

STATE OF WASHINGTON
FOREST PRACTICES BOARD

PO Box 47012
Olympia, WA 98504-7012

November 1, 2018

Bernard Dean
Chief Clerk of the House
338B Legislative Building
Olympia, WA 98504

Brad Hendrickson
Secretary of the Senate
412 Legislative Building
Olympia, WA 98504

Dear Chief Clerk Dean and Secretary Hendrickson:

Please accept the enclosed report, submitted on behalf of the Forest Practices Board (Board), as directed in the 2017-2019 biennial operating budget, 2017 Substitute Senate Bill 5883 (SSB 5883) Section 308(4). This proviso provided additional general fund-state funding, beyond the Forests and Fish Support Account funding, to carryout scientific research in the Forest Practices Adaptive Management Program (AMP) pursuant to RCW 76.09.370.

This report provides a background of the AMP and a synopsis of the associated activities that occurred in fiscal year 2018 (FY18), emphasizing details about the Cooperative Monitoring, Evaluation and Research Committee's (CMER) research studies and accomplishments, the science used in decision making, and the funding needs for the 2019-2021 biennium.

The research conducted in the AMP focused on evaluating the effectiveness of Forest Practices Rules in meeting resource targets identified in the 1999 Forests and Fish Report (FFR). Research emphasis focused on areas with the highest amount of uncertainty. For example, rules targeting topics such as providing riparian functions for fish habitat, and protecting or restoring water quality are currently underway. These studies include evaluating riparian buffer prescriptions in fish and non-fish bearing waters, unstable slopes, and wetlands in the forested environment. These projects assist in assuring forest practices are congruent with the Clean Water Act and the Forest Practices Habitat Conservation Plan under the Endangered Species Act.

Should you have any questions, please contact me at 360-902-1028 or stephen.bernath@dnr.wa.gov.

Sincerely,



Stephen Bernath
Chair, Forest Practices Board

Enclosure (1) Legislative Report: Forest Practices Adaptive Management Program, FY 2018

c: Members of the Senate Natural Resources & Parks Committee
Members of the House Agriculture & Natural Resources Committee
Members of the Senate Ways & Means Committee
Members of the House Appropriations Committee



Forest Practices Board

Legislative Report on the Adaptive Management Program

October 31, 2018

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Forest Practices Adaptive Management Program FY 2018 Report to the Washington State Legislature

Purpose of Report

This report is intended to provide information to the Washington State Legislature regarding the Forest Practices Adaptive Management Program, the fiscal year 2018 (FY18) expenditures, research accomplishments, and the use of science in decision-making for the 2017-2019 biennium. This report concludes with a description of funding needs for the 2019-2021 biennium.

This report was requested in a proviso within the 2017-2019 biennial operating budget, Substitute Senate Bill 5883 ([SSB 5883](#)) Section 308(4):

“The forest practices board shall submit a report to the legislature following review, approval, and solicitation of public comment on the cooperative monitoring, evaluation, and research master project schedule, to include: Cooperative monitoring, evaluation, and research science and related adaptive management expenditure details, accomplishments, the use of cooperative monitoring, evaluation, and research science in decision-making, and funding needs for the coming biennium. For new or amended forest practices rules adopted or new or amended board manual provisions approved under chapter 76.09 RCW, the forest practices board shall also report on its evaluation of the scientific basis for the rule or board manual provisions including a technical assessment of the value-added benefits for aquatic resources and the corresponding economic impact to the regulated community from the rule or board manual. The report shall be provided to the appropriate committees of the legislature by November 1, 2018.”

Adaptive Management Program

The Salmon Recovery Act of 1999 ([ESHB 2091](#)) directed the Forest Practices Board ([Board](#)) to adopt rules consistent with the 1999 Forests and Fish Report ([FFR](#)), including rules for a scientifically based Adaptive Management Program ([AMP](#)) used "...for evaluating the impacts of forest practices on aquatic resources". Revised Forest Practices rules consistent with the FFR and ESHB 2091, including the AMP, were adopted by the Board in 2001 (Washington State Forest Practices Rules, [WAC 222-12-045](#)). In support of the AMP, the Board established the Cooperative Monitoring, Evaluation and Research ([CMER](#)) Committee to oversee research necessary to determine the effectiveness of contemporary Forest Practice Rules in meeting aquatic and riparian resource targets.

ESHB 2091 also directed the state to seek "federal assurances" from the appropriate federal agencies that the revised rules, including the AMP, were adequate to meet Endangered Species Act ([ESA](#)) and Clean Water Act ([CWA](#)) requirements. The Department of Natural Resources submitted the Forest Practices Habitat Conservation Plan ([FP HCP](#)) in late 2005 and received approval in the form of incidental take permits ([ITPs](#)) from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service in June 2006. Similarly, the Washington Department of Ecology, through authority delegated by the U.S. Environmental Protection Agency, provided CWA assurances upon adoption of the 1999 FFR by the Legislature. This action was taken with the assumption that the revised rules would either meet state water quality standards, or put impaired water bodies on a trajectory to meet standards.

In May 2012, the Washington State Department of Natural Resources, Department of Ecology, Forests and Fish Conservation Caucus, and Washington Forest Protection Association announced that a settlement agreement had been reached to avert litigation over the state's FP HCP before the statute of limitations to challenge the FP HCP expired. The issues addressed in the final agreement revolve primarily around covenants not to sue in exchange for clarification of a minimum program funding level and clearer enforcement language in federal agreements, firm commitments to a schedule of science and adaptive management projects, and an improved collaborative process in evaluating science information for implementation (known as the 2012 Settlement Agreement).

The Board approved the CMER Master Project Schedule as a strategy to implement research projects through 2030 as a result of the 2012 Settlement Agreement. This schedule contains a comprehensive list of projects with budgets and timelines for completion. Following public input this schedule was reviewed and adopted by the Board in May 2015 and is updated biennially. The specific areas of research included in the Master Project Schedule are:

- Fish habitat modeling to explore enhancing establishment of the regulatory break between fish (Type F) and non-fish (Type N) bearing waters;
- Effectiveness of Type N and F riparian buffer prescriptions (site and landscape scale, eastern and western Washington);
- Monitoring to evaluate status and trends of resource condition indicators across lands covered by the Forest Practices Habitat Conservation Plan;
- Evaluation of landforms regulated as potentially unstable slopes;
- Effectiveness of road best management practices to reduce sediment entering streams; and
- Timber harvest effects on forested wetlands, remote mapping of wetlands, and effectiveness of wetland buffers.

It is important to note that research projects of this complexity take several years to complete, often crossing several biennia, particularly if they rely upon “before after control impact” (BACI) studies. The *Eastside Type N Riparian Effectiveness Project* is an example of a CMER BACI study. This study is progressing within the proposed timelines and budgets but will take approximately six years to complete.

CMER Master Project Schedule Progress in 2017-2019 Biennium

A total of 26 projects were allocated funding in the 2017-2019 Master Project Schedule: 21 projects in FY18 and 17 projects in FY19.

Four projects were completed in FY18, as expected:

- *Extensive Alternative Remote Sensing Pilot* – This report highlighted an opportunity to use LiDAR (Light Detection and Ranging) to collect forest stand metrics.
- *Van Dykes Salamander Project* – This was a literature review that described the nexus between forest management and a stream-associated amphibian species.
- *Type N Experimental Buffer Treatment Project in Hard Rock Lithologies* - Actions from the Hard Rock study are currently being considered and recommendations are expected to be brought to the Board in February 2019.
- *Deep-Seated Research Strategy* – This was a Board-directed project that will result in a project to explicitly address concern regarding deep-seated potentially unstable landforms.

Fourteen new research projects were initiated in FY18 and three ongoing projects (as originated in prior biennia) continued in FY18. The CMER Master Project Schedule identifies nine final reports to be completed in FY19. CMER has identified additional projects ready for execution if additional funding becomes available or if implementation issues emerge with other scheduled research studies on the list.

2017-2019 Funding Levels and Fiscal Year 2018 Expenditures

On July 1, 2006, a new law was passed that reduced certain business and occupation (B&O) taxes for harvesting timber or manufacturing or processing wood products. Starting on July 1, 2007, taxpayers taking advantage of the reduced tax rate began paying a surcharge. “The proceeds from the surcharge are put in the Forests and Fish Support Account ([FFSA](#)) an account dedicated to the implementation of the state’s forests and fish report, including adaptive management...”

The FFSA and General Fund – State (GF-S) are the main sources of the AMP funding for research projects, project management and program administration. In 2017, the Governor and Washington State Legislature passed the 2017-2019 biennial operating budget ([SSB 5883](#)), which appropriated General Fund-State (GF-S) funding for the AMP. This budget included a fund exchange that reduced the GF-S amount by \$1.5 million to \$3.28 million and replaced it with the same amount from an available fund balance in the Forests and Fish Support Account (FFSA) (Table 1).

Table 1: 2017-2019 Biennium Funding Levels and Sources

<u>Forest Practices Adaptive Management Program</u> 2017-2019 Biennium Funding Sources/Levels for Research Projects, Project Management and Program Administration				
Funding Source		FY18	FY19	Total
Research Projects	Forests & Fish Support Account (FFSA)	1,170,160	1,755,240	2,925,400
	FFSA - Fund Shift (SSB 5883)	750,000	750,000	1,500,000
	Total FFSA	1,920,160	2,505,240	4,425,400
	General Fund – State Proviso (SSB 5883)	2,390,000	2,390,000	4,780,000
	General Fund – State Proviso 2017 Fund Reduction (SSB 5883)	(750,000)	(750,000)	(1,500,000)
	Total GF-S	1,640,000	1,640,000	3,280,000
Research Projects Subtotal		3,560,160	4,145,240	7,705,400
Administration & Project Support				
	Forests & Fish Support Account	354,100	369,300	723,400
	General Fund–State	250,600	270,800	521,400
Administration & Project Support Subtotal		604,700	640,100	1,244,800
TOTAL AMP RESEARCH BUDGET		4,164,860	4,785,340	8,951,300

Table 2: FY18 Actual Research Expenditures

<u>Forest Practices Adaptive Management Program</u> 2018 Actual Research Expenditures				
Funding Source and Projects		FY18 Expenditures	FY18 Variance	
Research Projects	Forests and Fish Support Account (FFSA)			
	Type F (fish-bearing streams) Riparian Prescription Group	14,869		
	Type N (non-fish-bearing) Riparian Prescription Group	518,609		
	Wetland Protection Group	200		
	Unstable Slope Rule Group	355		
	Roads Rule Group	174,133		
	Stream Typing Rule Group	14,780		
	TFW Policy Facilitation/CMER Science Conference/ISPR/UW Fish Co-Op Dues	128,556		
	Research Projects FFSA Expenditure Subtotal		851,502	1,068,658
	General Fund – State Proviso			
	Type F (fish-bearing streams) Riparian Prescription Group	176,730		
	Type N (non-fish-bearing) Riparian Prescription Group	470,218		
	Wetland Protection Group	86,112		
	Unstable Slope Rule Group	133,337		
	Roads Rule Group	231,662		
	Stream Typing Rule Group	402,329		
	TFW Policy Facilitation/CMER Science Conference/ISPR/UW Fish Co-Op Dues	139,611		
	Research Projects GF-S Proviso Expenditure Subtotal		1,640,000	-
	Administration & Project Support	Forests and Fish Support Account (FFSA):		
Project Support/Management (3.25 FTEs)		341,721		
One-Time Research/Field Support (0.46 FTEs)		26,342		
General Fund–State:				
Program Administration (2 FTEs)		228,864		
Administration and Project Support Subtotal		596,927	7,773	
TOTAL EXPENDITURE		3,088,429	1,076,431	

Consequently, although this fund exchange reduced the GF-S amount dedicated (by proviso) to research by 31% compared to the prior biennium, the same level of *total* funding was made available for the AMP.

During FY18, the AMP expended all of the GF-S and 44% of the FFSA that was allocated for research/monitoring projects (Tables 1 and 2). The main reasons for the FFSA under-expenditure were timing decisions made on individual studies and implementation of research contracts. The program anticipates spending in FY19 all of the FFSA positive variance that accrued in FY18.

CMER Science Used in Decision Making

No specific decisions were made in FY18 by the Forest Practices Board regarding rule changes. However, numerous research projects are underway which will help Board determine if potential rule changes are needed, including eight that are scheduled to be completed during the current biennium. These research projects will provide information about rule groups associated with the Type N and F riparian prescriptions, unstable slopes, wetland protection, road prescriptions, and stream typing.

Funding Needs for 2019-21 Biennium

The Board-approved Master Project Schedule for the 2019-2021 biennial budget focuses on directed research relating to forest practices rules that affect fish-bearing streams, unstable slopes, wetland protection, non-fish-bearing stream (Type N) riparian prescriptions, and water quality. A total of \$7.56 million will be needed for research projects during the 2019-2021 biennium from a combination of GF-S and FFSA funding sources (Table 3).

Table 3: 2019-2021 Biennium Funding

Forest Practices Adaptive Management Program 2019-2021 Biennium Funding Needs				
Funding Source & Projects		FY20	FY21	TOTAL
Research Projects	Forests & Fish Support Account			
	Type F (fish-bearing streams) Riparian Prescription Group	134,794		134,794
	Type N (non-fish-bearing) Riparian Prescription Group	753,811	536,266	1,290,077
	Wetland Protection Group	257,500		257,500
	Unstable Slope Rule Group			
	Roads Rule Group			
	CMER Scientists/Independent Scientific Peer Review	619,503	743,875	1,363,378
	Research Projects FFSA Subtotal	1,765,608	1,280,141	3,045,749
	General Fund – State Proviso			
	Type F (fish-bearing streams) Riparian Prescription Group	11,956		11,956
	Type N (non-fish-bearing) Riparian Prescription Group		221,128	221,128
	Wetland Protection Group		257,500	257,500
	Unstable Slope Rule Group	232,000	100,000	332,000
	Roads Rule Group	374,500	330,500	705,000
	Stream Typing Rule Group	817,172	640,872	1,458,044
TFW Policy Facilitation /CMER Science Conference /Technical Editor	204,372	90,000	294,372	
Research Projects Subtotal	1,640,000	1,640,000	3,280,000	
Administration & Project Support	Forests & Fish Support Account			
	Project Support/Management (3.25 FTES)	356,895	356,895	713,790
	General Fund–State			
	Program Administration (2 FTEs)	261,500	261,500	523,000
	Administration & Project Support Subtotal	618,395	618,395	1,236,790
	TOTAL	4,024,003	3,538,536	7,562,539

The funding differences between the two fiscal years reflect seasonality of the field research studies, implementation of pilot projects, and the funding projected for the life cycle of the research studies.

The GF-S proviso amount needed in the 19-21 biennium to accomplish the research projects identified in the Master Project Schedule is \$3.28 million (the same as was provided in the current biennium) (Table 3). The rest of the identified \$7.56 million budget may be provided using the projected FFSA fund balance and the new monies that will be deposited into that account over the course of the biennium. Similar GF-S proviso needs are currently anticipated for each subsequent biennium through 2024. In 2024, the law that reduced certain B&O taxes for harvesting timber or manufacturing or processing wood products and the associated surcharge that funds the FFSA sunsets, effectively curtailing that funding source. Stakeholders are in discussions on when to approach the Legislature with a request to extend the sunset date.