# Timber, Fish, & Wildlife Policy Committee April 4 & 5, 2019 Approved Meeting Summary v. 5.2.19

Action	Responsibility
Contact Joe Shramek about providing an	Triangle
update on the AMPA search at the May Policy	
meeting.	
Coordinate a workshop on ENREP for the	Howard Haemmerle, with support from Tim Link
May Policy meeting to provide a project	and Darin Cramer as needed
update and opportunity for Policy to ask	
questions regarding the project budget.	
Write up an updated timeline for the Hard	Howard Haemmerle
Rock and Soft Rock projects to be included in	
the Co-Chairs' update to the Board; send to	
Policy.	
Prepare the Type N Alternatives Workgroup	Darin Cramer, Mark Hicks, Steve Barnowe-
position description, proposed process and	Meyer
Workgroup timeline for Policy's review by the	
May meeting mailing date. Work with Heather	
Gibbs to schedule meetings if needed.	
Reach out to Stephen Bernath and Marc Engel	Terra Rentz, Curt Veldhuisen
as a heads-up regarding the biennial budget	
approved by Policy on April 5 2019.	
Draft a brief update on the Extended	Darin Cramer, Chris Conklin
Monitoring Workgroup for inclusion in the	
Board report; send to Policy Co-Chairs.	

DAY 1	
Decision	Notes
Request of Joe Shramek that a formal review and feedback be made to the position description for the AMPA prior to recruitment starting.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.
Make the additional Clean Water Act assurances projects the number one priority after core projects.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

Request a workshop to be held at the May Policy meeting to discuss the ENREP study, including the following topics:  a. A review of the study design's intended outcome, what has been done, and what remains to be done; b. The likelihood of finding additional 6 sites this year, and how this affects the integrity of the project; and c. An overview of who is involved in the project, what portion of the budget is allocated to them, and their responsibilities.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.
Direct the principal investigator for Type N Experimental Buffer Treatment Project on Hard Rock Lithologies – Extended Sampling to write up the post-2017 data in an addendum and report out the data in a similar manner to what was done with the Phase II report.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.
Accept Scenario 2 of the anticipated budget for the Type N Experimental Buffer Treatment Project on Hard Rock Lithologies – Extended Sampling and end monitoring fall of 2019. If the reference sites are harvested prior to fall 2019, then monitoring will end at the time of harvest.	The Eastside Tribal caucus, DNR caucus, and Federal caucus were absent; the Conservation caucus voted thumbs sideways; all other caucuses voted thumbs up.
Recommend the hiring of a CMER wetland scientist to be posted at NWIFC.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.
Recommend consideration of hiring an administrative assistant II to support the AMP (specifically the operations of Policy and CMER) to be negotiated with DNR.	The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.
Pending the decision on hiring an administrative assistant, recommend reducing or minimizing the existing TFW Policy Committee Facilitation line item.	The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.
After core projects and additional CWA assurances projects, prioritize Type Np alternative proposal implementation projects in the MPS.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.
Include \$200,000 in the MPS for the Type Np Alternatives Workgroup for FY2020.	The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

After Type Np Alternative projects, prioritize Additional Deep-Seated Research Strategy Implementation projects.  Remove the PHB validation study from the MPS and include line items for the following:  a. A project contingency fund (\$75,000 in FY 2020 and \$150,000 in FY 2021),  b. A placeholder for a water typing strategy study design (\$40,000 in FY 2020), and  c. A placeholder for the water typing studies (\$450,000 in FY 2021).	The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.  The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.
DAY 2	
Decision	Notes
Approve the March meeting summary with edits.	The Eastside Tribal caucus, Conservation caucus, DNR caucus, and Federal caucus were absent; all other caucuses voted thumbs up.
Approve the budget as edited on April 5, 2019.	The Eastside Tribal caucus, DNR caucus, and Federal caucus were absent; the Conservation caucus voted thumbs sideways; all other caucuses voted thumbs up.
Allow Policy Co-Chairs to share the PHB-inclusive budget version with the Forest Practices Board Chair not as a recommendation, but as an informational document describing how fully funding the PHB study would impact the MPS and the goals of the AMP.	The Eastside Tribal caucus, DNR caucus, and Federal caucus were absent; all other caucuses voted thumbs up.

### **Day 1: April 4, 2019**

Welcome, Introductions, & Old Business – Policy Co-Chair Terra Rentz, Washington Department of Fish and Wildlife (WDFW), opened the meeting and reviewed the day's agenda. The meeting on April 4 was focused on the budget and Master Project Schedule (MPS). Terra suggested that Policy revisit the high-level prioritization that Policy had sent to the Board, and then apply this logic to the MPS.

Howard Haemmerle, Department of Natural Resources (DNR), reported that Hans Berge, AMPA, will no longer be working at DNR after April 10. Joe Shramek, DNR, has begun the process to find a replacement for the AMPA position. Howard will be the acting AMPA for the next several months. Howard suggested inviting Joe Shramek to give an update at the May Policy meeting.

<u>Decision</u>: Policy requests of Joe Shramek that a formal review and feedback be made to the position description for the AMPA prior to recruitment starting. The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

<u>CMER Update and Workplan Review</u> – policy reviewed the written update from CMER from its March meeting. Emily Hernandez, DNR, shared that the drafts for the charter and communications plan for the Westside Type F Riparian Prescriptiveness Effectiveness Project study are going through final edits with the Instream Scientific Advisory Group (ISAG) and, pending CMER approval at its April meeting, may be delivered to Policy for the May Policy meeting. Howard Haemmerle clarified that communication plans do not come to Policy for approval, while charters do.

<u>Budget Recommendations for the 2019-21 Biennium</u> – Terra Rentz led a discussion on the Master Project Schedule (see Attachment 2 for March 28, 2019 version). She reminded Policy that Policy agreed on high-level funding categories earlier in the year. There was one suggested edit to a budget number on the scenario assumptions as submitted to the Board in February. Terra made this edit on screen at the meeting.

Terra reviewed the categories that Policy determined in March. She clarified that the latest project updates (those received after March 28, 2019) were not reflected in the budget materials that Policy was working with at this meeting.

Darin Cramer, Washington Forest Protection Association (WFPA), noted that the Senate proposed shifting funding in the Forest and Fish Support Account (FFSA) to operations and allocating a higher fund balance. Policy discussed the effects this might have on the MPS. Participants made plans to contact individuals at DNR to confirm these details.

Jim Peters, Northwest Indian Fisheries Commission, NWIFC, moved to make the additional Clean Water Act assurances projects the number one priority after core projects. The motion was seconded. Policy reviewed the MPS version provided in the Policy May meeting packet. Terra identified the projects included within each high-level category, as well as those that did not fall within any of the buckets.

A question was asked about the default physicals study. Terra clarified that the default physicals project does not have any money allocated to it, so it was not captured in this version of the MPS.

<u>Decision</u>: Make the additional Clean Water Act assurances projects the number one priority after core projects. The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

Policy then took a short break to prepare questions for guests on specific projects. Upon return, Terra shared an updated budget spreadsheet. She noted that the balance at the end of the fiscal year, given Policy's decision to prioritize core projects and additional CWA projects, totals \$1,302,729 (line 66). In the following text, discussions about individual budget line items are denoted in italics.

Eastside Type N Riparian Effectiveness Project – Timothy Link, University of Idaho, joined Policy via phone to discuss the Eastside Type N Riparian Effectiveness Project (ENREP). Tim is a hydrologist at the University of Idaho, and is employed with two other staff on ENREP as biophysical leads. Tim and Howard shared the following updates on the project.

- When the initial budget for ENREP was developed, it was expected that all 12 watershed sites would be installed and running and that a season of data would have been collected last summer. Due to budget delays and difficulty in finding new sites in the east Cascades, the project is behind schedule. There are 6 sites set up with instrumentation and running. The first round of stream surveys in the northern Rockies sites should be completed in summer 2019.
- In March, the Department of Natural Resources State Lands made the decision to allow DNR to test prescriptions on sites it identified in 6 basins on state lands. DNR will continue to work with State Lands to proceed in final site selection.

- A participant asked whether any of the sites are on private properties. Howard stated that there are agreements with private property owners for the project where necessary.
- The project missed its first summer of data collection. The consultants reported that landowners have been receptive to a delay of a year. This delay would likely mean another season of data collection.
- Given this change in schedule, the project team shifted allocated personnel funds to instead purchase equipment, such as meteorological stations, through the University of Idaho.
- Howard noted that if the project continues to spend at the same rate as the second quarter, the money will be fully spent for this biennium.

In regards to the next biennium, Tim listed the following cost increases:

- Unbudgeted equipment and supplies needs
- Travel costs to sites that are farther than expected
- Access challenges to one remote eastern site, including the purchase of all-terrain vehicles
- Added personnel to address safety concerns
- Increased frequency of winter travel to sites
- 26% overhead from University of Idaho on items shifted from DNR's budget to be paid for by University of Idaho
- Contract for flume construction and installation on 6 newer sites
- Budget to fund continued involvement by Ecology
- Technical coordinator position, representing the DNR interest on the technical side, considering the absence of a permanent AMPA

Policy representatives expressed concern with the cost of the project, noting that all of the money for the current biennium has been spent and only half of the sites are set up. It was also noted that the Department of Natural Resources State Lands may not be able to prioritize this project.

Policy representatives expressed support for a workshop on ENREP, seeking a better understanding of the management of the ENREP project budget, staffing, and other components. It was clarified that the vehicles purchased would be property of the program.

Tim noted that because the funding will not roll over past June, work on the project will cease if there is no further funding allocated. Tim expects the project may lose staff if those staff are furloughed. Tim also clarified that the project actually spent close to its target budget for the number of sites that it completed, but that the cost increase was due to the shift in the funding source.

Darin Cramer, WFPA, motioned that Policy request a workshop to be held at the May meeting to discuss the ENREP study to get a reminder of the study design's intended outcome, what has been done and what remains to be done; including the likelihood of getting an additional 6 sites this year, and how this affects the integrity of the project. Additionally, the workshop would include a rundown of who is involved in the project, what portion of the budget is allocated to them, and their responsibilities. The motion was seconded and discussed.

Policy clarified further details about the workshop. The workshop will not exceed a half-day and will include a budget line item update. The Scientific Advisory Group – Eastside (SAGE) will be invited to attend. Terra will let the Board know in the Policy memo that Policy is having a discussion on the ENREP project and that the Board may receive an updated budget.

Terra recommended moving Ash Roorbach's presentation on relevant chapters of the CMER Protocols and Standards Manual to the June Policy meeting in order to make time for the ENREP workshop at the May meeting.

A Policy representative expressed a desire for this periodic project review process to occur without the need for Policy representatives to make a motion.

<u>Decision</u>: Request a workshop to be held at the May Policy meeting to discuss the ENREP study, including the following topics:

- a. A review of the study design's intended outcome, what has been done, and what remains to be done:
- b. The likelihood of finding additional 6 sites this year, and how this affects the integrity of the project; and
- c. An overview of who is involved in the project, what portion of the budget is allocated to them, and their responsibilities.

The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

<u>Action:</u> Howard Haemmerle, with support from Tim Link and Darin Cramer, will coordinate a workshop on ENREP for the May Policy meeting to provide a project update and opportunity for Policy to ask questions regarding the project budget.

Type N Experimental Buffer Treatment on Hard Rock Lithologies - Extended Sampling — Policy heard an update from Reed Ojala-Barbour, WDFW, and Bill Ehinger, Department of Ecology, on the Type N Hard Rock Extended Sampling project. Reed clarified that the term "extended" refers to completing the current report and a potential amphibian resampling in the future. Additionally, Ecology will be conducting continued temperature monitoring.

Reed noted that the Board-approved MPS is out of date, and that the project team does not feel that the funding amount in Policy's proposed budget reflects true costs. The project team put together an anticipated budget including line items for WDFW and Ecology, with two budget scenarios based on the type of reporting and the length of time of the monitoring process. Policy reviewed the anticipated budget scenarios. Bill recommended that the data be run through a second report in a similar manner to the Phase II report, as this would save time and money.

Darin Cramer, WFPA, motioned that Policy direct the principal investigator for the Type N Experimental Buffer Treatment Project on Hard Rock Lithologies – Extended Sampling to write up the post-2017 data in an addendum and report out the data in a similar manner to what was done with the Phase II report. The motion was seconded.

Policy discussed the motion. Bill clarified further details about the project schedule and budget for Policy.

<u>Decision</u>: Direct the principal investigator for Type N Experimental Buffer Treatment Project on Hard Rock Lithologies – Extended Sampling to write up the post-2017 data in an addendum and report out the data in a similar manner to what was done with the Phase II report. The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

Steve Barnowe-Meyer, Washington Farm Forest Association (WFFA), moved that Policy accept Scenario 2 of the anticipated budget for the Type N Experimental Buffer Treatment Project on Hard Rock Lithologies – Extended Sampling project. The motion was seconded.

Policy discussed the motion. Bill provided further information on the collection of data in regards to shade measurements and other factors. He stated that this data collection would not delay other work associated with Type N. Policy representatives expressed support for extending the monitoring through the water year.

Policy amended the motion to account for the possibility of the harvest of the study sites. It was also clarified that the extra data will be provided as additional information for the Type N Workgroup, but was not identified as required information to be considered.

<u>Decision</u>: Accept Scenario 2 of the anticipated budget for the Type N Experimental Buffer Treatment Project on Hard Rock Lithologies – Extended Sampling and end monitoring fall of 2019. If the reference sites are harvested prior to fall 2019, then monitoring will end at the time of harvest. The Eastside Tribal caucus, DNR caucus, and Federal caucus were absent; the Conservation caucus voted thumbs sideways; all other caucuses voted thumbs up.

Howard reminded Policy that accepting an anticipated budget means accepting the anticipated timeline. The Type N extended monitoring report will go to CMER, then through ISPR. It was clarified that the Soft Rock and Hard Rock projects are moving forward simultaneously, and because of staffing overlaps, progress in one sometimes delays progress in the other. A Policy representative expressed desire for increased transparency of known project schedules and costs in the future.

Policy discussed concerns over accepting a budget before the ENREP workshop occurs. Terra offered to keep two live spreadsheets to track different scenarios that Policy could recommend, depending on how much money Policy decides to allocate to the ENREP project in May.

<u>Action</u>: Howard Haemmerle will write up an updated timeline for the Hard Rock and Soft Rock projects to be included in the Co-Chairs' update to the Board and send it to Policy.

CMER Scientist Position – Policy considered the option to hire additional CMER scientist positions. Dave Schuett-Hames, NWIFC, and Debbie Kay, Suquamish Tribes, explained to Policy that hiring a wetlands scientist through CMER would save money on projects by avoiding the need to contract out. This position would support SAGE and be the default project manager for wetlands-related projects.

Jim Peters, NWIFC motioned to recommend the hiring a CMER wetland scientist to be posted at NWIFC. The motion was seconded and discussed.

Debbie informed Policy that CMER has three projects on which the wetland scientist could take on tasks over the summer. Terra clarified that the CMER scientist team would include two ecologists, a hydrologist, a wetlands scientist, and an eastside scientist. The estimated cost per year of the wetlands scientist would be \$100,000, while the estimated cost per year of a contracted PI would be \$130,000.

**<u>Decision</u>**: Hire a wetlands CMER scientist to be posted at NWIFC. DNR absent, all other caucuses voted thumbs up.

Forested Wetlands Effectiveness Project – Policy discussed the site selection process for the Forested Wetlands Study. Dave Schuett-Hames, NWIFC, noted that the data collection may need to happen more in the spring field season in the summer. Terra responded by shifting funding numbers one year later and adding \$150,000 to the budget.

It was suggested that Policy's Budget Workgroup engage with CMER project managers in order to project more accurate future expenditures.

Administrative Support for the AMP – Policy discussed the option of hiring an Administrative Assistant II to support the AMP. This person would report to the AMPA and be included on the DNR staff roster under the AMP program. They would support Policy and free up time of other DNR staff. A representative noted that an administrative support staff person supporting both CMER and Policy may help improve communications between the two committees.

A motion was made to recommend consideration of hiring an Administrative Assistant II to support the AMP (including the operations of Policy and CMER). The motion was seconded.

Representatives expressed support for having a staff person to support the AMP. There was discussion of whether DNR should contribute to the expense of the Administrative Assistant II. No DNR representative was present to respond. Policy revised the motion before calling a vote.

<u>Decision</u>: Recommend consideration of hiring an administrative assistant II to support the AMP (specifically the operations of Policy and CMER) to be negotiated with DNR. The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.

TFW Policy Committee Facilitation – Policy considered whether to continue the current facilitation contract.

<u>Decision:</u> Pending the decision on hiring an administrative assistant, recommend reducing or minimizing the existing TFW Policy Committee Facilitation line item. The Eastside Tribal, Federal, DNR, and Conservation caucuses were absent; all other caucuses voted thumbs up.

*Type Np Workgroup* – A motion was made that Policy, after core projects and CWA additional projects, prioritize Type Np alternative proposal implementation projects in the MPS. The motion was seconded.

A representative expressed concern that the funding amount specified in the current budget would not be enough for professional Workgroup participants to prioritize responsibilities related to the Workgroup. Terra reminded Policy that per DNR's policy, a "direct buy" of contracting services is capped at \$10,000. Beyond this, a Request for Proposals (RFP) must be published. Another option is collaborative research, which has no monetary cap but would require consensus on the consultant.

<u>Decision</u>: After core projects and CWA additional projects, prioritize Type Np alternative proposal implementation projects in the MPS. The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

Scott Swanson, Washington Association of Counties (WSAC), motioned to include \$100,000 per fiscal year for the Type Np Alternatives Workgroup in the MPS, totaling \$200,000 for the next biennium. The motion was seconded.

Policy discussed and amended the motion. It was clarified that the \$200,000 can be rolled over from the first fiscal year to the second, and may need to be phased.

<u>Decision</u>: Include \$200,000 for the Type Np Alternatives Workgroup in the MPS for the 2019-2020 fiscal year. The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; all other caucuses voted thumbs up.

Financial and Performance Audit – Terra noted that the audit has no cost, but is included in the budget to emphasize its importance to Policy. She also clarified that the "Board-directed projects" column in the MPS was removed. Policy discussed seeking clarification on how Policy should respond to Board-directed projects.

Riparian Characteristics and Shade Study – Terra reminded Policy of the current proposed spending for the remainder of the biennium, and that the total number was proposed to Policy by CMER. No objections were raised to keeping this project as a funding priority as Policy had decided at a previous meeting.

Deep-Seated Research Strategy – A motion was made that Policy prioritize Additional Deep-Seated Research Strategy Implementation projects after Type Np Alternative projects. The motion was seconded.

Policy discussed the status of the group of Deep-Seated Research Strategy projects. It was noted that the overall project is still in the scoping phase, and mostly involves computer modeling. Policy decided to seek more clarification on what percentages of the funds needed are for project costs and for staffing.

<u>Decision:</u> After Type Np Alternative projects, prioritize Additional Deep-Seated Research Strategy Implementation projects. The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.

Extensive Riparian Status and Trends —Terra described some background on the project, including how it was once below the line in the last biennium but ended up receiving funding. Policy had previously planned to discuss whether the pilot project produced the information necessary to inform its extended monitoring discussion.

It was suggested that Policy not move forward with the project, but include some money for peer review. Dave Schuett-Hames, NWIFC, shared that RSAG created a list of potential questions that could be answered by extensive monitoring. CMER plans to send this to Policy in the near future.

There was general agreement among Policy representatives to keep this item below the line.

Eastside Timber Harvest Types Evaluation Project (ETHEP) – Policy discussed whether to keep this project above the line and without funding. The project is in scoping phase.

A motion was made to move the Eastside Timber Harvest Types Evaluation Project below the line in the MPS. The motion was seconded. It was noted that this project may have been included above the line in the interest of the Eastside Tribes. Policy representatives suggested moving all projects without scopes below the line for consistency.

**<u>Decision</u>**: After discussion, the motion regarding ETHEP was rescinded.

Roads Prescription Scale Effectiveness Project – Howard Haemmerle, DNR, shared that the public works bid package for this project had been sent out that and the bid process may take 12 weeks. There are 76 new sites. The amount of additional money needed for the next fiscal year depends on how much work is completed by June 30, 2019, when current funding runs out. Howard estimated a range of \$50,000-\$100,000 would be needed. There was general agreement that Policy will wait until the end of the fiscal year to reallocate money towards the Roads Prescription Scale Effectiveness project.

A Policy representative suggested entering projects on the CMER work plan into line items on Policy's MPS. This would allow facilitate making projects ready for implementation in the case of extra funds, and could incentivize project teams to complete scopes and study designs. Another representative suggested that the Policy Co-Chairs and CMER Co-Chairs meet to discuss the benefits of adding CMER projects to the MPS. The group also discussed allocating money for a contingency fund for active projects and for project development, as well as the potential to fund operational trainings for those involved in the AMP.

*Potential Habitat Break (PHB) Validation Study* – Policy discussed the status of the PHB study and the impact of fully funding the study on the rest of the MPS. Policy representatives present for the discussion shared perspectives from their caucuses.

- The Counties caucus is unsure whether the PHB study is ready to implement \$1 million in funding for the next year, given changes in leadership and staffing and other factors.
- The Westside Tribal caucus originally supported the validation study, but has concerns about the scope, budget, and outcomes of the study. The tribes would like to be involved in a revision of the study design.

- The Industrial Landowners caucus supports the concept of the validation study in the interest of using science to back rulemaking, but questions whether the study addresses uncertainties such as the anadromous floor.
- The WDFW/Ecology caucus finds many technical concerns with the study design and seeks a common understanding of what the study should inform. This caucus is interested in adaptive management improvement. WDFW and Ecology would also like to hear from the DNR and Conservation caucuses about the benefits of the study.
- The Small Forest Landowner caucus suggested having technical experts review and revise the study design. They would support putting a small amount of money towards the PHB study, but are not comfortable with the full funding amount. They are uncertain that the data needs to be validated by such a study.

Howard confirmed that the study design is to be delivered to the Board for its May 2019 meeting. ISPR approved the study design with contingencies. Terra summarized that there is low confidence among Policy that the PHB study is an effective use of funds to achieve the requirements of the AMP. There is a preference to revisit what the questions are that Policy wants answered.

A Policy representative expressed that should the PHB study be approved by the Board, then water quality projects should be prioritized to reach toward AMP goals.

Policy agreed to develop two scenario budgets: one in which the PHB study is fully funded, and one in which the PHB study is not included. Terra demonstrated what a budget might look like which includes the PHB study as currently proposed. This budget zeroed out a number of projects including Deep-Seated Slope Strategy, Type N Alternatives, ENREP, and others.

A motion was made to remove the gap year from the Westside Type F study in the MPS. A meeting participant then clarified that the gap year is necessary. The motion was rescinded.

A motion was made to remove the PHB validation study from the MPS and include line items for a contingency fund (\$75,000 in FY 2020) and a project development fund (\$150,000 in FY 2021), a placeholder for a water typing strategy study design (\$40,000 in FY 2020) and a placeholder for the water typing studies (\$450,000 in FY 2021).

**Decision**: Remove the PHB validation study from the MPS and include line items for the following:

- a. A project contingency fund (\$75,000 in FY 2020 and \$150,000 in FY 2021),
- b. A placeholder for a water typing strategy study design (\$40,000 in FY 2020), and
- c. A placeholder for the water typing studies (\$450,000 in FY 2021).

The Eastside Tribal caucus, Federal caucus, DNR caucus, and Conservation caucus were absent; all other caucuses voted thumbs up.

Policy discussed the need to improve the process of creating policy questions and communicating these clearly to CMER to result in effective study design.

A representative suggested asking the Department of Natural Resources State Lands to attend the June Policy meeting to discuss the process of site selection for AMP projects.

Day 1 of the meeting was adjourned at 5:00 p.m.

#### **Day 2: April 5, 2019**

Welcome, Introductions, & Old Business – Policy Co-Chair Curt Veldhuisen, Skagit River System Cooperative (SRSC), opened the meeting and reviewed the day's agenda. Policy Co-Chair Terra Rentz, WDFW, noted changes to the meeting agenda, including a revisit of budget line items from the previous meeting day.

Steve Barnowe-Meyer, WFFA, shared that a field trip to a Type N Alternatives study site may be possible in the fall of 2019. Steve suggested coordinating with the Type N Alternatives Workgroup once it is formed and operating.

The group then reviewed the February meeting summary and discussed suggested edits.

<u>Decision</u>: Approve the March meeting summary with edits. The Eastside Tribal caucus, Conservation caucus, DNR caucus, and Federal caucus were absent; all other caucuses voted thumbs up.

<u>Extended Monitoring Policy/CMER Workgroup</u> – 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.

Darin Cramer, WFPA, shared that the Workgroup approved a charter at its second meeting. The workgroup has two more meetings scheduled in April. At its second and third meetings, the group worked on a decision framework document that describes the circumstances under which extended monitoring should be considered. These include the following:

- During the scoping phase, extended monitoring should be deliberately considered as a potential option.
- During the implementation phase, unexpected events may influence the integrity of the project and should be documented in regular progress reports. Extended monitoring should be considered as an option to mitigate these impacts to the study results.
- Near project completion, before field equipment is removed, CMER and Policy should be briefed on the project status and a decision made whether to extend monitoring beyond the original scope.

The Workgroup plans to create a form that would document the decisions at each of the points above, and that would align with the budget cycle and existing checkpoints within the CMER process. The Workgroup also recommends that project check-ins can be initiated at any time. The Workgroup would like for the end product to be formally reviewed and approved by both CMER and Policy before being sent to the Board.

<u>Legislative Updates</u> – Policy representatives shared the following updates on legislative outreach efforts.

- Jim Peters, NWIFC, shared an update on the Forest and Fish Support Account (FFSA) Business and Operations (B&O) surcharge. There have been no amendments yet, but an extension request was submitted to the Ways and Means Committee to extend the expiration date to 2045. A request was also submitted to remove the language around federal monies offsetting the surcharge, and to set up an incremental raise on the cap in the following pattern: raise from \$8 mil to \$8.5 million in 2019, to \$9 million in 2024, and to \$9.5 million in 2029. The Tribes are seeking sufficient funding for members to participate in the Forest and Fish Agreement. Jim noted that the Eastside Tribes have similar interests in the amendments to the bill as the Westside Tribes.
  - Later in the meeting, Jim shared that an amendment was made to the B&O Bill that increases the cap and extends to 2045. The Westside Tribes plan to attend the hearing and support the bill.

- Ken Miller, WFFA, asked Policy representatives to reach out to their legislative liaisons in support of the Small Forest Landowner study bill (Senate Bill 5330).
- Chris Conklin, WDFW, shared an update on the Community Forest Bill (5873). The latest version
  is in testimony and is being considered in the Senate. The bill is currently proposed as funding for
  three pilot sites. There is concern among legislators that these forests would be underproductive
  compared to commercial forests and would use too many public funds. Policy representatives noted
  a high interest among proponents in starting a formal community forestry program that maintains
  forest health, supports communities through timber harvests, and forms connections with local
  schools
- Chris also shared that WDFW was accepted as a workgroup member in the review of the Aerial Pesticides on Forest Land Bill (5597). The first meeting will occur June 30, 2019. This is an initiative to consider alternatives to aerial pesticide spray.
- Darin Cramer, WFPA, reported out on the Fire Funding Bill (5996). This bill adds a fee onto developed property insurance to ensure a \$55 million fund for emergency fire suppression, fire management and forest health. The Industrial Landowner caucus has some concerns that the allocation of the monies may not be sustainable. They hope to work with the legislature and insurance experts to adjust the bill. This bill is separate from DNR's fire bill.

<u>Type N Alternatives</u> – Policy discussed the progress of the Workgroup for Type N Alternatives. Curt shared that Mark Hicks will be taking over some of his responsibility in planning.

Darin shared that he and Mark Hicks drafted a charter and time commitment estimate. A motion was made to add an addendum to the Type N Alternatives charter. The motion was seconded. Policy then discussed what content would go into the addendum. Terra captured some points of information in a draft addendum during the conversation and sent it to the Type N Workgroup coordinating committee. Policy then decided to table the motion until the afternoon, as the representative who made the motion had to step out temporarily.

Policy revisited the Type N Alternatives charter in the afternoon and agreed to keep the edits internal to the workgroup for now instead of approving and sending a finalized addendum to the Board.

<u>Action</u>: Darin Cramer, Mark Hicks, and Steve Barnowe-Meyer will prepare the position description, proposed process and Workgroup timeline for Policy's review by the May meeting mailing date. Work with Heather Gibbs to schedule meetings if needed.

<u>Budget Recommendations for the 2019-21 Biennium</u> – Policy returned to the topic of budget recommendations that it had discussed on the previous day. Terra reviewed the motions made from the previous day.

Terra then shared an updated version of the MPS. This consisted of an Excel document with three tabs representing Policy's recommended budgets under the following scenarios: a "high" budget that includes the updated ENREP funding needs; a "low" budget based on more limited funding for ENREP and other items; and a budget that includes the PHB study fully funded. Policy discussed the following edits to the "high" version of the budget, which Terra captured on screen:

- Reduce the budget for the continuation of Triangle Associates' facilitation services
- Reduce the contingency funding to \$100,000

Scott Swanson, WASC, moved that Policy accept the "high" budget as edited on April 5, 2019. The motion was seconded. It was clarified that Policy would only send the high budget to the Board, but will still discuss the other two budgets as alternatives.

Policy then discussed the PHB study. The Conservation caucus expressed concern with extending the study design process when it has been going on for many years. Several other Policy representatives summarized their concerns about the cost of the study and the uncertainty of the fundamental Policy questions. One representative expressed a hope that this process can provide a valuable feedback opportunity for the AMP.

Policy representatives also expressed a desire for input from the DNR caucus on Policy's recommended budget. The Co-Chairs agreed to reach out to Stephen Bernath and Marc Engel, DNR.

<u>Action</u>: Terra Rentz and Curt Veldhuisen will reach out to Stephen Bernath and Marc Engel as a heads-up regarding the biennial budget approved by Policy on April 5, 2019.

Terra recommended removing \$13,000 from the contingency fund in order to balance the high budget. The motioner and seconder approved the amendment.

<u>Decision</u>: Accept the budget as edited on April 5, 2019. The Eastside Tribal caucus, DNR caucus, and Federal caucus were absent; the Conservation caucus voted thumbs sideways; all other caucuses voted thumbs up.

Terra then shared the budget version that included the fully-funded PHB study. She noted that this budget applies the prioritization logic approved by Policy, with the PHB study items prioritized after Clean Water Act (CWA) assurances. She noted that some projects were cut, while some were kept in the budget with a gap year. This budget included no contingency fund and no funding for the Type Np Alternatives Workgroup. The group discussed possible rearrangement of line items and funds in the PHB-inclusive budget. Some adjustments were made and captured on screen, including delaying the hiring of staff associated with delayed projects.

A motion was made to allow the Policy Co-Chairs to share the PHB-inclusive budget version with the Forest Practices Board Chair not as a recommendation, but as an informational document describing how fully funding the PHB study would impact the MPS. After some discussion, Policy amended the motion to add the words "and the goals of the AMP" at the end of the motion.

<u>Decision:</u> Allow Policy Co-Chairs to share the PHB-inclusive budget version with the Forest Practices Board Chair not as a recommendation, but as an informational document describing how fully funding the PHB study would impact the MPS and the goals of the AMP. The Eastside Tribal caucus, DNR caucus, and Federal caucus were absent; all other caucuses voted thumbs up.

Policy drafted language for a memo to the Board explaining its decision regarding the PHB study. Representatives suggested language and the group revised it collaboratively.

A motion was made that Policy assert the following: "The current PHB study design does not have consensus regarding the priority, policy questions and analytical framework for answering those questions. Additionally, the cost of the proposed study would delay progress on a variety of long-term priorities including Clean Water Act assurances and others. Therefore, TFW Policy in full consensus recommends that the FPB should not move forward with the study at this time. The FPB should direct TFW Policy to frame the priority, policy questions which need science, and direct CMER to review/revise the existing draft study designs (PHB, default physicals, LiDAR model) or new studies to answer those questions. All established AMP processes/procedures should be followed in accomplishing the above steps."

The motion was seconded. Policy discussed the language of the motion. Representatives expressed concern over the status of the existing studies mentioned in the motion, as not all had seen every study design.

Policy revised the motion language to the following: "Policy asserts that the current PHB study design does not have consensus regarding the priority, policy questions and analytical framework for answering those questions. Additionally, the cost of the proposed study would delay progress on a variety of long-term priorities including Clean Water Act assurances and others. Therefore, TFW Policy in full consensus recommends that the FPB not move forward with the study at this time. TFW Policy would welcome direction from the FP Board to frame the priority, policy questions which need science, and direct CMER to consider the existing draft study designs (PHB, default physicals, LiDAR model) or new studies to answer those questions. All established AMP processes/procedures should be followed in accomplishing the above steps."

<u>Decision</u>: The Eastside Tribal caucus, Federal caucus, and DNR caucus were absent; The Conservation voted thumbs down; all other caucuses voted thumbs up. The motion failed.

Terra invited the Conservation caucus to provide edits and comments via email. A representative suggested that the Policy Co-Chairs come up with language for the memo to the Board that addresses Policy's concerns. Terra sought and received general agreement among the caucuses that a water typing strategy of some kind must go through the adaptive management process.

<u>Action</u>: Darin Cramer and Chris Conklin will draft a brief update on the Extended Monitoring Workgroup for inclusion in the Board report and send it to the Policy Co-Chairs.

<u>AMP 20-Year Reflection</u> – Timothy Quinn, WDFW, presented a proposal for a review of the successes and challenges of the AMP. This proposal seeks to define success in adaptive management based on the experience of the AMP in the 20 years since the Forest and Fish Agreement, and to identify how it has used scientific information to reduce uncertainty about existing management strategies.

A Policy representative asked whether this project would overlap with a performance/financial audit. Tim explained that this project would serve certain purposes of the performance audit by evaluating the progress of the AMP in regards to its own goals as well as in regards to other adaptive management programs. The project will include interviews with Policy representatives and others involved in the AMP through the past 20 years.

A representative noted that the proposed budget may underestimate the needs of this project. Several expressed interest in the project and the usefulness of having a historical account that could be brought forward for the education of Policy members, legislators, and others. It was recommended to designate this as a Policy track item. While representatives supported the idea of the review, they expressed discomfort with this project being approved by the Board at its May meeting given that Policy already approved its budget recommendation, which did not include the AMP 20-Year Review.

<u>Next Steps</u> – Policy reviewed the monthly workload document and the meeting schedule for 2019. The Policy Co-Chairs noted that some topics on the May workload may be postponed to accommodate the ENREP workshop that Policy requested via a motion on the previous day.

Next meeting date: Thursday, May 2, 2019, at the Department of Ecology.

Day 2 of the meeting was adjourned at 3:17 p.m.

### Attachment 1 – Participants by Caucus at 4/4 and 4/5 Meeting\*

#### **Conservation Caucus**

\*Alec Brown, WEC

#### **County Caucus**

Kendra Smith, Skagit County \*Scott Swanson, WSAC

#### **Industrial Timber Landowner Caucus**

\*Darin Cramer, WFPA Martha Wehling, WFPA

#### **Small Forest Landowner Caucus**

\*Steve Barnowe-Meyer, WFFA

\*Ken Miller, WFFA (Friday only)

#### State Caucus – DNR

Emily Hernandez, DNR

#### State Caucus – Ecology & WDFW

\*Chris Conklin, WDFW

\* Rich Doenges, Ecology

Terra Rentz, WDFW and Co-Chair

Reed Ojala-Barbour, WDFW (Thursday only)

Bill Ehinger, Ecology (Thursday only)

#### Tribal Caucus - Westside

\*Jim Peters, Northwest Indian Fisheries Commission
Ash Roorbach, Northwest Indian Fisheries Commission
Curt Veldhuisen, Skagit River System Cooperative and Co-Chair (Friday only)
Debbie Kay, Suquamish Tribes (Thursday only)
Dave Schuett-Hames, Northwest Indian Fisheries Commission (Thursday only)

## Tribal Caucus - Eastside

\*caucus representative

#### Others

Howard Haemmerle, Adaptive Management Program Project Manager Rachel Aronson, Triangle Associates Annalise Ritter, Triangle Associates

# Attachment 2: Master Project Schedule v.3-28-19

Г	A	В	С	E	F	G	Н	1		J	K	
1	Master Project Schedule and Budget for the Adaptive	Managem	ent									
2	WORKING FY20/21 Budget March 2019 discussion											ļ
3	*FY31+ Hidden for printing purposes	FV Change	\$ Changes from	Roard Annrove	d 8/8/18							ŀ
4	1151: Haden for printing purposes		Discussion Item	bouru Approve	u 0, 0, 10							ļ
5	<del>-</del>	z.ponunu o										ļ
	<u> </u>		FY2018	FY2019								
6	Expenditure	Sou	Approved	REVISED	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
7	Administration and Program Staff											
8	Program Administration (AMPA and Contract Specialist)		267,000	257,000	261,500	261,500	269,345	269,345	277,425	277,425	285,748	285,748
9	Administrative Assistant 2 (supports TFW & CMER)				87,000	87,000	89,610	89,610	92,298	92,298	95,067	95,067
10	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
11	CMER Scientists (3 Scientists at NWIFC)		566,533	507,717	507,831	456,971	523,066	523,066	538,758	538,758	554,921	554,921
12	CMER Scientist Eastside (NRS 4)		0	70,000	128,750	,	132,613	132,613	136,591	136,591	140,689	140,689
13	Independent Scientific Peer-Review		75,000	60,000	67,500	67,500	69,525	69,525	71,611	71,611	73,759	73,759
14	TFW Policy Committee Facilitation		75,000	75,000	75,000	75,000	77,250	77,250	79,568	79,568	81,955	81,955
15	TFW Board/Technical Work		125,000	0								
16	CMER Conference (Facility, refreshments, programs)		10,000	0	5,000		10,000		10,000		10,000	
17	Contingency Fund for Active Projects		0	8,000	0	0	100,000		100,000		100,000	
18	Project Development Fund (holds unspent funds for "below the line")			0	0	0	0	0	0	0	0	0
19	Technical Editor (on-call contract)		10,000	10,000	15,000	0	15,000		15,000	15,000		15,000
20	AMP Audits Performance & Financial				0	0						
21	Type Np Workgroup - participation grants*			10,000	100,000							
22	Implementation Phase											
23	Extensive Riparian Status and Trends Monitoring Vegetation, Type F/N - Westside (Remote Sensing)	RSAG	25,000	0	15,000							
24	Pilot Project Extensive Riparian Monitoring Implementation*			75,000								
25	Extensive Riparian Status and Trends Monitoring Eastside Pilot	RSAG				200,000						
26	Extensive Riparian Status and Trends Monitoring Study Design	RSAG					75,000					
27	Extensive Riparian Status and Trends Monitoring Statewide Study	RSAG						200,000	200,000	200,000	200,000	200,000
28	CWA_Type N Experimental Buffer treatment Project in Soft Rock Lithology		221,000	140,000	20,000							
29	Add on_Type N Experimental Buffer Treatment Project in Soft Rock Lithology Extended monitoring through 2020 (FY21)		0	0	139,000	151,000	0					
30	Type N Experimental Buffer Treatment Project in Hard Rock Lithology Temperature Monitoring (Report extended data)	RSAG	100,000	136,655	92,627	28,884						
31	Type N Experimental Buffer Treatment in Hard Rock Lithologies Extended Amphibian (Analysis & Summary Report)	LWAG	134,000	236,000	51,563	34,848						
32	Add On_Type N Experimental Buffer Treatment Project in Hard Rock LithologyExtended Monitoring: AMPHIBIANS - 2 years	LWAG					111,000	262,000	80,000			
33	CWA_Eastside Type N Riparian Effectiveness (ENREP)	TWIG	297,680	632,886	634,827	649,324	686,719	626,609	366,695	152,267		
34	Field Testing/Pilot Phase					ĺ						
35	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
36	Site Selection Phase											
37	CWA_Road Prescription-Scale Effectiveness Monitoring	TWIG	277,267	538,752	374,500	330,500	403,000	400,500	406,000	291,000	212,000	

38	Potential Habitat Break Validation/Evaluation Study Pilot FY19	AMPA/ISAG	0	524,020	1,050,982	958,570	982,746	387,336				
39	Study Design Phase	AIVII AYISAG	0	324,020	1,030,302	330,370	302,740	307,330				
33	CWA_Unstable Slopes Criteria Evaluation & Development	TWIG	25,000	50,000	95,000							
40	Project 2: Object-based Landform Mapping	11110	23,000	30,000	33,000							
	CWA Unstable Slopes Criteria Evaluation & Development	TWIG				10,000	250,000	150,000				
41	Project 3: Shallow Landslide Susceptibility					10,000	250,000	150,000				
	CWA Unstable Slopes Criteria Evaluation & Development	TWIG				10,000		90,000				
42	Project 4: Shallow Landslide Runout					,,,,,		7.7.				
	CWA Unstable Slopes Criteria Evaluation & Development	TWIG						10,000	150,000			
43	Project 5: Management Susceptibility Modeling											
44	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
45	Literature Review Forested Wetlands (Updated; WetSAG)*			30,000								
46	Riparian Characteristics and Shade Response	RSAG	0	50,000	10,000	121,445	341,000	330,000	20,000			
47	Equipment Riparian Characteristics and Shade Study*			30,000								
48	Scoping Phase											
49	CWA_Wetlands Management Zone Effectiveness Monitoring	WetSAG	0	0	25,000	25,000	100,000	0	360,000	360,000	360,000	360,000
	Scoping CWA_WetSAG_Wetlands Management Zone			35,000								
50	Effectiveness Monitoring*											
51	Deep Seated Research Strategy	UPSAG	10,000	0								
52	Deep Seated Research Strategy 4.5 Mapping Objectives	UPSAG			75,000	100,000	100,000	25,000	25,000			
53	Deep Seated Research Strategy 4.6 Pilot Classification	UPSAG			50,000	65,000	40,000	25,000	50,000			
54	Deep Seated Research Strategy 4.7 Toolkit Development	UPSAG			0	10,000	10,000	0	0			
55	Deep Seated Research Strategy 4.8 Groundwater Modeling	UPSAG			0	25,000	50,000	50,000	50,000			
56	Deep Seated Research Strategy 4.9 Physical Modeling	UPSAG			0	0	0	75,000	50,000			
57	Deep Seated Research Strategy 4.10 Landslide Monitoring	UPSAG			0	0	0	25,000	25,000			
58	Eastside Timber Harvest Types Evaluation Project (ETHEP)	SAGE	0	0	0	0	0	0	0	0		
	CWA_Road Sub-Basin-Scale Effectiveness Monitoring	UPSAG		0	0	0	0	0	0	0	0	75,000
_	Resample (Re- scoping)											
60	CWA_Wetlands Intensive Monitoring	WetSAG		0	0	0	0	0	0	0	50,000	0
	CWA_Watershed Scale Assessment of Cumulative Effects	RSAG		0	0	0	0	0	0	0	5,000	50,000
61	(roads and riparian) post Effectiveness Monitoring											
62	Mass Wasting Landscape Scale Effectiveness Proof of concept	UPSAG	0	0								
63	Completed Long-Term Projects (FY18-19)											
64	FPB_LiDAR Based Water Typing Model/Physicals Study Design	FPB	60,000	128,202								
	WFFA Template PI Technical Assessment		52,000	24,400								
	AMP Improvement Facilitation (Principal's meeting)	144 154 6	100,000	30,000	+							
6/	WetSAG_Wetlands Mapping Tool Validation	WetSAG	25,000	104,000	+							
68	Riparian Literature Synthesis Project	134/4.0	20,000	5.000								
69	CWA_LWAG_Type N Experimental Buffer Treatment in Hard Rock Lithology Genetics (Response to ISPR Comments)	LWAG	10,000	5,000								
	Type N Experimental Buffer Treatment Project in Hard Rock Lithology		87,000	0								
70	(2) Monitoring into 2019 until references lost											
71	Fish/Habitat Detection using eDNA rescoped to pilot project	ISAG	40,000	20,000								
_	Completed Short-Term Projects (FY18-19)											
_	RMAP checklist survey			25,000								
	Eastside LiDAR Acquisition (Part 1 & 2)			221,000								
75												
_	AMP Research Expenses		3,058,980	4,655,232	4,392,780	4,390,492	5,075,924	4,490,404	3,887,673	2,898,245	3,014,378	2,777,378
77	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)

78	Rollover funds from previous FY	0	722,620	0	(443,430)	0	(1,294,324)	0	(4,106,073)	0	(3,232,778)
79	Balance at the end of Fiscal Year (accounting for Rollover)	722,620	(151,012)	(443,430)	(884,572)	(1,294,324)	(2,003,129)	(4,106,073)	(7,222,718)	(3,232,778)	(6,228,555)
80											
81	REVENUE										
82	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
83	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
84	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
85	Reverse Fund Shift (FY20/21) - \$715,500 per FY			715,500	715,500						
86	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
87	EXPENSES										
88	TFW Participation Agreements										
89	Tribal 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
90	NGO and County Participation Grants	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500	475,500
91	State Agencies	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000	430,000
92	FFSA DAHP (Dept. Archeology & Historic Preservation)			94,500	94,500						
93	FFSA Agency Admin/AG/OVH			312,850	312,850						
94	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
95	PROGRAM TOTALS										
96	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
97	AMP Research Expenses	3,058,980	4,655,232	4,392,780	4,390,492	5,075,924	4,490,404	3,887,673	2,898,245	3,014,378	2,777,378
98	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
99	Balance at the end of each fiscal year	722,620	(873,632)	(443,430)	(441,142)	(1,294,324)	(708,804)	(4,106,073)	(3,116,645)	(3,232,778)	(2,995,778)
100	Cumulative Balance at end of Biennium		(151,012)		(884,572)		(2,003,129)		(7,222,718)		(6,228,555)
101											
102	*Short-term (FY19) Projects										
103	** <b>FFSA For FY18/19</b> includes Long term (\$557,000) and one-time (\$750,000) fund s	shifts, which were o	originally separa	ate revenue line	items						