

Timber, Fish, & Wildlife Policy Committee
 March 7, 2019 FINAL Meeting Summary
 v. 4.5.19

Action	Responsibility
Reach out to SAG project managers to provide to Policy updated project one-pagers with the additional information requested by Policy including if and why a budget changed, the original budget, and the actual amount spent.	Howard Haemmerle
Develop a job description for participation in the Type N Alternatives Workgroup.	Darin Cramer, Curt Veldhuisen, and Emily Hernandez
Review the MPS budget outline shared at the March 7 meeting and send any further comments to the budget workgroup.	Policy representatives
Review the project one-pagers from CMER prior to the April 4 th Policy meeting.	Policy representatives

Decision	Notes
Approve the February meeting summary.	The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.
Accept the Alternate Plan Template Workgroup recommendations and extend the Workgroup timeline.	The Federal and Eastside Tribal caucus were absent; the Industrial Landowners, Small Forest Landowners, Counties, and State caucuses voted thumbs up; the Westside Tribal, Conservation, and DNR caucuses voted thumbs sideways.
Motion that the Workgroup’s review of template prescriptions be confined to the draft template simplified.	The Eastside Tribal and Federal caucuses were absent; The Westside Tribal caucus voted thumbs sideways; all other caucuses voted thumbs up.

Welcome, Introductions, & Old Business – Policy Co-Chair Curt Veldhuisen, Skagit River System Cooperative (SRSC), and Terra Rentz, Washington Department of Fish and Wildlife (WDFW), opened the meeting and reviewed the day’s agenda.

The group reviewed the February meeting summary. No edits were made.

Decision (Motion 1): Approve the February meeting summary. The Eastside Tribal caucus and Federal caucus were absent; all other caucuses voted thumbs up.

Policy briefly discussed the AMP improvement process. Two leadership forums have taken place, and two caucuses have interviewed with a facilitator, Francine Madden. Francine will work with AMP participants in the spring and deliver a report to DNR. Another leadership forum will likely be scheduled once DNR receives Francine’s report.

CMER Update – Jenny Knoth, Green Crow, and Doug Hooks, Washington Forest Protection Association (WFPA), CMER Co-Chairs, provided Policy with an update from the February CMER meeting.

- The Westside Type F Riparian Prescription Monitoring Program charter and communication plan were approved and will be delivered to Policy for approval.
- The Riparian Characteristics and Shade Study has a contractor actively working on the study design, which is expected to be completed in June.
- CMER discussed the February report from Policy. All of the projects for which CMER was seeking funding are moving forward.
- Ecology has determined that the Mass Wasting Landscape Scale Effectiveness study is no longer a Clean Water Act (CWA) milestone. The project seeks to understand the natural landslide frequency on western Washington landscapes. However, due to difficulty in comparing managed and unmanaged landscapes that are different in land type and ecology, the study has not moved forward. Policy will discuss whether this project will be kept or removed from the MPS.
- The Buffer Shade Findings Report will be completed on March 1. Mark Hayes will present on this study to Policy at its April or May meeting.
- The Hardwood Conversion, Westside Type N Buffer Characteristics, Integrity and Faction (BCIF), and Eastside Type F Riparian Effectiveness Monitoring [Bull Trout Overlay (BTO) Add-on] studies have returned from Independent Scientific Peer Review (ISPR). They should arrive at Policy in the next few months.
- Howard Haemmerle, AMP Project Manager, shared that the Roads Prescription Scale Effectiveness project team is working to evaluate construction costs and whether there is enough budget to complete work on all 76 sites. Howard will report back to Policy when he learns further information.
- Dave Schuett-Hames, a geologist with the Northwest Indian Fisheries Commission (NWIFC), will be retiring at the end of the year, with a plan to transition a new person into the position during the last six months. Greg Stewart has also resigned from NWIFC. Curt Veldhuisen expressed appreciation for both Dave and Greg's contributions to the AMP. Dave is helping to review and update the position according to upcoming project needs.

Jenny Knoth noted that there has been some difficulty in communication between CMER and the SAGs. Some project steps have been delayed due to process issues, with resulting budget changes. Terra requested short memos to Policy describing project budgets that have changed and why. Terra also requested that the updated project one-pagers include why the budget changed, the anticipated budget, and actual amount spent. This information would enable Policy to make informed decisions. Policy and CMER Co-Chairs and the AMPA are taking steps to improve communications between the committees and among the SAG project managers.

Policy discussed the benefits of reviewing CMER position descriptions regularly. Terra Rentz noted that the Policy and CMER Co-Chairs have been discussing how to standardize this approach.

Ash Roorbach, NWIFC, offered to give a presentation on the updated roles and responsibilities sections of Chapter 3, Chapter 7, and Chapter 8 within CMER's Protocols and Standards Manual at the May Policy meeting.

Action: Doug Hooks will reach out to SAG project managers to provide to Policy updated project one-pagers with the additional information requested by Policy including if and why a budget changed, the original budget, and the actual amount spent.

Legislative Updates – Policy representatives reported on legislative outreach efforts. It was noted that the deadline to submit bill requests has passed.

Ken Miller, Washington Farm Forestry Association (WFFA), shared that Senate Bill 5330 passed the Senate and is at the House Agricultural and Rural Development Committee. There will be a hearing on March 15th. Ken requested that Policy representatives reach out to any House Appropriations Committee members that they know with support for this bill.

Jim Peters, NWIFC, has been tracking the Business and Occupation (B&O) tax reduction bill and associated surcharge (House Bill 2121/Senate Bill 1324). This surcharge would distribute funds to tribes, Ecology, and the AMP. Jim testified at a hearing several weeks ago at which the surcharge was attached. Further conditions are under consideration for addition to the bill, such as a funding cap. Additionally, the extension timeframe moved from 2056 to 2036.

Small Forest Landowner Alternate Plan Template Workgroup Recommendations – Marc Engel, DNR, and Ken Miller, WFFA, updated Policy on the Workgroup’s progress and deliverables and summarized the Workgroup’s report to Policy. Please see Attachment 2 for the Workgroup’s recommendations to Policy that were submitted on February 26, 2019 in accordance with the Workgroup charter.

The Workgroup reviewed the State caucuses’ proposed prescriptions for conifer thinning and conifer restoration. There is general agreement in the Workgroup that whichever documents are brought forward for recommendation must include a significant monitoring component, requirements for regeneration, and a periodic review process. Major points of non-consensus remaining include the RMZ widths and the eligibility of the Small Forest Landowner caucus’s proposal to be a template.

Motion 2: Scott Swanson, Washington State Association of Counties (WSAC), moved that Policy approve the Alternate Plan Template Workgroup recommendations and extend the Workgroup timeline. Darin Cramer, WFPA, seconded. Policy discussed the motion. Discussion points are highlighted below.

- There was discussion of the dispute resolution process. It was clarified that dispute resolution can only be called at Policy, not within a Workgroup. Dispute resolution may be called on a decision, an action, or lack of action.
- Workgroup participants expressed willingness to continue working collaboratively, given that the Workgroup has a clear path forward. One participant stated that they expect to have less capacity to participate in the Workgroup later in the year due to other workload items.
- Marc Engel reminded Policy that the Workgroup focused on high-level prescriptions and did not review the entire proposal that was put before the Board in fall 2018. He also noted that the Workgroup has followed both science and policy tracks due to Policy’s acceptance of the AMP’s recommendation to do so.
- Ken Miller expressed that the top priority of the Small Forest Landowner caucus is that the prescriptions are put into effect, regardless of whether or not they constitute a template. Their top topics of interest are captured in the bullets A, B, C, and D of the Draft Template Simplified.

Decision (Motion 2): Accept the Alternate Plan Template Workgroup recommendations and extend the Workgroup timeline. The Federal and Eastside Tribal caucus were absent; the Industrial Landowners, Small Forest Landowners, Counties, and State caucuses voted thumbed up; the Westside Tribal, Conservation, and DNR caucuses voted thumbs sideways.

Motion 3: DNR then moved that the Workgroup’s review of template prescriptions be confined to the draft template simplified. The State caucus seconded. Policy discussed the motion.

It was clarified that the Workgroup was given direction to begin by reviewing the primary four prescriptions (A, B, C, and D in the draft template simplified). The acceptance or rejection of these prescriptions as written would determine the acceptability of many of the other prescriptions.

Decision (Motion 3): Motion that the Workgroup’s review of template prescriptions be confined to the draft template simplified. The Eastside Tribal and Federal caucuses were absent; The Westside Tribal caucus voted thumbs sideways; all other caucuses voted thumbs up.

Motion 4: Alec Brown, Washington Environmental Council (WEC), moved that Policy determine that the Alternate harvest Prescriptions for Small Forest Landowners in Western Washington proposal initiation from WFFA does not qualify as a template as written; and that identified work in Motions 2 and 3 approved by Policy on March 7, 2019 continue until completed. The Westside Tribal caucus seconded the motion. Policy then discussed the motion.

The Small Forest Landowner expressed discomfort with the motion as written, viewing it as an attempt to stop the whole process of considering opportunities for small forest landowners. Other caucuses responded that they do not view the motion in that way, nor do they intend to stop the process. Terra stated if this motion is not voted on at this meeting, it will need to be voted on when the Workgroup finishes its tasks.

The Small Forest Landowner Caucus moved to table Motion 4 until the April meeting. The Eastside Tribal and Federal caucuses were absent; the Small Forest Landowner and Industrial Landowner caucuses voted thumbs up; the State, DNR and Counties caucuses voted thumbs sideways; the Conservation and Westside Tribal caucuses voted thumbs down.

Policy then voted on Motion 4. The Federal and Eastside Tribal caucuses were absent; the Conservation, Westside Tribal, DNR, and State caucuses voted thumbs up; the Industrial Landowners and Counties caucuses voted thumbs sideways; the Small Forest Landowner caucus voted thumbs down. The motion failed.

Terra summarized that the Workgroup will be required to provide its final recommendations to Policy for the September Policy meeting.

Type N Alternatives – Policy discussed the formation of a workgroup for Type N Alternatives. Terra noted that because the Board has not met since Policy’s last meeting, Policy has not received official direction from the Board. Hans Berge, AMPA, shared that he did not receive any nominations from Policy representatives regarding potential workgroup members.

It was recommended that Policy plan to compensate each workgroup member with a \$10,000 stipend. Policy representatives pointed out that there are more limitations around paying private sector employees for participation than government or tribal employees. The group flagged this as a discussion point for later meetings. Terra reminded Policy that state contracting policy limits the pool of potential participants to those without other current DNR contracts.

Action: Darin Cramer and Curt Veldhuisen will work with Emily Hernandez to develop a job description for participation in the Type N Alternatives Workgroup.

High-Level Prioritization of Next Biennium Funds – Terra Rentz began a discussion of the latest work regarding the prioritization of next biennium funds. The budget workgroup met on March 5 to work through the Master Project Schedule (MPS) and budget and discussed the following items:

- Terra noted several factors Policy should consider in designing the MPS. Firstly, project work cannot begin until the contract is signed. In order for a project to begin at the beginning of the given biennium, preparatory steps need to be completed prior to the end of the previous fiscal

year. Secondly, site selection has caused delay in several projects. This delay could be up to two years.

- The Budget Workgroup discussed the clarification of roles of CMER scientists on projects. Some of the projects could engage CMER scientists more, and some need extra support for CMER scientists.
- The budget workgroup discussed overall staffing and support needs for the AMP. There are many vacancies within the AMP. Policy requested more information on what staffing the program needs in order to function effectively and deliver on necessary outcomes.

Terra then gave an overview of the latest version of the MPS budget spreadsheet (see Attachment 3). Hans Berge noted changes to the spreadsheet, and then reviewed the revenue portion of the Fiscal Year 2020 budget. Highlights are listed below.

- Proposed governor's budget: In the previous biennium, there was a fund shift in the proposed Governor's budget that filled the gap in the General Fund State. This was pulled out of the Forest and Fish Support Account (FFSA). For the 2019-2021 biennium, a similar amount of money was put back into the FFSA, balancing the account.
- The General Fund State AMP research budget received \$1.1 million per fiscal year.
- The yellow highlighted sections in the spreadsheet reflect items that are included in the expenses, but that are not within Policy's decision space. Hans is seeking more clarification on these projects. Policy discussed communicating to the Board its discomfort with these project allocations within the AMP budget.

Hans also gave an update on Policy's recommendations for reallocations of unspent funds. Highlights are listed below.

- Regarding the Road Maintenance and Abandonment Program (RMAP) checklist survey: Hans noted that several Policy representatives provided a convincing case for its strong connection to AMP goals. Hans and Marc Engel will work together to move the project forward.
- Equipment for Riparian Characteristics and Shade Study: Mark Hicks will work with others to move this project through a bidding process by the end of the fiscal year.
- Type N Workgroup needs: No movement on this item.
- Wetlands Management Zone Effectiveness: There is uncertainty whether this will be spent by the end of the fiscal year. It is in CMER's hands.
- Eastside Light Detection and Ranging (LiDAR) Acquisition: Locations are plotted and an agreement is signed with the vendor. For the Mount Spokane area, the team is waiting for snowmelt. Hans recommended that if it cannot be flown by May 30, 2019, it will not go forward.
- Literature Review for Forested Wetlands: The allocated number is about \$15,000 higher than necessary.
- Pilot for Olympia Experimental State Forest (OESF): This project will likely underspend its budget by the end of June. The team can use previously collected data from other projects, which will bring the cost down.
- Fire Workshop: The Scientific Advisory Group-Eastside (SAGE) came up with a draft agenda for the proposed workshop, which helped provide focus. A Policy representative recommended including more professionals with fire expertise in the planning of the workshop.
- Chehalis LiDAR Acquisition: No update.
- Literature Review on Windthrow: No update.

Darin Cramer updated Policy on changes to the line items.

- AMP Project Managers: There are 3 Project Managers; Hans noted that the AMP needs more.

- CMER Scientists: Out of three total full-time positions, there is currently one current vacancy and one more by the end of 2019. There was discussion of the number of scientists employed for CMER projects in the past and how future project needs might shape the budget. Jim Peters noted that NWIFC is seeking funding for a wetland-specific scientist.
 - Terra Rentz requested that Policy representatives discuss among each other the need for CMER scientists in preparation to discuss at the April Policy meeting.
- CMER Eastside Scientist: The position description was shared with SAGE, which provided comments. This will be a DNR position housed at Ecology in Spokane. Hans is working internally to determine the classification. This position would be a statewide resource available not just for SAGE. They will be focused on forest health, fire, and riparian and hydrology.
 - Jim noted that it is important that CMER communicates how this position will be administered and supervised. Hans clarified that this position will only be working on CMER projects.
- Performance and Financial Audits: An AMP performance audit is scheduled for October 2019. Terra stated that the Policy Co-Chairs hope to get the Auditor's Office to begin discussions with Policy representatives earlier than October 2019. Representatives expressed desire for more information on what will be included. The financial audit that was completed previously was not comprehensive of the whole AMP. Hans will look into how to obtain the results of the financial audit.
- The allocations for the Type N Experimental Buffer Treatment in Hard Rock Lithologies projects may increase.
- Deep Seated Research Strategy: scoped 1-5. This line item is actually 5 distinct projects with separate scopes for each. The group discussed breaking this item down into individual line items. The Budget Workgroup will make this adjustment. Hans noted that it is necessary to fill the geologist position in order for work to be done on these projects.
- Mass Wasting Landscape Scale Effectiveness: This project will be removed from the MPS.
- Type N Soft Rock Extended Monitoring: These numbers are corrected from a previous version of the MPS.

In summary, Darin noted a possible positive variance by the end of the biennium, while the next biennium has a negative balance due to changes in project schedules. Policy will need to plan for funding shifts in upcoming biennia.

Questions and comments:

- Why did the Potential Habitat Break (PHB) Validation Study increase from \$700,000 to over \$1 million?
 - Hans responded that the Board decided to delay the field portion, which then got added to the next biennium. Jim Peters expressed concern that CMER won't be able to spend this entire budget.
- Why did the Forested Wetlands study drop to \$25,000?
 - The expense of the study design document was shifted to this year, which reduced the cost next year. The \$25,000 is allocated to finish study design and site selection.
- A Policy representative noted that the budget for the Soft Rock Existing Report will need to be increased to accommodate for onboarding costs of a new scientist.

Action: Policy members will let the budget workgroup as soon as possible know if they have any further comments on the MPS.

Action: Policy representatives will review the project one-pagers from CMER prior to the April 4th meeting.

Extended Monitoring Policy/CMER Workgroup – Curt Veldhuisen gave an update to Policy on the process to address extended monitoring.

Workgroup membership will include Darin Cramer, Curt Veldhuisen, Chris Conklin from Policy; and Doug Hooks, Harry Bell, and Chris Mendoza from CMER. Additionally, Emily Hernandez will help manage the workgroup.

Curt and Darin drafted a charter, and the workgroup is in the process of selecting dates for its first meetings. Policy discussed whether the workgroup's product needs to be approved by both CMER and Policy before going to the Board. The group recalled that the Board requested a report at its May meeting to inform the Soft Rock Extended project. Curt suggested developing with a draft framework to approach extended monitoring to present to the Board, with the recommendation to test the approach with Soft Rock Extended as its pilot project.

Next Steps – Policy reviewed the monthly workload document and the meeting schedule for 2019. There are rooms reserved at Ecology through December for Policy meetings.

Chris Conklin, WDFW, shared that he presented at the Forester's Forum on the considerations for the resiliency of aquatic and terrestrial habitats in the face of forest health. Chris reported that forestry professionals from other states said that they regard the Washington Forest Practices program as a model for success in collaborative management. Other states are going through rule changes and are looking for guidance in the process.

Next meeting date: Due to weather-related impacts to the Board's winter meeting schedule, the Policy April meeting was rescheduled to April 4th and 5th.

Curt put out the request for Policy representatives to step up to organize field trips for future Policy meetings.

The meeting was adjourned at 4:00 p.m.

Attachment 1 – Participants by Caucus at 3/7 Meeting*

Conservation Caucus

*Alec Brown, WEC

County Caucus

Kendra Smith, Skagit County

*Scott Swanson, WSAC

Industrial Timber Landowner Caucus

*Darin Cramer, WFPA

Doug Hooks, WFPA

Martha Wehling, WFPA

Jenny Knoth, Green Crow

Small Forest Landowner Caucus

*Steve Barnowe-Meyer, WFFA

*Ken Miller, WFFA

Harry Bell, WFFA

State Caucus – DNR

*Marc Engel, DNR

Heather Gibbs, DNR

Emily Hernandez, DNR

State Caucus – Ecology & WDFW

*Mark Hicks, Ecology

*Chris Conklin, WDFW

Terra Rentz, WDFW and Co-Chair

Don Nauer, WDFW

Tribal Caucus – Westside

*Jim Peters, Northwest Indian Fisheries Commission

Ash Roorbach, Northwest Indian Fisheries Commission

Curt Veldhuisen, Skagit River System Cooperative and Co-Chair

Tribal Caucus – Eastside

*caucus representative

Others

Hans Berge, Adaptive Management Program Administrator

Howard Haemmerle, Adaptive Management Program Project Manager

Rachel Aronson, Triangle Associates

Annalise Ritter, Triangle Associates

Attachment 2: Policy Alternate Plan Template Workgroup Recommendations to TFW Policy

Date: February 26, 2019

From: Ken Miller and Marc Engel, Workgroup co-chairs

Subject: Policy Alternate Plan Template Workgroup Recommendations to the TFW Policy Committee (Policy)

The Policy Alternate Plan Template Workgroup (Workgroup) has completed the work outlined in Policy directed work in deliverable #1 as summarized on page 6 in the final Workgroup charter, dated October 4, 2018. The Workgroup has met the charter timeline and has developed recommendations for full Policy consideration. In a final Workgroup meeting, on February 22, 2019, it was decided to submit the following report to Policy:

1. There is currently no consensus within the Workgroup that the proposed *Alternate Harvest Prescriptions for Small Forest Landowners in Western Washington* template, as a whole or in part, qualifies as a template.
2. Recommend Policy approval for the Workgroup to continue their review and evaluation of the SFL template in light of the ISPR review of the Cramer Fish Sciences report on the completed science process when the final draft is available, with an eye toward responding to all aspects of the Board's original motion, which includes the following items:
 - a. *Whether the proposal meets the criteria for a template outlined in WAC 222-12-0403 and consider different strategies moving forward*
 - b. *Literature synthesis*
 - c. *Recommend next steps*
3. Recommend Policy approval for the Workgroup to continue the evaluation of the draft State proposed experimental alternate harvest prescriptions and to work toward consensus.
4. Recommend Policy to extend the Workgroup charter and set a new timeline for Workgroup completion and recommendations back to Policy, with a target of five months after delivery of the final Cramer Fish Sciences report and direction from Policy.

The decision as documented at the February 22, 2019 Workgroup meeting: Approve the above recommendations to Policy. The Conservation, Counties and Industrial Landowner caucuses were absent; the Westside Tribal caucus voted thumb sideways, the State, DNR, and Small Forest Landowner caucuses voted thumbs up.

Attachment 3 – AMP Master Project Schedule and Budget

Master Project Schedule and Budget for the Adaptive Management Program

WORKING FY20/21 Budget – March 2019 discussion

*FY18 - Hidden for printing purposes

Items for specific discussion/highlight
Changes from Proposed (8/18)

Expenditure	Source	FY2018 Approved	FY2019 REVISED	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Administration and Program Staff														
Program Administration (AWPA and Contract Specialists)		267,000	257,000	261,500	261,500	269,345	269,345	277,425	277,425	285,748	285,748	294,321	294,321	303,150
Project Support (3.5 Project Managers)		346,500	294,500	361,700	361,700	372,551	372,551	383,728	383,728	395,239	395,239	407,097	407,097	419,389
CVEER Scientists (3 Scientists at RWPC)		566,534	507,717	547,625	547,625	564,054	564,054	580,975	580,975	598,405	598,405	616,357	616,357	634,817
CVEER Scientist Eastside (NRS-4)		0	70,000	128,750	128,750	132,613	132,613	136,591	136,591	140,689	140,689	144,909	144,909	149,257
Independent Scientific Peer-Review		75,000	60,000	67,500	67,500	69,525	69,525	71,611	71,611	73,759	73,759	75,972	75,972	78,251
TFW Policy Committee Facilitation		75,000	75,000	75,000	75,000	77,250	77,250	79,568	79,568	81,955	81,955	84,413	84,413	86,946
Statewide/Technical Work		125,000	0	0	0	0	0	0	0	0	0	0	0	0
CVEER Conference (facility, refreshments, programs)		10,000	0	5,000	0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Contingency Fund for Active Projects		0	8,000	0	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Project Development Fund (holds unspent funds for "below the line")		0	0	0	0	0	0	0	0	0	0	0	0	0
Technical Editor (on-call contract)		10,000	10,000	15,000	0	15,000	0	15,000	15,000	0	15,000	15,000	0	15,000
AMP Audits -- Performance & Financial		0	0	0	0	0	0	0	0	0	0	0	0	0
Implementation Phase														
Extensive Riparian Status and Trends Monitoring – Vegetation, Type F/N - Westside (Remote Sensing)	RSAC	25,000	0	15,000	0	0	0	0	0	0	0	0	0	0
CWA_Type N Experimental Buffer Treatment Project in Soft Rock Lithology -- (1) Monitoring ends fall 2017, 2 yr post harvest		221,000	140,000	25,000	0	0	0	0	0	0	0	0	0	0
Type N Experimental Buffer Treatment in Hard Rock Lithologies -- Extended Amphibian Analysis & Summary Report	LWAG	134,000	236,000	20,000	0	0	0	0	0	0	0	0	0	0
Type N Experimental Buffer Treatment Project in Hard Rock Lithology -- (1) Temperature Monitoring ends June 2017, Report extended data		100,000	136,655	20,000	0	0	0	0	0	0	0	0	0	0
CWA_Eastside Type N Riparian Effectiveness (ENRPF)	TWIG	297,680	632,886	623,811	632,394	686,719	626,609	366,605	152,267	0	0	0	0	0
Field Testing/Pilot Phase														
CWA_Westside Type F Riparian Prescription Monitoring	TWIG	0	197,100	125,000	0	35,000	150,000	250,000	150,000	250,000	250,000	40,000	20,000	0
CWA_Road Prescription-Scale Effectiveness Monitoring	TWIG	277,267	338,752	374,500	330,500	403,000	400,500	406,000	291,000	212,000	0	0	0	0
Potential Habitat Break Validation/Evaluation Study -- Pilot FY19	AMPA/ISAG	0	524,020	1,041,882	948,570	972,746	387,336	0	0	0	0	0	0	0
Study Design Phase														
CWA_Unstable Slopes Criteria Evaluation and Development	TWIG	25,000	50,000	100,000	100,000	250,000	240,000	150,000	20,000	0	0	0	0	0
CWA_Forested Wetlands Effectiveness Study	TWIG	100,000	130,000	25,000	232,500	232,500	150,000	150,000	150,000	200,000	200,000	200,000	40,000	0
Riparian Characteristics and Shade Study	RSAC	0	50,000	10,000	110,000	341,000	330,000	20,000	0	0	0	0	0	0
Scoping Phase														
CWA_Wetlands Management Zone Effectiveness Monitoring	WetSAG	0	0	25,000	25,000	100,000	0	360,000	360,000	360,000	360,000	100,000	15,000	0
Deep Seated Research Strategy*	UPSAG	10,000	0	0	0	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
Eastside Timber Harvest Types Evaluation Project (RTHP)	SAGE	0	0	0	0	0	0	0	0	0	0	0	0	0
CWA_Road Sub-Basin Scale Effectiveness Monitoring -- Resample (Re-scoping)	UPSAG	0	0	0	0	0	0	0	0	0	75,000	0	0	0
CWA_Wetlands Intensive Monitoring	WetSAG	0	0	0	0	0	0	0	0	50,000	0	0	0	0
CWA_Watershed Scale Assessment of Cumulative Effects (roads and riparian) -- post Effectiveness Monitoring	RSAC	0	0	0	0	0	0	0	0	5,000	50,000	340,000	340,000	340,000
Mass Wasting Landscape Scale Effectiveness -- Road-of-concept	UPSAG	0	0	0	0	0	0	0	0	0	0	0	0	0
Extended Monitoring for Projects														
Add On_Type N Experimental Buffer Treatment Project in Hard Rock Lithology -- Extended Monitoring: AMPHIBIANS - 2 years (holding sites for potential resample)	LWAG	0	0	0	0	0	0	0	0	0	0	0	0	0
Add on_Type N Experimental Buffer Treatment Project in Soft Rock Lithology -- Extended monitoring through 2020 (FY21)		0	0	159,000	151,000	40,000	0	0	0	0	0	0	0	0
Completed Long-Term Projects (FY18-19)														
FPB_LIDAR Based Water Typing Model/Physicals Study Design (combined)	FPB	60,000	128,202	0	0	0	0	0	0	0	0	0	0	0
WFFA Template PI Technical Assessment		52,000	24,400	0	0	0	0	0	0	0	0	0	0	0
AMP Improvement Facilitation (Principal's meeting)		100,000	30,000	0	0	0	0	0	0	0	0	0	0	0
WetSAG_Wetlands Mapping Tool Validation	WetSAG	75,000	104,000	0	0	0	0	0	0	0	0	0	0	0
Riparian Literature Synthesis Project		70,000	0	0	0	0	0	0	0	0	0	0	0	0
CWA_LWAG_Type N Experimental Buffer Treatment in Hard Rock Lithology -- Genetics (Response to ISPR Comments)	LWAG	16,000	5,000	0	0	0	0	0	0	0	0	0	0	0
Type N Experimental Buffer Treatment Project in Hard Rock Lithology -- (2) Monitoring into 2019 until references lost		87,000	0	0	0	0	0	0	0	0	0	0	0	0
Fish/Habitat Detection using eDNA -- rescope to pilot project	ISAG	40,000	20,000	0	0	0	0	0	0	0	0	0	0	0
Completed Short-Term Projects (FY18-19)														
RVAP checklist survey		25,000	0	0	0	0	0	0	0	0	0	0	0	0
Equipment -- Riparian Characteristics and Shade Study		30,000	0	0	0	0	0	0	0	0	0	0	0	0
Type Np Workgroup Needs (travel, facilitation, meetings, etc.)		10,000	0	0	0	0	0	0	0	0	0	0	0	0
Scoping -- CWA_WetSAG_Wetlands Management Zone Effectiveness Monitoring		35,000	0	0	0	0	0	0	0	0	0	0	0	0
Eastside LIDAR Acquisition (Part 1)		175,000	0	0	0	0	0	0	0	0	0	0	0	0
Eastside LIDAR Acquisition (Part 2)		46,000	0	0	0	0	0	0	0	0	0	0	0	0
Literature Review -- Forested Wetlands (Updated; WetSAG)		45,000	0	0	0	0	0	0	0	0	0	0	0	0
Pilot Project -- Extensive Riparian Monitoring Implementation		75,000	0	0	0	0	0	0	0	0	0	0	0	0
Fire Workshop		25,000	0	0	0	0	0	0	0	0	0	0	0	0
AMP Research Expenses		3,058,980	4,695,232	4,026,268	3,972,039	4,741,302	3,839,782	3,427,592	2,738,164	2,832,794	2,595,794	2,498,068	2,138,068	2,206,760
Projected Available Funds for Research		3,781,600	3,781,600	3,949,350	3,949,350	3,781,600	3,781,600	(218,400)	(218,400)	(218,400)	(218,400)	(218,400)	(218,400)	(218,400)
Rollover funds from previous FY		0	722,620	0	(76,918)	0	(959,702)	0	(3,645,992)	0	(3,051,194)	0	(2,716,468)	0
Balance at the end of Fiscal Year (accounting for Rollover)		722,620	(191,012)	(76,918)	(99,607)	(999,702)	(1,017,885)	(3,645,992)	(6,602,557)	(3,051,194)	(5,865,389)	(2,716,468)	(5,072,936)	(2,425,160)
REVENUE														
GF-S - AMP Carry Forward (i.e. base admin funding)		240,100	240,100	260,700	260,700	240,100	240,100	240,100	240,100	240,100	240,100	240,100	240,100	240,100
Reverse Fund Shift (FY20/21) - \$715,500 per FY		0	0	715,500	715,500	0	0	0	0	0	0	0	0	0
GF-S - AMP Research		1,640,000	1,640,000	1,107,000	1,107,000	2,947,000	2,947,000	2,947,000	2,947,000	2,947,000	2,947,000	2,947,000	2,947,000	2,947,000
FFSA - AMP (Business and Occupation Tax surcharge)**		5,307,000	5,307,000	5,679,000	5,679,000	4,000,000	4,000,000	0	0	0	0	0	0	0
Subtotal of Revenue		7,187,100	7,187,100	7,762,200	7,762,200	7,187,100	7,187,100	3,187,100	3,187,100	3,187,100	3,187,100	3,187,100	3,187,100	3,187,100
EXPENSES														
TFW Participation Agreements		2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Tribal Participation Agreements		475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500
NGO and County Participation Grants		430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000
FFSA DAHP (Dept. Archeology & Historic Preservation)		0	0	94,500	94,500	0	0	0	0	0	0	0	0	0
FFSA Agency Admin/IG/OTM		0	0	312,500	312,500	0	0	0	0	0	0	0	0	0
Subtotal of TFW Participation Agreements		3,405,500	3,405,500	3,812,850	3,812,850	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500
PROGRAM TOTALS														
Revenue		7,187,100	7,187,100	7,762,200	7,762,200	7,187,100	7,187,100	3,187,100	3,187,100	3,187,100	3,187,100	3,187,100	3,187,100	3,187,100
AMP Research Expenses		3,058,980	4,695,232	4,026,268	3,972,039	4,741,302	3,839,782	3,427,592	2,738,164	2,832,794	2,595,794	2,498,068	2,138,068	2,206,760
TFW Participation Agreements		3,405,500	3,405,500	3,812,850	3,812,850	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500	3,405,500
Balance at the end of each fiscal year		722,620	(191,012)	(76,918)	(99,607)	(999,702)	(1,017,885)	(3,645,992)	(6,602,557)	(3,051,194)	(5,865,389)	(2,716,468)	(5,072,936)	(2,425,160)
Cumulative Balance at end of Biennium														
			(191,012)	(278,936)	(378,543)	(1,378,245)	(2,396,130)	(6,042,122)	(9,644,679)	(12,695,873)	(15,751,262)	(18,467,698)	(20,844,634)	(22,879,494)

* DRSR broken down by phases: Phase I: Mapping (4.5), GIS Toolkit Development (4.7), and pilots for Landslide Classification (4.6) and Groundwater Modeling (4.8); Phase II: Landslide Classification Project (4.6); Phase III: Groundwater Modeling Project (4.8); Phase IV: Physical Modeling of Deep Seated Landslides; Phase V: Landslide Monitoring Project

** FFSA For FY18/19 includes Long Term (\$557,000) and one time (\$750,000) fund shifts, which were originally separate revenue line items

Expenditure	Source	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
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