



Public Advisory Committee (PAC) Meeting

Wednesday, June 17th, 2015 - 5:00 to 8:00pm (includes catered light supper)

Peace River Provincial Building (9621-96 Avenue) - Room 108

Meeting Notes –June 17, 2015

Attendance:

Terry Kosabeck (facilitator) Sharon Tiggelers (recorder)

DMI staff team: Amber Armstrong, Wayne Wasiliew, Frazer Butt, Gord Whitmore, Trina Tosh, Andre Knight-Lira, Jim Witiw

PAC: Al Benson, Peter Frixel, Arie Loogman, Geoff Milligan, Ashley Zavisha, Ken Buchinski, Paul Hvenegaard, Rod Burr, Doug Dallyn, Francois Allard, Laval Bergeron

Guests: Dr. Brian Eaton –Alberta Innovates, Technology Futures, Josef Macleod –Alberta government (AEP, Fish & Wildlife, Peace River), Dr. Peter Aku –Alberta Conservation Association

Regrets: Mark Ladd, Rick Keillor, Jason Parker, Colin Needham, Dwight Weeks, Kris Kennedy, Gareth Davies, Dave Walty, Tolko High Level, Chris Sillito, Terry Kristoff, Keith Branting, Judy Weiler, Sherri Larsen, Harry Krawchuk, Norm Duval, Steve Krahn, Lee Rueb, Stefan Szabo, Bernie Morin

Dinner service

5:00pm

A) Welcome and Introductions *Terry Kosabeck, Facilitator*

a. Review of agenda

5:17 -Terry called meeting to order – Paul Hvenegaard introduced his guest Alberta Conservation Association staff – Dr. Peter Aku, Fisheries Program Manager.

-Terry asked for additions to agenda, no new items added motion to accept Arie - second Laval no objection – motion carried.

B) Business carried over *Terry Kosabeck, Facilitator*

a. April 29th, 2015 Meeting notes (errors/edits, and adoption

- Terry requested if anyone noted any errors or changes – no comments.

- Terry asked for motion to accept? Ken B made motion seconded by Laval – no opposed all in favour – carried.

b. DMI DFMP Executive Summary Update (distribution status) – Amber Armstrong

- Amber handed out final production copies of DMI's Executive Summary Westside and Eastside FMAs, inviting PAC members to review at home. DMI welcomes any comments. You can email or fax me. This is the final printed

product for now but we would like to hear your feedback if you have any. Jim W & Terry thanked Amber for the great work in the final look of this product.

c. PAC Education Plan Update – Amber Armstrong & Mark Ladd

-Mark is unable to attend tonight's meeting – busy with school year end. So Amber updated group re: online "Survey Monkey" poll of PAC members seeking feedback on a narrowed list of specific existing DMI VOITs that PAC is interested in learning about and observing implementation & monitoring efforts. There were 8 responses, so an internet-based feedback tool did not work as a pathway for everyone. Next time she will try a survey approach that is more inclusive.

-Anyone who has not responded yet could look at the list of VOITs and hand that feedback in at the end of the meeting or fax later to her providing their VOIT areas of interest. Amber spoke relating to the 8 responses which signal the top 4 indicators of interest to PAC members so far as follows:

#6 Interior old forest core area by cover group at future points in time: *Does the forest contain old growth components arranged so as to function as "interior core" areas for habitat?*

#9 Presence of caribou & grizzly species: *Are at-risk species remaining present in local forests?*

#13 Area of Continuous Reserve Network – CRN: *Are high sensitivity forests excluded from harvesting? (Reducing the impact of regional footprint of forest industry)*

#37 Percent of sampled blocks with buffers in place as required by government: *are Industry operations kept away from water & riparian habitat to government specifications?*

-Other indicators showing 50% interest response (4/8 PAC members) include:

#7 Annual achieved retention by company; *Will the second crop forests have natural structure within them at the stand level?*

#10 Alberta Recovery team population estimates for Grizzly and Caribou; *Will local populations of at-risk species decline over time?*

#12 Area of identified High Conservation Value Forest (HCVF) features by type; *Are identified special features protected ?*

#17 Area of in-situ reserves by seed zone by tree species; *Are natural supplies of native genetic tree seed maintained?*

#23 Annual percentage of cutblocks achieving required reforestation standard by company (Reforestation Report); *Is the harvested forest growing back to meet government standards?*

#24 Opportunities for other industries to consult on footprint issues (Integrated Land Management activity); *Are companies working together to minimize cumulative impacts and footprint?*

#25 Annual forest landbase balance; *Is the productive forest land base (timber supply area) getting smaller?*

#30 Annual number of significant surface erosion events related to silviculture, harvesting, and road activities by company; *Is water quality protected, and Is soil productive capacity protected by efforts to prevent major erosion ?*

#33 Annual Percentage of temporary crossings that meet all standards; *Do company temporary stream crossings meet regulations? Is water quality & aquatic/riparian wildlife protected ?*

#34 Annual Percentage of active permanent crossings inspected; *Are permanent stream crossings regularly inspected ? Is water quality & aquatic/riparian wildlife protected ?*

#43 Annual direct and indirect employment levels by company; *Does the forest industry provide social and economic benefits to the regional communities?*

#44 Reforestation Standards productivity forecast by company; *Do companies maintain long term timber productivity?*

#45 Annual number of Aboriginal consultation opportunities by company. Annual number of early and effective opportunities for consultation with Aboriginal communities by company; *Do forest companies make efforts to provide meaningful consultation opportunities with Aboriginal groups?*

Jim will plug in these VOITs of interest into the evolving meeting notes addendum (attached) on PAC Education Plan as a record of feedback on Indicators from the larger DMI management plan list.

C) Area Sawmills Up-date (current initiatives info share) Westside Mills & Eastside Mills

5:25 Terry noted Canfor representative not present and then asked Ashley Zavisha if he would like to update the group?

5:26 Ashley of note we just completed reforestation of ½ million trees . They also are noting in aerial surveys some land base area where there are patches of smaller pine 60 yr. range not attacked by MPB ...it was good to see these small areas that were not affected. Also went through and reviewed status of blocks that were regenerated 3 yrs. ago which show good success from planting as well as natural growth. Zavisha is still mandated to maintain approximately 70% pine focus diet 2015 still responding to recovery of MPB killed forest.

Q. Amber asked status of area by MPB this year?

A. Ashley - no new attack red pine areas evidence. The population of MPB seems to have peaked as we did not find fresh pitch pockets, it seems that they have run out of food and have moved on.

Terry thanked Ashley and noted that we are ahead for time as per the agenda and asked Al Benson if he would present early?

D) Alberta Government Up-date (current initiatives info-share) -Al Benson, Alberta Gov

5:28 Al provided a brief up-date that cabinet changes have occurred after the election. ESRD has been moved to one of 2 departments; Forest Protection moved to Agriculture and Forestry, ESRD is now in Environment and Parks. Department re-organization continues in response to the new government.



Q. Amber - who is the new minister?

A. Shannon Phillips MLA from Lethbridge is Environment and Parks, Oniel Carlier from Whitecourt is Agriculture and Forestry.

Q Jim -Are both part of SRD or does SRD not exist anymore? Confusion as web site shows both ministers.

A. Al - all foresters do forest management work – they can do this for a group that is in another department, note they are still sorting out details of new departments this will take some time.

Q Jim - is there a signal on land use framework regional planning status?

A. Al –regarding the Land Use Framework, I currently have no scheduling information on Upper and Lower Peace regions. We have some internal workshops scheduled. I can send up-dates for info-share with PAC if desired

A. Jim –we can await a later up-date from you at next PAC meeting once some of these files become clearer under the new government.

E) Presentations (Session 2 of 3) -Protection of water & riparian features

Introduction of Presentation Plan –Jim Witiw

5:32 Jim -Since a number of PAC members were not available for the last meeting I will revisit some of the highlights leading us to tonight’s agenda. Jim showed presentation to overview PAC interest areas in water protection, revisiting the scope of PAC anchored to operational implementation of forest management plans on the ground and how natural resources are accommodated in DMI activities. We planned 3 separate meeting-sessions to address this area of PAC interest. The 3 session strategy plan was broken down into Part I – Part II - Part III.

Revisiting the theme on “government requirements” for water protection, the message from last meeting’s Part-I was that on the government side there are a number of agencies looking at aquatic and riparian resources and industry practices, different layers of government and some non-government interaction through Alberta Conservation Association and ABMI initiatives. Hats off to Darren Fearon & Al Benson for presentations on how much is being done and what is covered in various policies on practices.

Tonight’s Part-II session focuses on Science and Ecology connections or foundations. What does science in Alberta tell us? How does knowledge inform our requirements, rules and practices? Our first guest speaker will provide an overview Alberta aquatic & riparian species, Alberta research, and our state-of-knowledge in guiding protection of water & riparian features. Our second speaker will cover fisheries biology and water hydrology foundations. After tonight’s meeting, this brings us to Part III where we will draw from DMI and Sawmills to cover what industry is doing on-the-ground to account for aquatic & riparian values and monitoring the targets in DMI’s strategic forest management plan. Your other related aquatic areas of interest in the PAC Education Plan, LiDAR technology and Arctic Grayling, will be addressed in separate sessions.

5:45 Terry called a 10 minute break before getting to tonight’s speakers.

Break

5:45pm

10 min

Session-2: Science & Ecology Connections Alberta Innovates Staff + Alberta ESRD

- a. **Alberta science connections on aquatic/riparian species diversity & ecology?** (What do we know? What are we yet researching in Alberta?)

-Dr. Brian Eaton -Senior Research Scientist /Aquatic Ecology, Alberta Innovates - Technology Futures

5:53 Jim introduced Dr. Brian Eaton from AITF and his wife Sherry who drove from Edmonton to Peace River today. I met Brian a number of years ago when the government was introducing various new species of concern and established a new rule requiring mitigation via a 100-meter buffer on amphibian breeding habitat. We needed to understand what was required in areas of amphibians to develop some practices. I contacted Dr. Eaton who was keen to take on local knowledge gaps and set out on a 3 year study with DMI. Other collaborators joined this research project, which resulted in new amphibian science, identification of a new habitat feature to Alberta, vernal pools, and some adaptive new DMI forest practices for northern Alberta. Since then Brian is engaged in co-supervising some follow-up amphibian research by UofA and AITF at EMEND testing the effectiveness of those new practices.

6:00 Brian presented an outline on northern boreal forest aquatic systems, covering a diversity of species and their life cycles. The focus was on northern habitat, aquatic and riparian systems, their diverse types and ecology, knowledge gaps, and what agencies are studying wetland ecology. Riparian habitat was described, as well as the significant proportion of species depending on this habitat type. The ecological role and relative effect of various sizes of buffers were described. Different gradients of buffers relative to their radiating distance for water were distinguished for amphibians. Alberta setback distances were exemplified. Different types of important connectivity for wildlife movement or dispersal across the landscape were described.

The local Alberta amphibian research projects conducted by AITF and UofA supported by DMI funding were overviewed. These focused on subtle ephemeral, intermittent and small permanent features, streams and small ephemeral wetlands (vernal pools). Brian shared local images of toad movement monitoring, the importance of deadwood piles, decomposing deadwood, squirrel caches or midden sites, upland over-wintering habitat, and watercourse riparian travel corridors.

Brian provided a glimpse into current wetland research underway in Alberta by various organizations, and the areas or topics where our knowledge is lacking yet.

Terry opened the floor for questions from PAC members.

Q. Al - can you explain difference between a bog & a fen?

A. Brian - simply stated, bogs are a slightly higher area in the peatland and has to have more than 40 cm of peat while a fen has water throughout. There are lots of variations and both can have pools that are important to animals. It is not easy to define. Dr. Dale Vitt has defined conditions for reclamation needed to get a disturbed industrial area back to a bog or a fen on developed areas.

Q. Arie - what is a vascular plant?

A. Brian - most of the plants we see are vascular. They have tubular tissues for conducting water and minerals throughout the plant. Broad-leaved plants, trees, grasses. Non-vascular plants are moss and lichens in wetlands.

Q. Al - some days it seems all is riparian area but how much is delineated on maps accurately is a good question?

A. Brian - could not find anything on AB wetland delineation mapping status or quality. Good examples are from BC, but you are right wetland is everywhere, rather widely prevalent in northern AB Boreal forest.

Q. Arie how old does a toad get?

A. Brian -To find out how old a toad is, we use a technique to clip their toes and embed in wax. Then we can count rings like a tree. A Canadian toad in the wild lives about 12 years, while a wood frog about 7 years but in captivity they can live up to 50 years. I have a pet toad 18 years old, was raised from tadpole.

Q. Al - just some information on non-native plant animal invasive aquatic species. There have been 3 recent incidents of finding them on boats entering Alberta from elsewhere.

A. Brian - yes non-native plants like loosestrife and animals such as like quagga and zebra mussels, they need to be monitored and stopped before they infest AB.

Q. Laval - should you not touch or hold a frog?

A. Brian - if you have clean hands and pick them up gently it is not hurting them, if you do not have pesticide or other toxins on your hands. Also it is not a good idea to pick up more than one, as disease can spread if you touch a lot of them. During field research we tend to use rubber gloves as a protocol.

Q Arie - how many species are there in our area?

A. Brian – in northern Alberta, documented about 10 amphibians and reptiles, not very many. 2 toads, 2 to 3 species of frogs, 2 snake species, possible salamanders.

Q. Rod - water resources policy for water bodies is that industry does not take more than 10cm from a water body when drawing water for industrial facilities. Is that enough?

A. Brian - in the spring there may be sensitive eggs near the surface. A drop in the level of water could affect wood frogs who like to lay eggs in shallow water.

Q. Rod - what about in winter time?

A. Brian - it is fine in winter, nothing in this species group over-winters in water. A lot of them are upland dependent for winter.

Q. Doug - AEMERA -The Alberta Environmental Monitoring, Evaluation and Reporting Agency, what role does AITF have with them?

A. Brian - we do have a role as we have worked on a data dictionary to create a data base for them, quite extensive trying to translate all data into one new complete data base.

Q. Doug - are they playing a big role in Alberta?

A. Brian - not sure if AEMERA has figured out completely what they are trying to do yet - it is a large undertaking!

Q. Doug -is DMI going to introduce the land use project that was presented to the Counties?

A. Jim & Frazer –Doug is referring to a DMI-Tolko project called “Land Use Rationalization”. It is basically a tool developed by a consultant, Silvacom under a project funded by Tolko, DMI and FRIAA to assist land use regional

planning decisions. An introductory orientation was provided to the Counties on project progress and the tool's potential value to future local planning committees under the Land Use Framework.

A. Jim – PAC has identified a future topic of interest in the PAC Education Plan around community sustainability and stability. The Land Use Rationalization tool offers value as a visualization tool, map based, to illustrate trade-offs and balancing scenarios among societal interests, environmental sensitivity, and economics for forest landscapes. Introducing this tool to PAC at a future meeting would fit well under that topic interest identified by PAC. We will note that in the PAC Education Plan.

6:54 Terry thank Brian for presenting and answering the PAC questions.

We will take a 5 minute break for our next speaker to set up.

b. How are Alberta buffer widths determined? (Fisheries biology & hydrology foundations) *-Alberta Government -Senior Fisheries Biologist, Peace Region*

7:10 Jim Introduced Josef MacLeod a new fisheries biologist with Peace River Alberta government.

Josef - I moved to Peace River from Sudbury in January of this year. Previously my university research work included looking at small critters like zooplankton and how they were affected by change in the boreal forest. My employment history started in northern Canada with the federal Department of Fisheries and Oceans. I am now stationed in Peace River and was requested to provide a presentation on Alberta government fisheries biology and watershed hydrology considerations in industry activity distances from water.

Josef provided a presentation to PAC. There may be some overlap with previous meeting government staff presentations. The presentation overviewed various natural ecosystem services from riparian areas across water quality, habitat, species movement corridors and erosion control. Fish habitat was highlighted in clarifying the influence of temperature, turbidity, water chemistry, insects as food, and coarse woody debris. Riparian vegetation areas were linked to these aquatic health characteristics, and the various roles that buffers play in maintaining the functional aspects of these sensitive areas.

The Alberta government has a vision for riparian areas regarding their physical structures and ecological integrity for their role in hydrology, or water quality & quantity, but also riparian dependent fish & wildlife. Both time and space are important scales to consider, since riparian areas are dynamic with life-histories of their own. Resilience of these systems was briefly mentioned as important to maintain through cumulative effects of various human activities and natural disturbances. Alberta goals and strategies are reflected in a variety of official documents; Fish & Wildlife Policy, Fish Conservation and Management Strategy, Water for Life Strategy, Stepping Back from Water, Water Act and forest Operating Ground Rules. New Alberta policies evolving include a Wetland Policy and Wildlife Conservation and Management Strategy.

Josef listed the broad goals for riparian areas that form foundations for the design of our current water protection practices and requirements in Alberta. Some of these are described within the Purpose and Discussion sections of DMI's FMA Operating Ground Rules. An example was provided. A brief explanation was provided for how Alberta requirements for buffer widths are determined and their link to science literature, especially in the 2012 Alberta document; "Stepping Back from Water". The Ground Rules table of water feature classes and setback distance requirements were reviewed again. In closing a brief overview of assessment methodology for determining riparian health was provided.

Terry opened the floor for questions from PAC members.

Q. Peter - more of a comment than question. A sore spot with me is riparian areas and setbacks, walk the same path as the moose and bear but the probability of the buffer zones we have now protecting them are a minimum spec, and in my opinion it is not good enough protection on these zones. Would it not be ideal to double or triple them?

A. Josef - as a biologist I agree but we need to do more research, where do we need to protect more and how do we get industry to agree.

A. Jim –I would offer an alternative science-based perspective, one that considers what the natural system does. Northern Canada and north Alberta has a very lengthy history of large scale forest fires that do not discriminate in burning through riparian areas. They do not typically kill all trees or vegetation in them, but disturbance is definitely not foreign to riparian areas if you consider landscape history. Evidence on burn patterns, aerial photographs, and old coarse woody debris reveals that natural history. Similarly in northern Alberta, beavers are a prevalent historical disturbance agent. I agree that natural disturbance agents are not the same as industrial footprint, but buffers of themselves are not a natural part of the system, they are rather foreign to it and somewhat dated in idea as a tool.

Q. Geoff - Some of the information we have now shows that it is fairly clear that there is some hotspots due to degradation in certain areas. How can we address known critical areas - is the government going to wait till research is done or will they get together and act?

A. Josef - the idea is for each of the watersheds in each area, government, to provide a report card red - yellow - green on status and to allow fisheries to respond. The harvest of fish is sensitive. For example grayling is only catch and release. Need to mitigate and tighten restrictions in each areas.

A. Jim – a future PAC meeting will be dedicated to insight from fisheries staff on local Arctic Grayling circumstances.

Q. Peter - my difficulty to understand is who is responsible for the environment?

A. We all are.

Q Peter -...and Management?

A. Fisheries has a role because they work with industry to establish buffers but Lands staff do also and Wildlife staff. Multiple departments are involved.

Q. Peter - there is a lack of clarity for which government department provides clear guidelines.

A. Riparian is transition zone for management efforts, it's a bit of everything, multiple agencies have roles.

Comment. Doug - municipalities do have some role also, with funding. An example is the Heart River Watershed, which has a restoration plan in the agriculture area and establishing best practices that are now being implemented. An example is taking cattle out of the river to protect the water. This is work being done today.

A. Josef – I just joined the committee for the Heart River Management and will be getting more up to date.

Q. Also Big Lakes municipality riparian areas have environmental funding. How do they pick an area?

A. Josef - I am very interested in trying to get into all the data that is coming on at this time. I do not have that information.

Q. Paul - where does the riparian area really stop on-the-ground relative to the strip we call the buffer? What I am suggesting is that we are currently only protecting a piece and not protecting the complete zone. I find that in protecting the strip going up a river, the term riparian protection is a misleading term. We are almost taking a slice and letting the rest go to hell!

A. Acknowledge that current standards tend to be channel or edge-of-water focused setbacks. Probably does not recognize high value versus lower value portions of riparian zone in delineating the fuller range of values at stake.

Q. Paul -from the previous meeting's information we were told that buffer widths change from province to province. Where do the Feds fit into aquatic habitat protection? The feds are mandated to protect fisheries ... where are they?

A. Yes, different jurisdictions have different guidelines.

A. Frazer – recall from the information presented by Darren Fearon in comparing those jurisdictions, that Alberta industry has one of the best buffering practices in the country.

A. Gord - to say that buffering as a protection tool, that the buffer is static and will not change, is not accurate. For example forest fires don't stop at riparian habitat but go right through to the water. Current practices do not account for natural disturbance influence or NRV on riparian ecology.

Q. Paul - but at the planning protection level?

A. Gord - it is left to user to determine site-specific needs. In some riparian zones DMI voluntarily leaves buffers beginning at the valley slope-top breaks. Some of these buffers may be kilometers in width. In those instances, the ground rules might only require 60-meters.

Q. Paul – does this identify a gap between legislation and practice?

A. Al – during my whole career studying various topography circumstances, the issue is the information or science we have now has of yet not been getting there. It is really a highly variable natural system. How do we know what is the right thing to do? It is a challenge to say how it should be done. I don't know how we will get there or when.

Q. Paul - should be like the recipe in a cook book, inputs and instructions then results?

A. Al - in the absence of new updated information that would be difficult to define. The natural system does not function like a cookbook, it is complex, it has limits to resilience, we are still learning about how it functions and responds.

Comment. Jim – One other thing to consider here. LIDAR technology now shows, quantifies that in the northern landscapes there is very little that isn't riparian. So, if we buffer all of it, there is very little left for natural resources economy. Most of us here tonight go home, unemployed, industry and government personnel, we have no economy. This is about balance and careful footprint, and about asking how the natural system is able to be resilient. We need to pay attention to that.

A. Al – we need not just the ability to measure but to know the function of it, and be able to flip the capability to get riparian protection where it is most needed, prioritization.

A. Josef - liberal application of precautionary allowance may not be a reasonable response.



Q. Jim – what about a more objectives-based system and abandonment of single objectives as it is a highly variable system in the boreal?

A. Al – the risk government has to manage is that one group will harvest right up to water and in another place or another group far away from the water. How can we identify this flexibility in a single process?

A. Josef - the answer is: What is the best we can do?

Q. Frazer - other industries are not regulated the way forestry sector is. How about oil and gas? or farming?

Comment. Ashley – even when we harvest to the minimum standard buffer width often nature has kept you away from the buffer edge. Sometimes shrub riparian areas are without trees and naturally much wider than the required buffer distance measured from edge of channel. We are also reforesting the areas that we harvest. But a forest fire often goes all the way and removes more area than forestry operations do on the land base and we reforest compared to what nature does to itself. Another thing to consider is that if a tree falls in the water when we log, we have to take corrective action to remove it, but nature does not do that. Just because we have gone into the riparian area does not mean it will not come back to forest.

Q. Terry - is forestry management better today than it was 50 years ago?

A. Josef – I cannot say for Alberta as my forest experience is from elsewhere.

A. Jim - It is different than 50 years ago. We are paying more attention now to the natural systems and we are trying to get closer to what nature does in its disturbances. Whether that is better than past practices? We have 10 years of field study at EMEND so far which has provided a scientific read on our harvest-design attempts to emulate some things we see in natural disturbances. EMEND suggests we are on the right path, but still learning. 10-years is a small timeframe in the response life of a forest ecosystem.

A. Ashley – Europe has more active management forest history than we did before the 2nd world war, but it is more like farming than going back to a natural forest. In my opinion we put more trees back and make them more productive than nature.

Comment. Jim - I don't know if there is an answer to your question Terry. Pre-2001 forest management saw wildlife concerns limited to a few species, moose, gamefish, etc. System-level biodiversity was not as big of an issue then – we now have a more humble view of the world.

Q. Paul – how would you judge “better” management? what parameters to measure, since endangered species lists are getting bigger?

A. Doug - we are doing better with farm land now. We now realize that we have to have a buffer zone around water and yes we have a lot of restoration issues as previously it was developed right up to the river bank. Activity has changed in the oil industry when opening a lease or a road to the lease now have to abide by the forestry rules and have to jump through hoops – not easy to just dirt fill muskeg wetland. They are also responsible when abandoning their projects to bring it back to the way it was before we arrived.

7:51 Terry a good discussion – thank you Josef for your presentation again we had an informative lively discussion.

Jim noted intent to have the presentations posted later for PAC member reference on DMI's website section for PAC. Jim thanked Dr. Eaton and Josef for the presentations tonight. PAC extended appreciation for guest speakers.

F) Next Meeting

a. Date, Meeting Place & logistics

Jim – we had proposed a field site visit on July 15, however that date cannot be met. DMI would still like to do a field session in September which will provide our third session on water protection, to demonstrate industry practices, permanent vs temporary water crossings, reclaimed crossings, buffers. And we can show the different classes of water features in northern Alberta.

Terry - asked Jim for next meeting date then if the July 15 field date cannot be met.

The PAC group confirmed it would like to do a field session in September to see how industry accounts for water and riparian protection in its practices. Proposal for mid- September timeframe.

The 23rd of September was presented and agreed as a possible date for the field tour. Jim & colleagues will advise later on logistics.

Terry -Following the PAC field tour, the next PAC meeting date will be when?

Discussion agreed **Wednesday November 25th**, meeting point **provincial building again. 5pm start**

ACTION: Al Benson to can secure and confirm Provincial Building for November.

b. Meeting topic/theme

Jim -For Sept 23, Part III of our sessions on water protection, we will draw from DMI and Sawmills to cover what industry is doing on the ground to account for aquatic & riparian values and monitoring the targets in DMI's strategic forest management plan. Availability of DMI operations for that timeframe suggests we will target the east-FMA, near the Whiskey Jack Operating Area.

For November 25th, content will be determined after field trip – but sticking to the PAC Education Plan and list of PAC's VOIT indicator interests.

7:59 Meeting adjourned



Attachment:

DMI Public Advisory Committee –Education Plan & discussion interests (June 2015)

Focus: “Operational scope” on-the-ground practices and activities, that generally have roots in science, government natural resource policy, and strategic long-range forest plans

This list was compiled through feedback from PAC members to the PAC co-chair & DMI, and is not presented in any particular order of sequential priority.

General area of interest -topical theme	Perceived root values at interest (as revealed within the request)	Related DMI VOITs + Commitments of interest to PAC members (DMI DFMPs)	Potential speakers, presentors, expertise
LiDAR mapping technology	Understanding connections of new technology to DMI practices in protection of water values (aquatic biota, hydrology conservation)	Indicator 33, 37	DMI staff, Dr. Barry White (ESRD LiDAR program development)
Ecosystem-based management (effectiveness, monitoring forest practices & cumulative effects)	<ul style="list-style-type: none"> • How DMI ecosystem based management approach is measured for efficacy & success at the biotic or species-response level (e.g. biodiversity indices?) • Are long-term changes monitored for comparisons to undisturbed biodiversity nearby? • The roles of variable-retention legacies 	Indicators 6, 7, 9, 10, 12, 13, 37	DMI staff, UofA Dr. John Spence or NRCan Dr Dave Langor (EMEND science program leads)
Mountain Pine Beetle (local context) Delivered Nov 26, 2014	<ul style="list-style-type: none"> • Species biology • Eastward infestation migration status • Up-date on current policy and regional strategy. • Clarify fire risk management strategy for dead stands on the landscape 	Indicators 22 + 7 Commitment C8	Conifer mills staff, ESRD Forest Health staff



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<p>Watercourse spatial buffers (logging proximity constraints) Delivery (3 meetings) starting April 29, June 17, 2015....</p>	<ul style="list-style-type: none"> • How fisheries science (stream flow/volume, temperature, habitat state) informs the definition of current regulatory policy on watercourse buffer sizes (Alberta). • Understanding the intersection of science, fisheries management, forest management strategy targets, and operational ground rules (field distancing practices) • Landscape strategies in retention for watershed values consideration • Cumulative effect of natural disturbance and MPBeetle surge harvest on water values? 	<p>Indicator 7, 12, 30, 33, 34, 37</p>	<p>Alberta ESRD staff (Al Benson, Darren Fearon), Ab Innovates Dr. Brian Eaton, Alberta ESRD Senior Fisheries Biologist, DMI + sawmill woodlands staff</p>
<p>Forest sustainability evidence reflected in:</p> <ul style="list-style-type: none"> • the characteristics of local 2nd-generation forests • perceptions of excessive logging of mature forest in proximity of the mills • recent clear-cutting in the region 	<ul style="list-style-type: none"> • Understanding reforestation policy and practices • Growth performance evidence in local regenerating trees. • Transferring genetic properties from mature forests to new regeneration • Clear-cutting vs ecosystem-based design (MPBeetle?) • Cumulative effect of natural disturbance and MPBeetle surge harvest on ecosystem? • Disproportionate spatial allocation of footprint impacts (near access or communities) 	<p>Indicator 6, 13, 17, 23, 44</p>	<p>DMI staff (silviculture, AAC development), Conifer mills staff, ESRD Reforestation staff, UofA -Dr. Philip Comeau (WESBOGY science lead)</p>



General area of interest -topical theme	Perceived root values at interest (as revealed within the request)	Related DMI VOITs + Commitments of interest to PAC members (DMI DFMPs)	Potential speakers, presentors, expertise
Natural disturbance-based harvest design	<p>Science rationale for connecting forest management to natural disturbance:</p> <ul style="list-style-type: none"> wildfire as a destructive source of renewal distinctions between human harvest-design and wildfire (patterns, ecosystem response, resiliency) distinctions between stand-replacing fires, stand-altering fires (light burns) NW Alberta fire patterns & tree-ring evidence 	Indicators 6, 7	<p>Dr. John Spence (EMEND science lead), Dr. David Andison (foothills Research Institute –Healthy Landscapes, natural disturbance science lead), Dr. Colin Bergeron (EMEND fire history)</p>
Reforestation strategies (soils, regeneration properties)	<p>Alberta forest policy requirements & ecology considerations in new policy, Forest science connections:</p> <ul style="list-style-type: none"> Forest soils properties & soils biodiversity Soil ecosystems resiliency Understory plant communities (competition and interactive dependencies) Rationale for scarification treatments & options in conifer Mixedwood forest regeneration strategies Herbicide (a tool for mixedwood forests?) 	Indicator 17, 23, 24, 37, 44	<p>DMI staff, Conifer mills staff, ESRD Reforestation staff, Dr. Sylvie Quideau (EMEND forest soils & soil biology scientist, others?) Dr. Vic Lieffers, Derek Sidders (EMEND reforestation scientists) Dr. Ellen Macdonald (EMEND mixedwood forest plant scientist)</p>



General area of interest -topical theme	Perceived root values at interest (as revealed within the request)	Related DMI VOITs + Commitments of interest to PAC members (DMI DFMPs)	Potential speakers, presentors, expertise
Local fisheries; Arctic Grayling	<ul style="list-style-type: none"> Local inventories on status Historic trends on presence absence in northern Alberta Accounting for effects of seasonality (Drought : Precipitation years) Climate change impact assessments on fisheries? 		UofA Dr. Mark Poesch ESRD Fisheries staff, Alberta Conservation Association staff, Rich McCleary –fRI
Community sustainability <i>(Land Use Rationalization assessment –northwest Alberta project)</i>	<ul style="list-style-type: none"> Benefits or returns to resource dependent communities Alberta policy considerations Mill business considerations 	Indicators 24, 25, 43, 44, 45	Silvacom + DMI woodlands staff, Green Analytics?, ESRD Forest Industry Developm policy unit ?, Forest products economic specialist (UofA)?
Performance <i>Delivered Feb 4th, 2015</i>	<ul style="list-style-type: none"> Industry performance in various pre-defined management plan target areas (VOITs, commitments) 	All VOITs and Commitments (sample set)	DMI staff sharing Stewardship Report outcomes