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**DRAFT**  
**EFFECTIVENESS MONITORING COMMITTEE (EMC)**  
**Strategic Plan**



**Submitted to the California Board of Forestry and Fire Protection**

*October 1, 2015 Draft*

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Member, California Board of Forestry and Fire Protection

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California Natural Resources Agency

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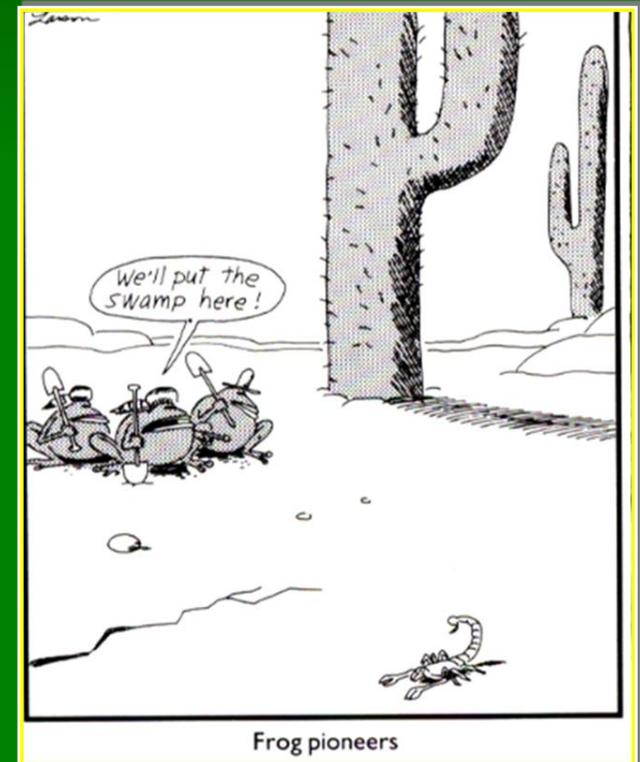
## EMC Timeline

- MSG Effectiveness Monitoring Proposal **July 20<sup>th</sup>, 2009**
- Charter – Management Committee **February 1<sup>st</sup>, 2013**
- Charter - Full Board Approval **August 12<sup>th</sup>, 2013**
- EMC members selected and approved **August 27<sup>th</sup>, 2014**
- EMC- 1<sup>st</sup> meeting **October 2<sup>nd</sup>, 2014**
- Draft Strategic Plan to Board for review **October 1<sup>st</sup>, 2015**

## Board Review and Guidance



- Does the Strategic Plan reflect the direction provided in the Charter, Board committees, and agency and public comment?
- Have we achieved an appropriate open and transparent process?
- Does the “Road Map” provide an appropriate decision space or playing field? Is it too broad or too prescriptive?
- Was the review and prioritization of monitoring questions appropriate?
- Does the plan going forward meet expectations?





# EMC Strategic Plan Development

- Open and Transparent
- Committee Members
- Staff Support
- Public Contributions

The screenshot shows the website for the Board of Forestry and Fire Protection. The header includes the CA.GOV logo, the Board's name, and navigation links for HOME, ABOUT, BUSINESS, POLICY, COMMITTEES, and REGULATIONS. A search bar is also present. The main content area features a large image of a forest and a house, with the text 'REGISTERED FORESTERS' and 'Board of Forestry and Fire Protection'. Below this, the mission statement is displayed. The page is divided into sections for the Effectiveness Monitoring Committee, with sub-sections for MISSION & GOALS, SEPTEMBER 2015, AUGUST 2015, and JULY 2015. Each section lists documents available for download. On the right side, there are two boxes: 'MAIN LINKS SUBSCRIBE' and 'BOARD COMMITTEES LINKS SUBSCRIBE', both containing lists of links to various pages and committees.

**Effectiveness Monitoring Committee**

Archive:

**MISSION & GOALS SUBSCRIBE**

- Effectiveness Monitoring Committee Charter (124KB PDF)
- Coe Report on Monitoring 2009 (1.5MB PDF)
- EMC Roster (183KB PDF)

**SEPTEMBER 2015 SUBSCRIBE**

- September 2015 Agenda (215KB PDF)

**AUGUST 2015 SUBSCRIBE**

- August 2015 Agenda (215KB PDF)
- Final Planning Rule Rule Text Only (157KB PDF)
- NMFS EMC Letter to Board August 2015 (672KB PDF)
- Draft FGC Relevant Policies (296KB PDF)
- EMC Monitoring Strategic Plan 8-18-15 w/edits (1.6MB PDF)

Please click the link below to register for the **Tue, Aug 18, 2015 9:00 AM - 5:00 PM** PDT meeting:  
<https://attendee.gotowebinar.com/register/5505113251587996930>

**JULY 2015 SUBSCRIBE**

- July 2015 EMC Agenda (216KB PDF)
- DRAFT EMC Strategic Plan 7-08-15 (1.4MB PDF)
- EMC DRAFT Strategic Plan Section 228 (56KB PDF)
- Notes from EMC Meeting July 8, 2015 (84KB PDF)

**MAIN LINKS SUBSCRIBE**

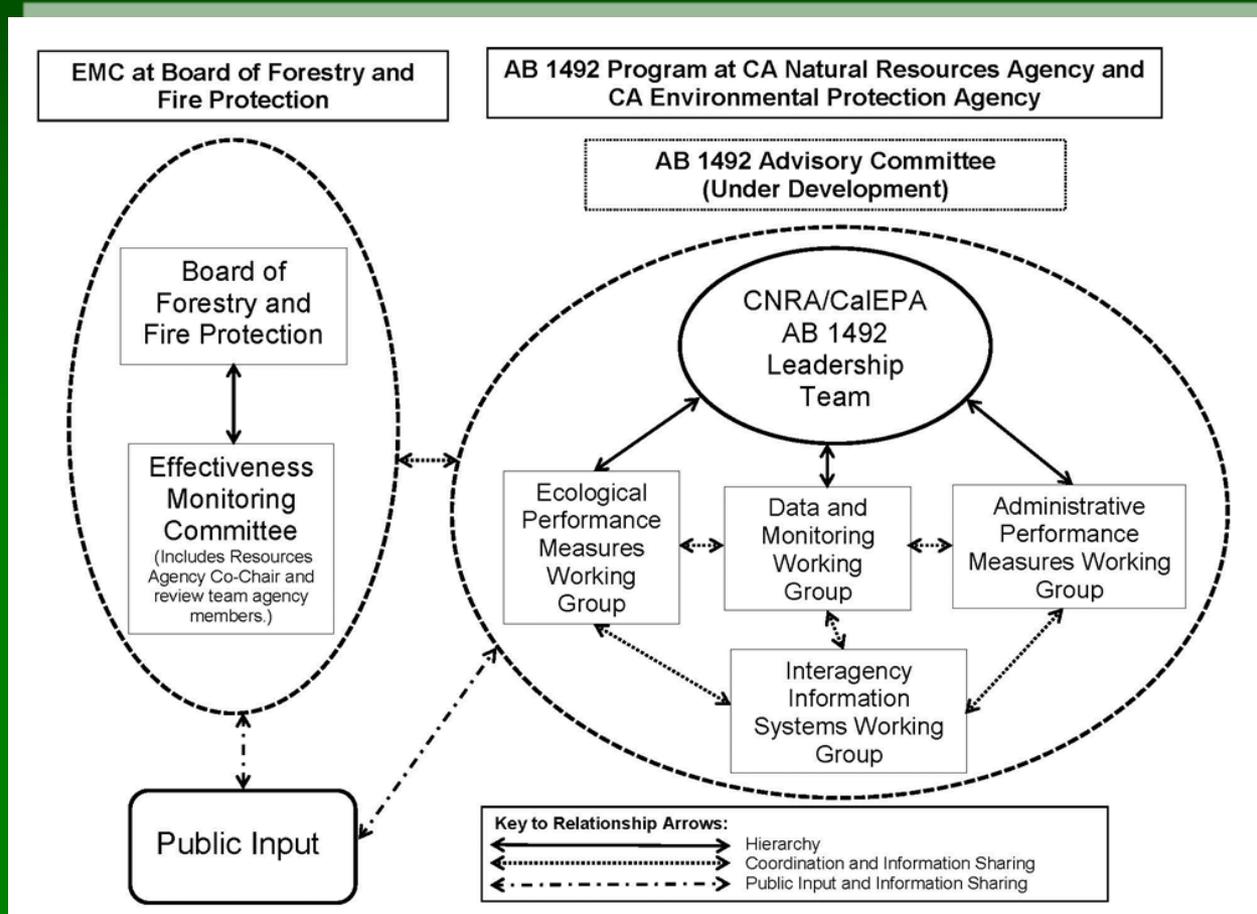
- Home
- About
- Business
- Policy
- Committees
- Regulations
- Registered Foresters

**BOARD COMMITTEES LINKS SUBSCRIBE**

- Monitoring Study Group
- Resource Protection Committee
- Forest Practice Committee
- Policy Committee
- Management Committee
- Range Management Advisory Committee
- Technical Advisory Committee
- Interagency Forestry Working Group
- Research and Science Committee
- VTAC
- Effectiveness Monitoring Committee



# EMC Strategic Plan Development





## EMC Strategic Plan Development

- Charter - Goals and Objectives
- Annual Reporting and review by the Board
- Personnel and Funding (Section 1.4)
- Collaborative scientific atmosphere that builds mutual understanding and trust of scientific results.





# Development of Critical Monitoring Question

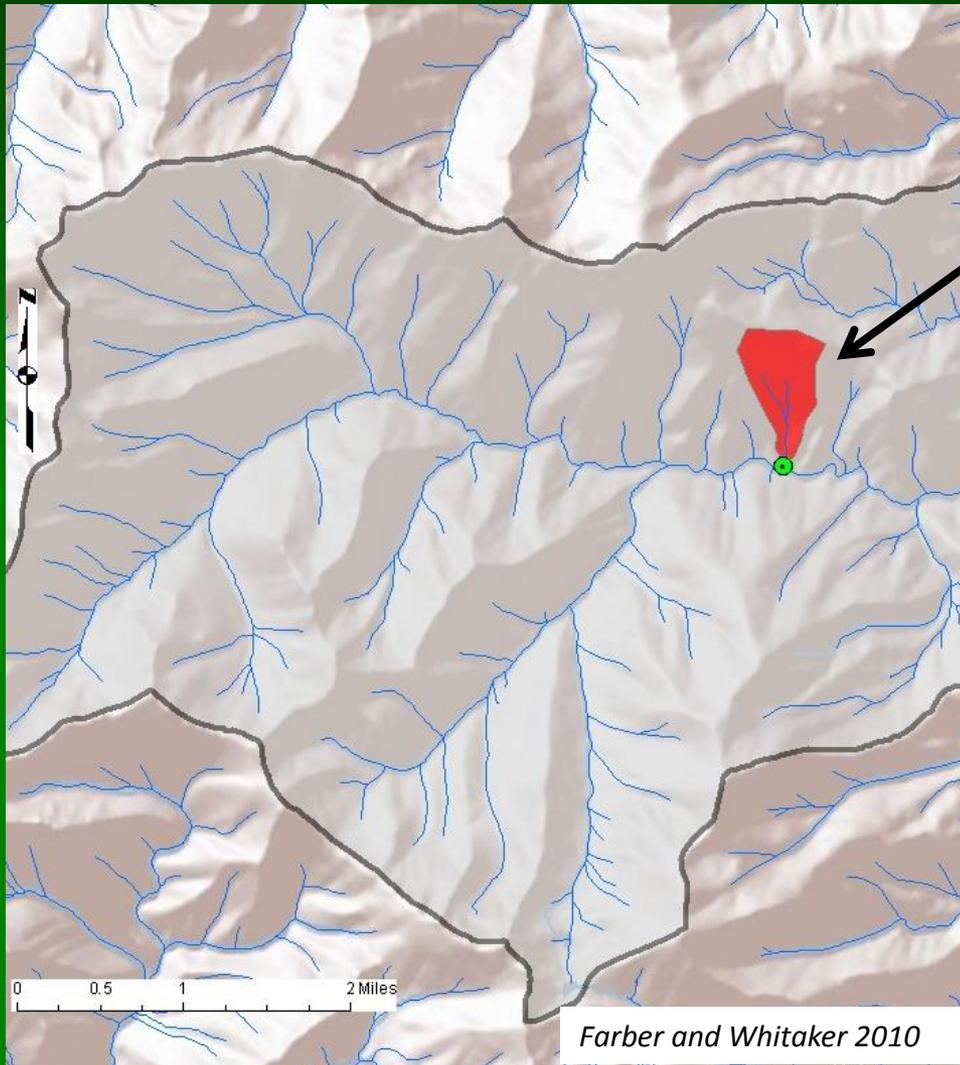
## Monitoring Priorities

- Board
- CDFW
- Water Boards
- CGS
- CALFIRE
- USFS
- NOAA/NMFS
- Public





## Cumulative Effects: Example



Step 1 Monitor causal linkages between FPRs and associated regulations and the resource of concern at relatively small spatial and temporal scales.  
**(Project or THP scale)**

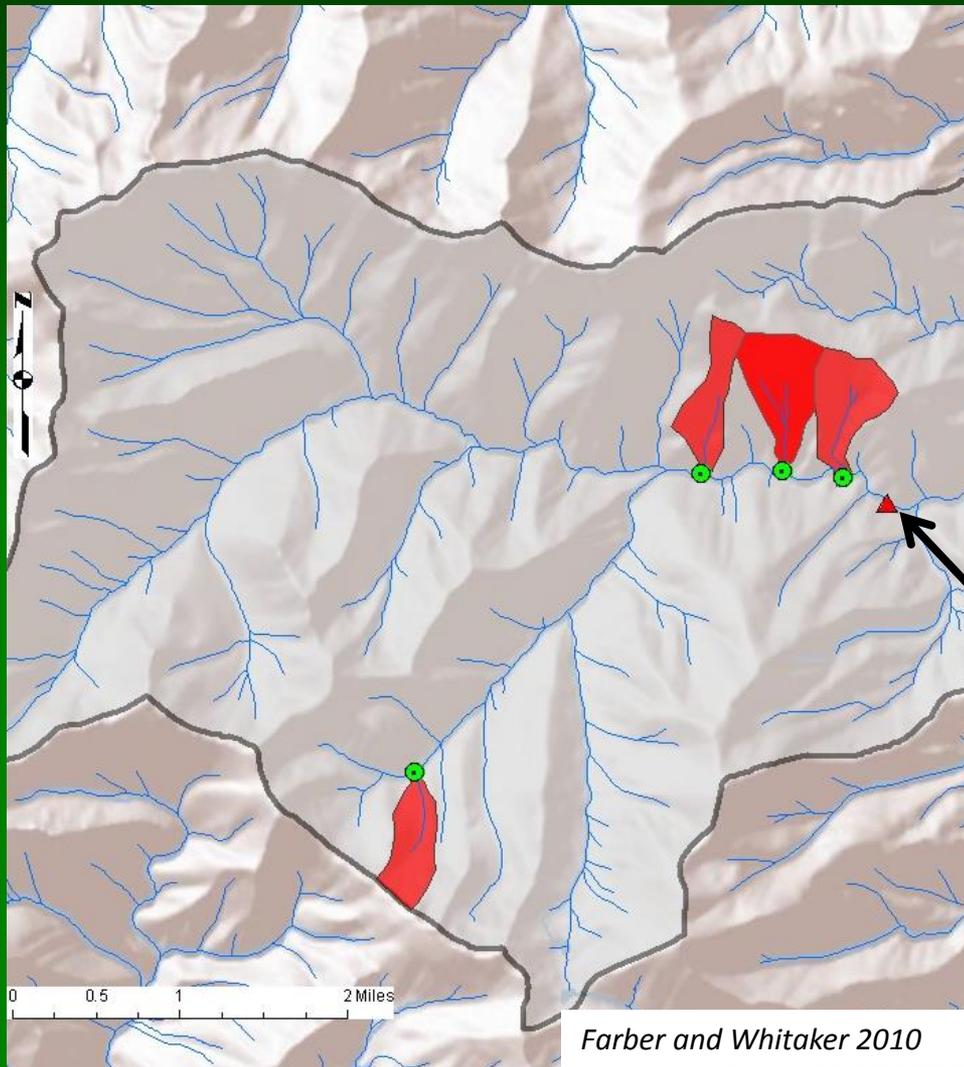
Critical Question Theme  
**WLPZ Canopy Closure**

Rule or Regulation  
**14 CCR § 916 [936, 956]**

Critical Monitoring Question  
**is maintaining or restoring water temperatures?**



## Cumulative Effects: Example



Step 1 Monitor causal linkages between FPRs and associated regulations and the resource of concern at relatively small spatial and temporal scales. (Project or THP scale)

Step 2 Nest the smaller spatial scales studies within larger studies and shorter temporal studies within longer studies.



## Issues of temporal and geographic scale:

- Range of variability
- Rare and large events
- Limits of the EMC (example: anadromous fish monitoring)
- Resource benefit

*Van Eck Forest*





- **Range of Variability**
- **Rare or Large Event Monitoring**

*Mill Creek, Scott River 2008*



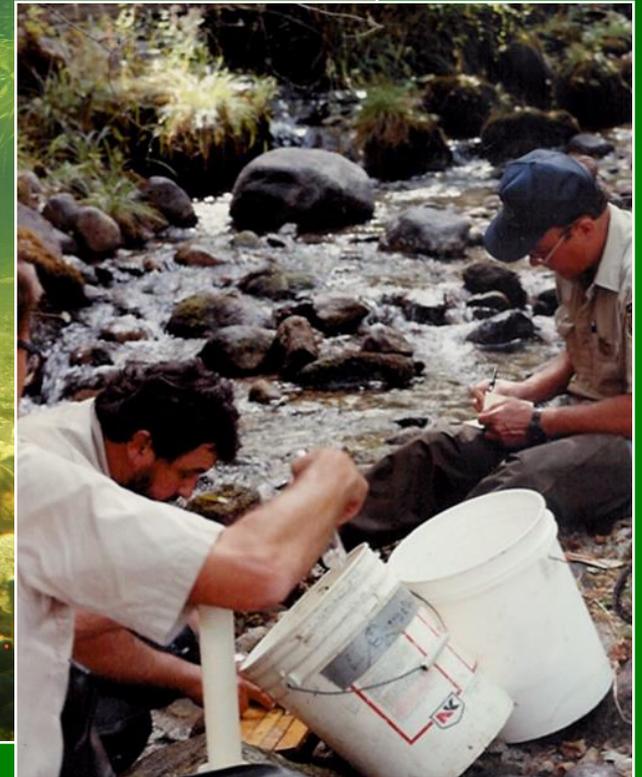
*Chips Fire, Plumas County, 2012*



# Anadromous Fish Monitoring



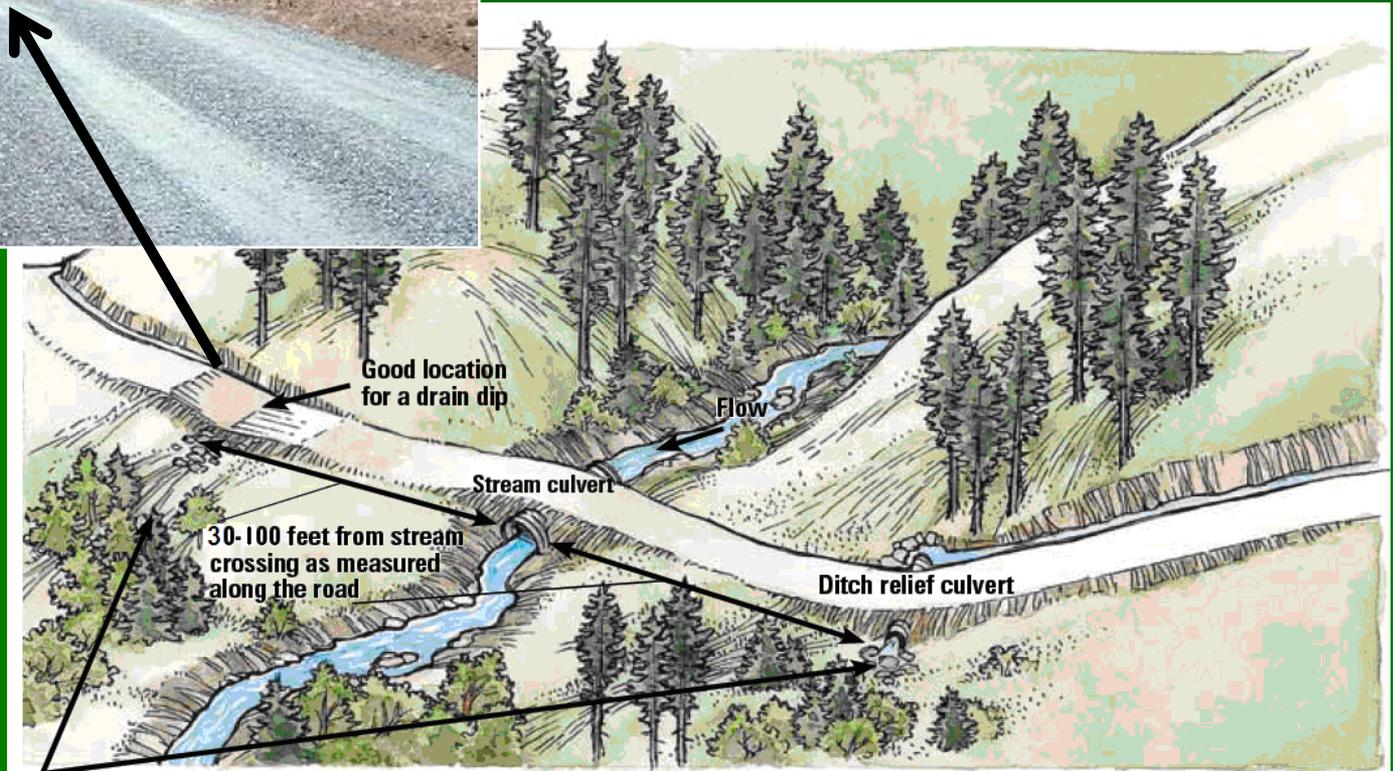
*French Creek Watershed Advisory Group, Siskiyou County*



# Resource Benefit

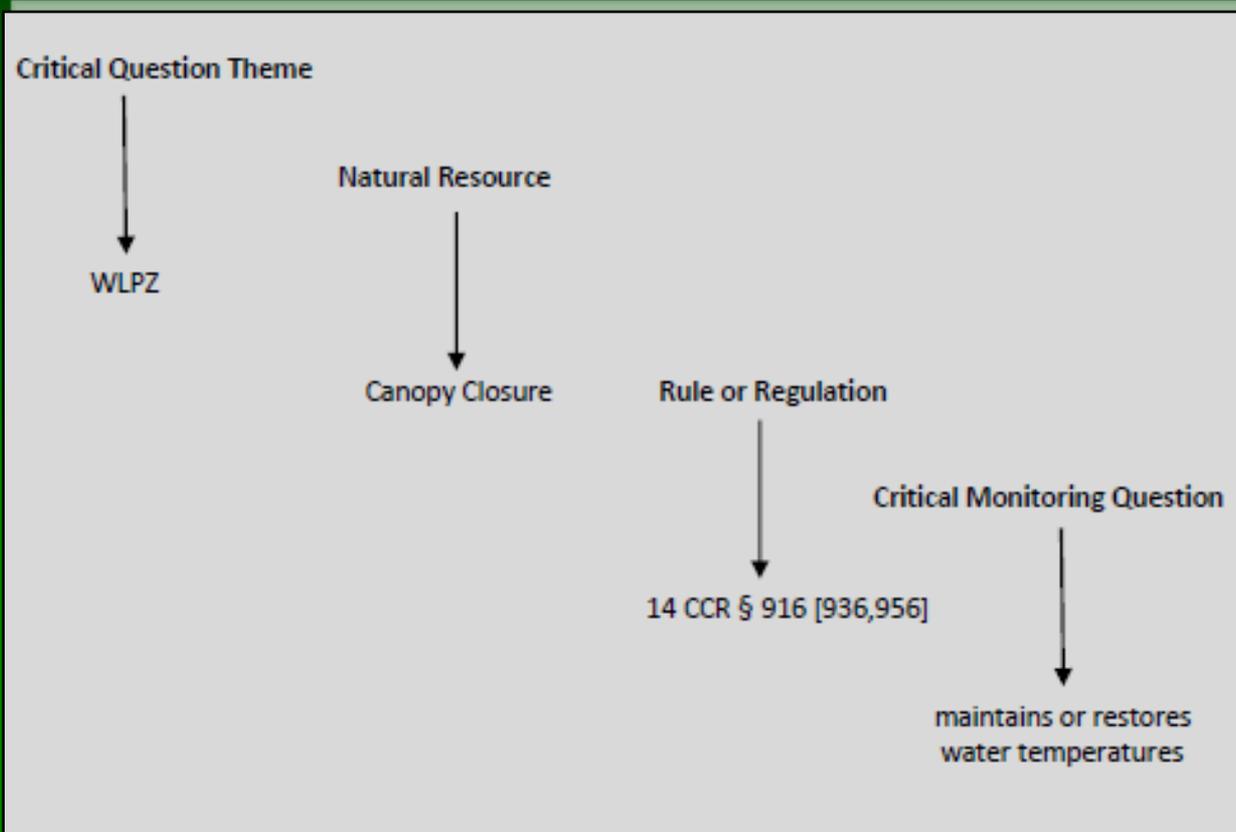


Road Rules 2013 Technical Rule Addendum #5





# Critical Monitoring Questions





## Critical Monitoring Questions

	<u>Critical Question Theme</u>	<u>EMC Members Priority</u>
1	WLPZ Riparian Function	High
2	Watercourse Channel Sediment	High
3	Road and WLPZ Sediment	High
4	Mass Wasting Sediment	Medium
5	Fish Habitat	Medium
6	Wildfire Hazard	High
7	Wildlife Habitat: Species and Nest Sites	Low
8	Wildlife Habitat: Seral Stages	Low
9	Wildlife Habitat: Cumulative Impacts	Medium
10	Wildlife Habitat: Structures	Low

# Example: Washington State CMER 2015 Work Plan

- Program Title
- Program Number
- Uncertainty
- Risk



Table 3. Rankings for Effectiveness Monitoring and Extensive Status and Trends Monitoring Programs

Program Title	Overall Ranking	Uncertainty		Risk	
		Mean	Rank	Mean	Rank
<b>Effectiveness/Validation Programs</b>					
Type N Buffer Characteristics, Integrity Function	1	4.4	1	3.9	1
Eastside Type F Desired Future Range and Target	2	4.2	2	3.8	2
Type N Amphibian Response	3	4.2	2	3.7	3
Road Sub-Basin-Scale Effectiveness Monitoring	4	3.4	5	3.4	4
Type F Statewide Prescription Monitoring	5	3.2	7	3.1	6
Mass Wasting Effectiveness Monitoring	6	3.2	6	2.9	8
Eastside (BTO) Temperature	7	3.0	9	3.2	5
Wetlands Revegetation Effectiveness	8	3.5	4	2.7	11
Road Prescription-Scale Effectiveness Monitoring	9	2.6	14	3.1	6
Hardwood Conversion	10	3.0	8	2.6	12
Wetlands Mitigation	11	2.8	11	2.7	10
Fish Passage Effectiveness Monitoring	12	2.6	14	2.9	9
Wildlife Program	13	2.9	10	2.4	14
Wetland Management Zone Effectiveness Monitoring	14	2.8	12	2.5	13
CMZ Effectiveness Monitoring	15	2.7	13	2.1	15
Forest Chemicals	16	2.0	16	2.1	16
<b>Extensive Status and Trends Monitoring Programs</b>					
Extensive Riparian Monitoring	1	3.5	2	3.5	1
Extensive Mass Wasting Monitoring	2	3.7	1	2.9	3
Extensive Fish Passage Monitoring	3	3.1	3	3.1	2



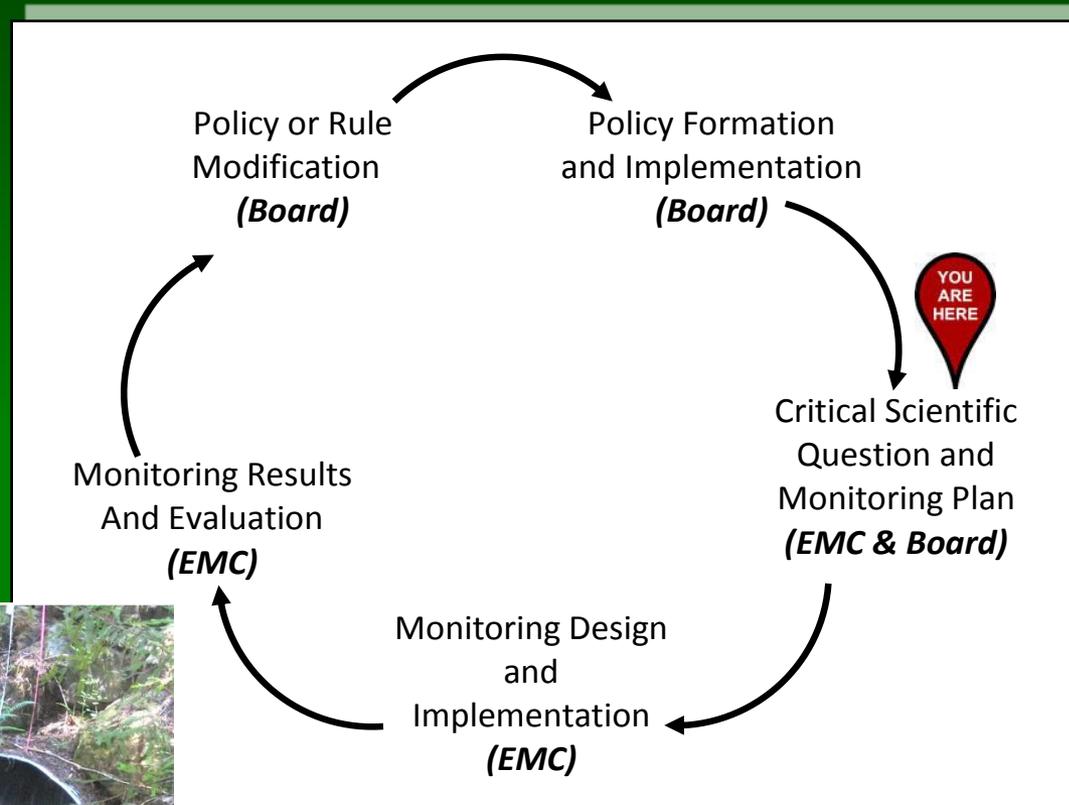
## Ranking Method for Monitoring Projects (Appendix F)

- Critical Question
- Scientific Uncertainty
- Geographic Application
- Collaboration and Feasibility





# Adaptive Management





## EMC Going Forward

- Finalize Strategic Plan
- Review and rank proposed monitoring projects
- Solicit monitoring projects, if necessary
- Seek collaborators and resources to implement monitoring
- Annual Report and update of Strategic Plan to the Board

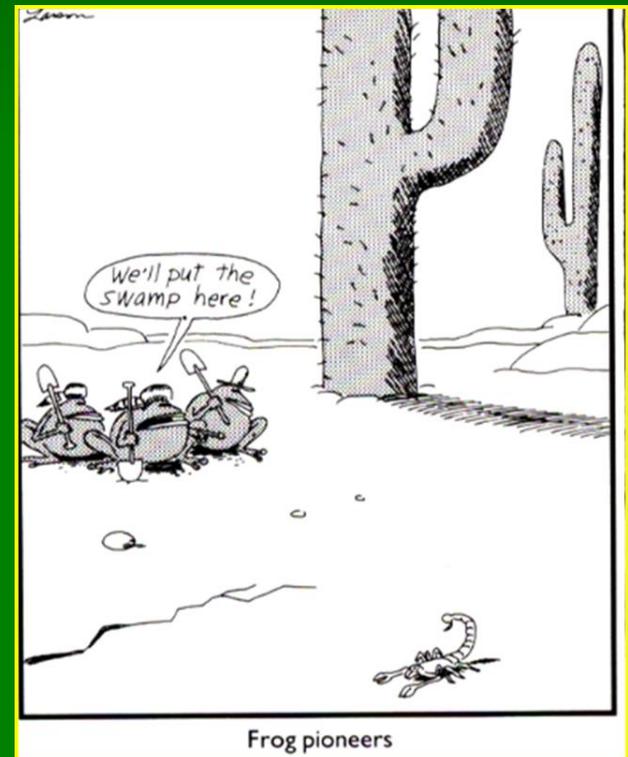
*Sue Hilton, V-Star sampling, French Creek, Circa 1996*

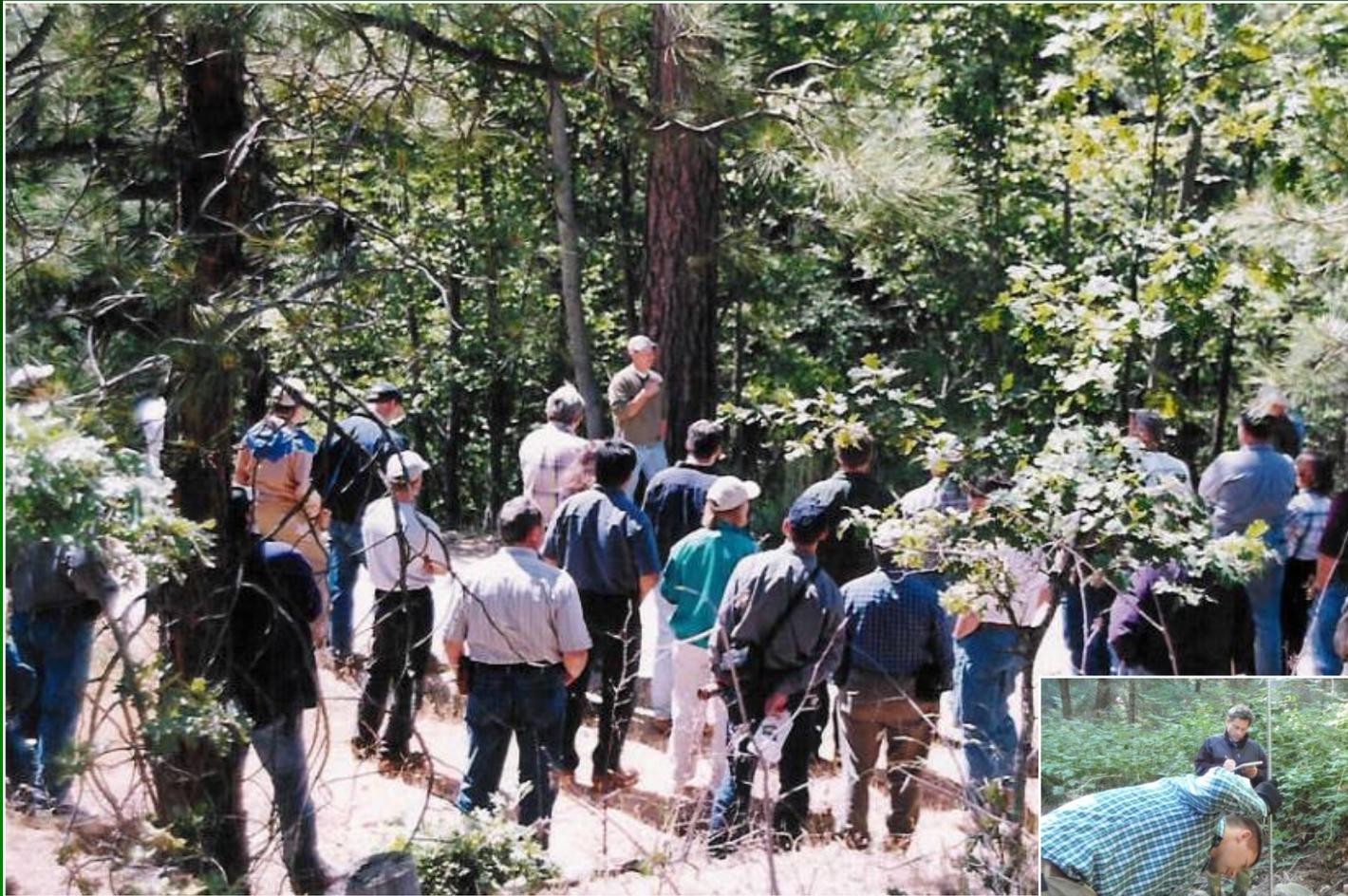




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*Board of Forestry and Fire Protection, 1996 Review of French Creek Watershed*

