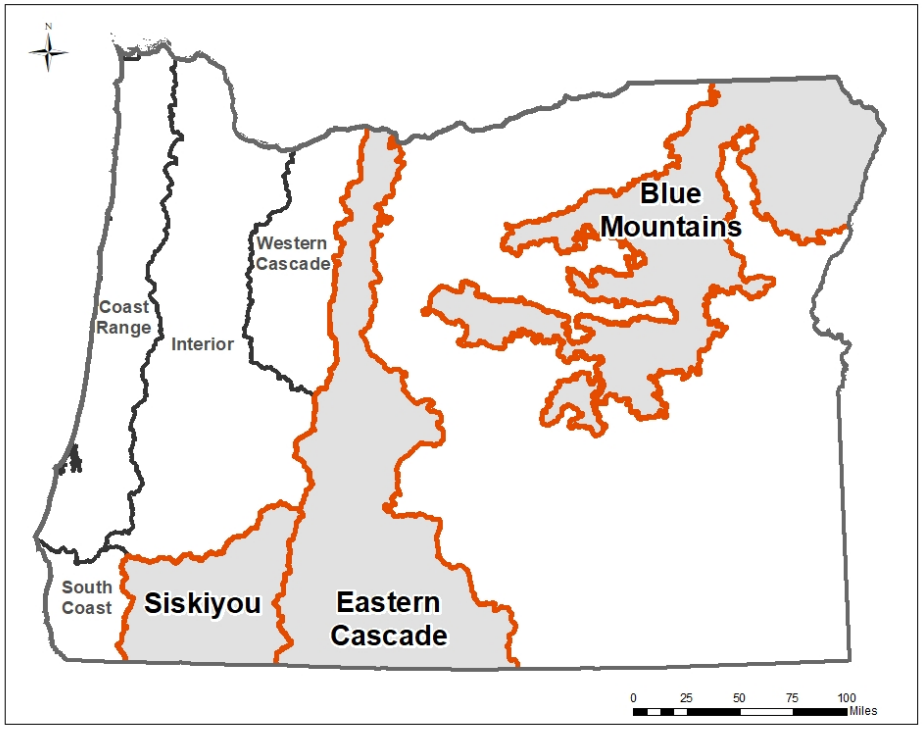
No monitoring study

Question elements: Simple Majority



Type:	**F**	N	D
Size:	S	**M**	L
Goal:	**WQ**	HSF	
Focus:	**Temp.**	Shade	WQ stds.
	LW	Fish	Rip.Mngment
Info:	**PeerRev.**		Fish Status/Trend
	Habitat		Vol.Msrs.

Question elements: Overall Majority



Type: F N D

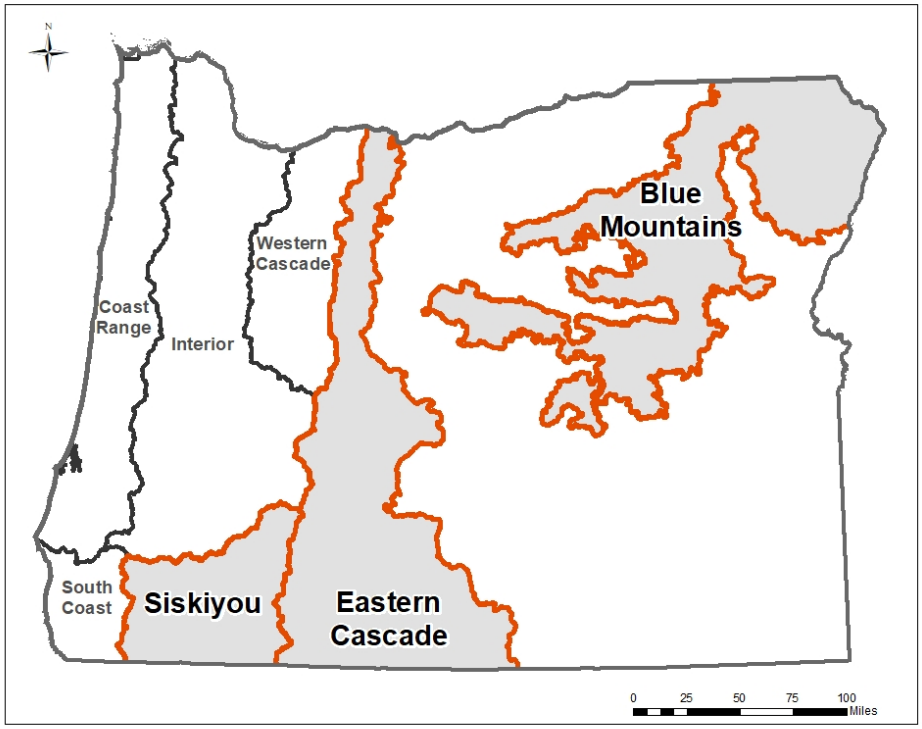
Size: S M L

Goal: WQ HSF

Focus: Temp. Shade WQ stds. LW Fish Rip.Mngment

Info: PeerRev. Fish Status/Trend Habitat Vol.Msrs.

Question elements: Domestic



Type: F N D

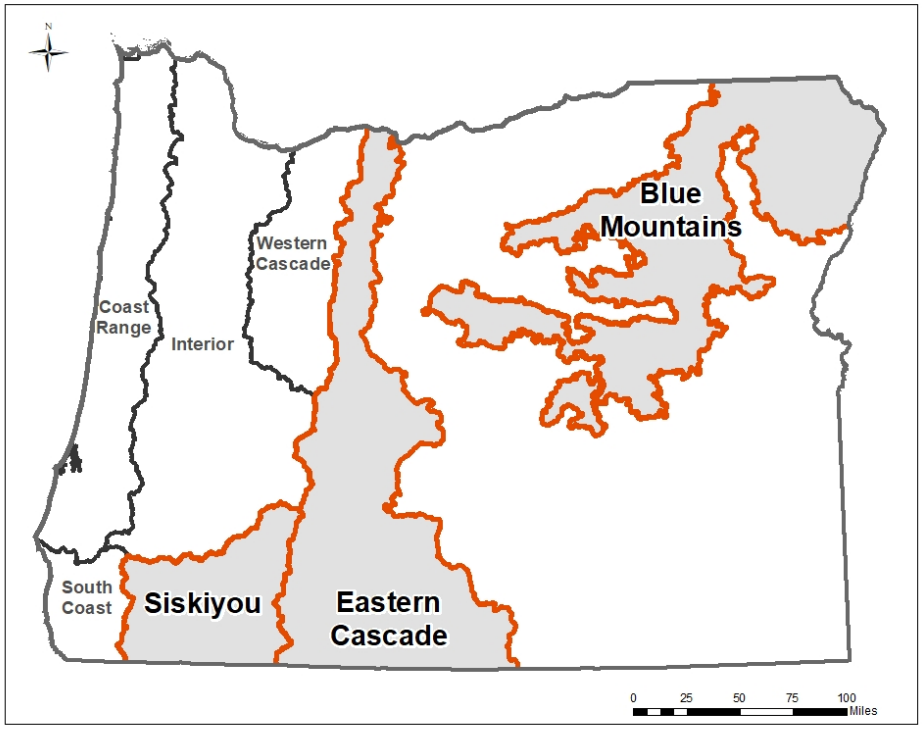
Size: S M L

Goal: WQ HSF

Focus: Temp. Shade WQ stds.
LW Fish Rip.Mngment

Info: PeerRev. Fish Status/Trend
Habitat Vol.Msrs.

Question elements: Holistic



Type: F N D

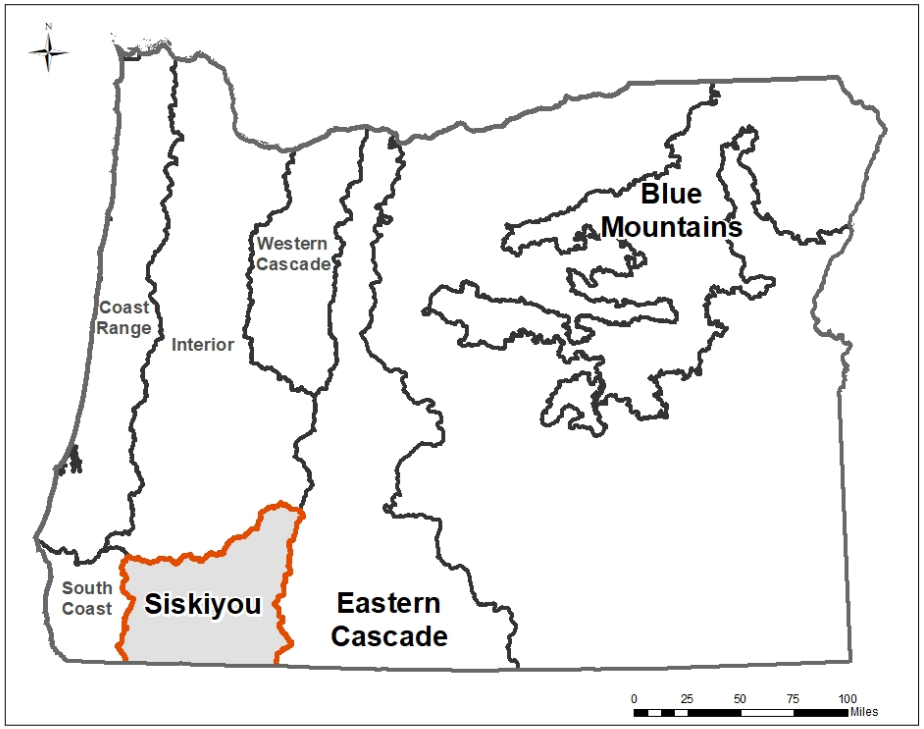
Size: S M L

Goal: WQ HSF

Focus: Temp. Shade WQ stds. LW Fish Rip.Mngment

Info: PeerRev. Fish Status/Trend Habitat Vol.Msrs.

Question elements: Siskiyou



Type:	**F**	**N**	**D**
Size:	**S**	**M**	**L**
Goal:	**WQ**	**HSF**	
Focus:	**Temp.**	**Shade**	**WQ stds.**
	LW	**Fish**	**Rip.Mngment**
Info:	**PeerRev.**		**Fish Status/Trend**
	Habitat		**Vol.Msrs.**

Translating question elements into a model question

Conduct a study to assess the effectiveness of Forest Practice Act streamside protection rule in the _____ geographic region(s) on _____ stream types and _____ stream sizes to meet the _____ purpose or goals relating to _____. Utilize research and monitoring data from _____ to inform the monitoring study.

Example monitoring question

Example: Simple Majority theme

Conduct a study to assess the effectiveness of FPA riparian rules in the Blue Mountains geographic region on fish stream type and medium stream size to meet the water quality protection purpose or goals relating to stream temperature.

Utilize research and monitoring data from peer-reviewed research to inform the monitoring study.

Study approach and timeline

Study approach and timeline

Study approach	Time to complete	Number of FTE staff	Confidence & applicability
Literature review	6-9 months	0.5-0.75 FTE	Low to high
Systematic review	12-15 months	0.75-1 FTE	Low to high
Light field study	18-30 months	1-2 FTE, a few seasonals	Moderate
Intensive field study	60-180 months	1-4 FTE, plus numerous seasonals	High

Caveats

-Timelines also affected by level of stakeholder involvement, number of topics & georegions

-Literature, Systematic reviews - depend on if sufficient number of highly-relevant studies

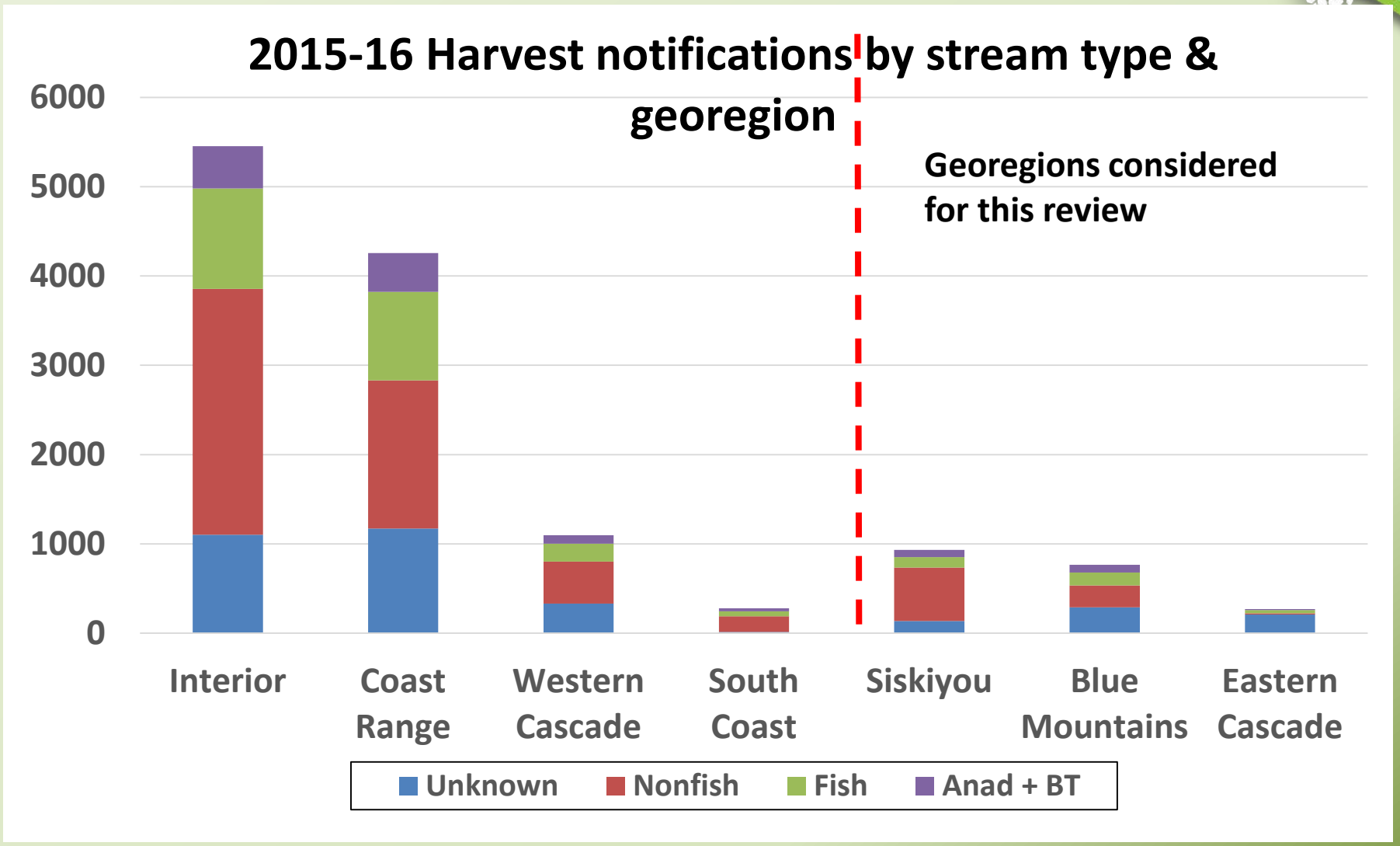
-Designing a field study: includes literature review

Decision framework: Combining GIS analyses (July 2017) + question themes

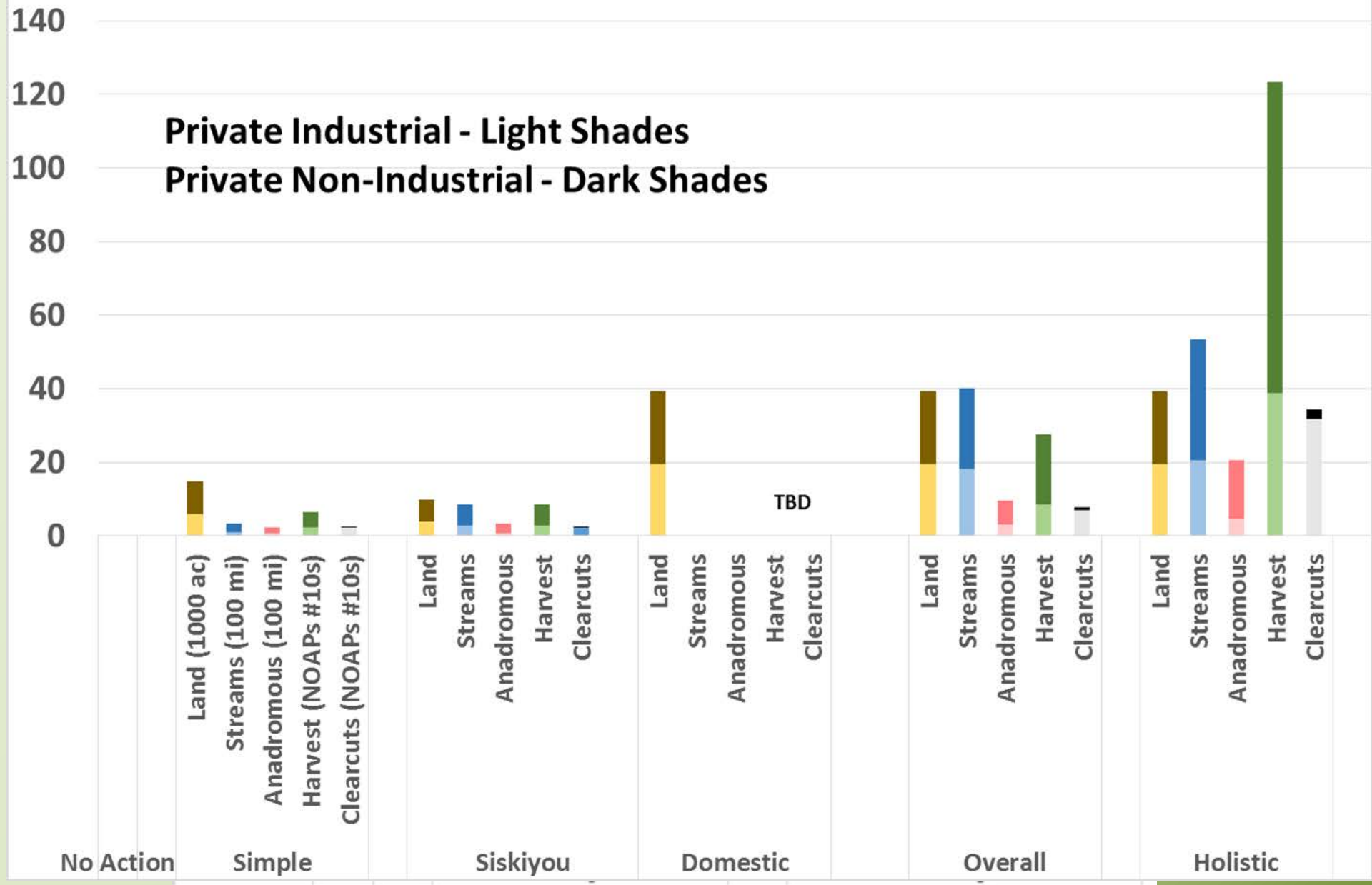
Decision Framework

- **Basic Goal**
  - –**Identify a monitoring question and how to answer**
- **What is in a question?**
  - **Who is interested in the question?**
  - **Where to look?**
  - **How to look?**
  - **Who may be affected by question outcomes?**
  - **How might they be affected?**
  - **What is the scope and type of affected natural resources?**

For reference (from July 2017 meeting)



Monitoring Question Themes vs. GIS Analysis



Questions?

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Next Steps (March)

<u>March Board meeting</u>

-Tally of potentially-relevant science

-Board decisions:

- **Which question, if any?**
- **Approach and timeframe**