



Legislative Assembly of Alberta

The 29th Legislature
Fourth Session

Standing Committee
on
Resource Stewardship

Ministry of Environment and Parks
Consideration of Main Estimates

Tuesday, April 17, 2018
3:30 p.m.

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Fourth Session**

Standing Committee on Resource Stewardship

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Drysdale, Wayne, Grande Prairie-Wapiti (UCP), Deputy Chair
Coolahan, Craig, Calgary-Klein (NDP),* Acting Chair

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Fraser, Rick, Calgary-South East (AP)
Hanson, David B., Lac La Biche-St. Paul-Two Hills (UCP)
Kazim, Anam, Calgary-Glenmore (NDP)
Kleinstauber, Jamie, Calgary-Northern Hills (NDP)
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Malkinson, Brian, Calgary-Currie (NDP)
McPherson, Karen M., Calgary-Mackay-Nose Hill (AP)
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Woollard, Denise, Edmonton-Mill Creek (NDP)
Vacant

* substitution for Rod Loyola

** substitution for Jamie Kleinstauber

Also in Attendance

Clark, Greg, Calgary-Elbow (AP)
Starke, Dr. Richard, Vermilion-Lloydminster (PC)
Strankman, Rick, Drumheller-Stettler (UCP)
Swann, Dr. David, Calgary-Mountain View (AL)

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Standing Committee on Resource Stewardship

Participants

Ministry of Environment and Parks

Hon. Shannon Phillips, Minister

Rick Blackwood, Assistant Deputy Minister, Strategy

Eric Denhoff, Deputy Minister

Steve Donelon, Assistant Deputy Minister, Parks

Ronda Goulden, Assistant Deputy Minister, Policy and Planning

Frederick Wrona, Chief Scientist and Assistant Deputy Minister, Environmental Monitoring and Science

3:30 p.m.

Tuesday, April 17, 2018

[Mr. Coolahan in the chair]

**Ministry of Environment and Parks
Consideration of Main Estimates**

The Acting Chair: Good afternoon, everyone. I'd like to call the meeting to order. The committee has under consideration the estimates of the Ministry of Environment and Parks for the fiscal year ending March 31, 2019.

I'd ask that we go around the table and have all MLAs introduce themselves for the record. Minister, please introduce the officials that are joining you at the table. My name is Craig Coolahan, the MLA for Calgary-Klein, and I will be serving as the chair of this committee. We'll go around the table, starting to my right, please.

Mr. Drysdale: Wayne Drysdale, MLA, Grande Prairie-Wapiti.

Mr. Strankman: Rick Strankman, MLA, Drumheller-Stettler.

Mr. Loewen: Todd Loewen, MLA, Grande Prairie-Smoky.

Mr. Clark: Good afternoon. Greg Clark, MLA, Calgary-Elbow.

Dr. Starke: Good afternoon. Richard Starke, MLA, Vermilion-Lloydminster.

Ms Phillips: Good afternoon. Shannon Phillips, Minister of Environment and Parks. I'm joined by a number of officials. I'll introduce them in my opening remarks.

Mr. Malkinson: Brian Malkinson, MLA for Calgary-Currie.

Mr. Rosendahl: Eric Rosendahl, MLA, West Yellowhead.

Ms Kazim: Anam Kazim, MLA for Calgary-Glenmore.

Dr. Turner: Bob Turner, MLA, Edmonton-Whitemud.

Ms Woollard: Denise Woollard, MLA, Edmonton-Mill Creek.

Mr. Nielsen: Good afternoon, everyone. Chris Nielsen, MLA for Edmonton-Decore.

The Acting Chair: Thank you.

I'd like to note the following substitutions for the record: myself for Member Loyola and Dr. Turner for Mr. Kleinstaub.

Please note that the microphones are operated by *Hansard* and that the committee proceedings are being live streamed on the Internet and broadcast on Alberta Assembly TV. Please set your cellphones and other devices to silent for the duration of the meeting.

Hon. members, the standing orders set out the process for consideration of the main estimates, including the speaking rotation. As provided for in Standing Order 59.01(6), the rotation is as follows. The minister or the member of Executive Council acting on the minister's behalf may make opening comments not exceeding 10 minutes. For the hour that follows, members of the Official Opposition and the minister may speak. For the next 20 minutes members of the third party and the minister may speak. For the next 20 minutes members of any other party represented in the Assembly or an independent member and the minister may speak. For the next 20 minutes private members of the government caucus and the minister may speak. For the time remaining, we will follow the same rotation just outlined to the extent possible; however, the speaking times are then reduced to five minutes as set out in Standing Order 59.02(1)(c).

Members wishing to participate must be present during the appropriate portion of the meeting. Members may speak more than once; however, speaking times for the first rotation are limited to 10 minutes at any one time. A minister and a member may combine their time for a total of 20 minutes. For the rotations that follow, with speaking times of up to five minutes, a minister and a member may combine their speaking time for a total of 10 minutes.

Discussion should flow through the chair at all times regardless of whether or not the speaking time is combined. Members are asked to advise the chair at the beginning of their rotation if they wish to combine their time with the minister.

A total of six hours has been scheduled to consider the estimates of the Ministry of Environment and Parks. With the concurrence of the committee I will call a five-minute break near the midpoint of the meeting; however, the three-hour clock will continue to run. Does anyone oppose having a break at this time? Seeing none, then we will have a break about halfway through.

Committee members, ministers, and other members who are not committee members may participate; however, only a committee member or an official substitute may introduce an amendment during a committee's review of the estimates.

Ministry officials may be present and at the direction of the minister may address the committee. Ministry officials seated in the gallery, if called upon, have access to a microphone in the gallery area. Ministry officials are reminded to introduce themselves prior to responding to a question or questions. Pages are available to deliver notes or other materials between the gallery and the table. Attendees in the gallery should not approach the table. Members' staff may be present and seated along the committee room wall. Space permitting, opposition caucus staff may sit at the table to assist their members; however, members have priority to sit at the table at all times.

If debate is exhausted prior to three hours, the ministry's estimates are deemed to have been considered for the time allotted in the schedule, and the committee will adjourn. The scheduled end time of today's meeting is 6:30 p.m.

Points of order will be dealt with as they arise, and the clock will continue to run.

Any written material provided in response to questions raised during the main estimates should be tabled by the minister in the Assembly for the benefit of all members.

The vote on the estimates and any amendments is deferred until consideration of all ministry estimates has concluded and will occur in Committee of Supply on April 19, 2018.

Amendments must be in writing and approved by Parliamentary Counsel prior to the meeting at which they are to be moved. The original amendment is to be deposited with the committee clerk, and 20 copies of the amendment must be provided at the meeting for committee members and staff.

I now invite the Minister of Environment and Parks to begin her opening remarks. You have 10 minutes, Minister.

Ms Phillips: Thank you, Mr. Chair. Good afternoon, everyone. I'm pleased to appear before you today to present the budget estimates for the Alberta climate change office and Alberta Environment and Parks.

I'm joined this afternoon, on my immediate right, by Eric Denhoff, Deputy Minister of ACCO and AEP; Tom Davis, at my far left, is assistant deputy minister of corporate services; Sandra Locke, at my furthest right, is assistant deputy minister, implementation and regulatory; and Ronda Goulden, to my immediate left, is assistant deputy minister of policy and planning. There are a number of other people here today from ACCO and AEP. They are in the gallery and here to assist in answering any questions the committee may have.

Budget 2018 delivers on the priorities of Albertans and continues to position Alberta as an environmental leader. It ensures the resources are in place to protect our air, land, and water for future generations. It maintains the services Albertans expect to ensure our province's water is safe to drink, our air is safe to breathe, our land is healthy and productive, and our fish and wildlife thrive. The budget values action as well as conservation, protects the ecosystems upon which we depend, and also focuses on diversifying Alberta's economy and creating jobs.

I'm here to discuss the budget for Environment and Parks, which includes the funding for the climate office. The overall operational budget for the ministry, which includes flood and climate leadership plan investments, is \$751 million. Our capital investment this year will be \$63 million. Some of the highlights of the 2018 budget are as follows.

The government continues to invest heavily in our provincial park system, with \$38 million this year in capital investments. Budget '18's overall capital investment in our provincial park system far exceeds that of previous governments. Funding will also support commitments made through regional plans, including investment in the newest formed provincial parks in southwest Alberta, in the Castle region.

We continue to invest in the Alberta community resilience program, or ACRP. In Budget '18 funding of nearly \$33 million was reprofiled from 2017-18. Bringing the '18-19 funding forward will provide communities with more flexibility, allow more high-priority flood resilience projects to be approved and moved quickly and constructed sooner in communities across the province. Dedicated ACRP funding for the city of Calgary is \$15 million a year for the next six years.

Alberta is committed to stabilizing, recovering, and ultimately achieving naturally self-sustaining populations of at-risk species as well. We are investing \$2.5 million to help protect at-risk species such as westslope cutthroat trout, bull trout, greater sage grouse, piping plover, and Ord's kangaroo rat. This funding will also support on-the-ground actions for species and their habitat and associated monitoring programs. Our robust, prudent, and thoughtful approach to protecting at-risk species brings together stakeholders from government, industry, indigenous peoples, and conservation groups. This ensures we have a made-in-Alberta solution that improves conservation outcomes for species at risk and meets the needs of our changing economy.

Our province continues to invest considerable time, money, and effort into keeping our public lands, parks, and protected areas safe and accessible for everyone. Last year we developed and distributed nearly 2,500 educational, wayfinding, and regulatory signs. We also distributed more than 115 pieces of educational material: fact cards, brochures, maps. All of that serves as the foundation for our enforcement program, which is a high priority for this government.

Provincial officers issued 6,500 charges and warnings in 2017 for offences such as operating off-highway vehicles without insurance or registration, entering closed areas, fishing without a licence, and cutting down trees. Those efforts will continue in 2018-19.

In conjunction with Justice and Solicitor General more than 300 fish and wildlife officers, conservation officers, and seasonal park rangers will patrol public lands, parks, and protected areas again this year. Eight seasonal problem wildlife technicians will take pressure off fish and wildlife officers, allowing them to focus their efforts on public lands and appropriate enforcement.

Approximately 20 seasonal park rangers will again be dedicated to public land issues. New educational materials will also be developed and distributed to address identified information gaps as we learn and build on our previous years' enforcement efforts.

We're also spending \$14 million on Alberta's fisheries management program to ensure the sustainability of our fisheries. The value of recreational fisheries to the provincial economy is estimated at more than \$600 million annually. Our highest priority is, of course, conservation needs. Many have heard me say this many times: there has to be something to fish. In the face of an extremely high level of pressure on our fisheries, the province's approach is robust and is demonstrating success in recovering and sustaining fisheries. We have seen some recovery of walleye fisheries, to the point where Alberta now has some of the best readily accessible walleye fishing in North America.

3:40

The ministry works to protect our precious biodiversity through our parks system but also through many of our land conservation programs. Significant dollars, \$10 million a year, continue to be allocated to the land stewardship fund. This fund supports two important conservation programs: first, the land purchase program, which is used to buy land of high conservation value or importance to the province; and the land trust grant program, which promotes voluntary conservation of high-quality private land by providing grants to land trusts and working with private landowners to secure conservation for the future. Those grants are also used to undertake stewardship activities or establish conservation easements on private land. I am always very pleased to support those projects that bring private landowners and land trusts together to ensure that ecologically sensitive areas are protected now and into the future.

Our Albertan values also include action on climate change, and I'm pleased to report that the Alberta climate leadership plan is working. Climate leadership funded programs demonstrate leadership in action towards climate change while also creating good jobs and supporting a diversified economy. With Budget 2018 our government is ensuring that Albertans are able to transition to an economy and a recovery built to last.

Over the next three years \$5.9 billion has been budgeted to support \$600 million in small-business tax reductions, and \$5.3 billion in expenditures has been budgeted for initiatives that support the outcomes of the climate leadership plan. Budget '18 continues to enhance and complement the policy pillars of the made-in-Alberta climate leadership plan. If Alberta had not put a policy in place, a system less suited for our economy and designed in Ottawa would have been imposed upon us.

The carbon levy enables support for initiatives that, one, reduce emissions; two, help the province adapt to climate change; three, enhance public transit; and four, help Alberta households and businesses transition to a diversified, more efficient, lower carbon economy. It enabled government to successfully support the development of 600 megawatts' worth of utility-scale renewable electricity at record low prices, the lowest in Canadian history. There is more to come. It has enabled investment in our indigenous communities and organizations to support a transition to a lower carbon economy.

There is also a carbon levy rebate, one way that we are providing transition support to Albertans. The rebate provides support to lower and middle-income Albertans and helps offset costs associated with the levy. Two-thirds of Albertans will receive a full or partial rebate.

In addition to rebates, our small-business tax rate has been reduced by one-third, from 3 to 2 per cent. That results in \$600 million in savings for small businesses over the next three years.

Albertans are also benefiting from Energy Efficiency Alberta programs. Five programs were launched this year to help our homes, businesses, and nonprofits. Those programs will save people money, they will reduce energy consumption, and they will

allow diversification through new renewable energy systems and help create jobs, especially for tradespeople in the energy efficiency sector. Energy Efficiency Alberta will receive \$132.7 million in '18-19 for program spending and administration. Energy efficiency is the simplest and most economical way to achieve greenhouse gas emissions, especially in Alberta, where we were the only jurisdiction without an energy efficiency program.

We have also created a new innovation fund. Alberta will invest \$1.4 billion over seven years for innovation projects in five categories, with \$440 million of this allocated to oil sands innovation. Oil sands innovation funding, long a request of the oil sands industry, will start at \$40 million a year in '19-20, rising to \$80 million in '20-21 through to '24-25. That fund will help large emitters upgrade facilities and update processes to reduce emissions and thrive in a carbon-constrained world.

The \$400 million green loan guarantee program is being developed to enhance access to capital support options, which businesses and communities can use to reduce GHG emissions, and to encourage lenders to enhance their focus on green lending.

In December 2017 our government published its first CLP progress report. We're currently working on the '17-18 CLP progress report, which will continue to provide valuable information to Albertans on the actions taken and the progress made, including the greenhouse gas emissions reductions, in order to achieve the goals set out in the climate plan.

The Acting Chair: Thank you, Minister.

For the hour that follows, members of the Official Opposition and the minister may speak. Would you like the timer set at 20-minute intervals to gauge your time?

Mr. Loewen: Yes, please.

The Acting Chair: Okay. And will you be going back and forth?

Mr. Loewen: Back and forth, yeah.

The Acting Chair: It's okay with you, Minister?

Ms Phillips: I will try it for the beginning, yes.

The Acting Chair: All right. Please go ahead.

Mr. Loewen: Okay. I just want to thank the minister for being here today and, of course, the ministry staff here. It's great to have everybody here today. We have limited time, so I'll be asking questions on behalf of Albertans, and, Minister, you'll be answering questions on behalf of Albertans. If I feel that we're off track or anything, then it's nothing personal; it's just that we need to move along with what we're asked to do here today.

I'll start with air quality. Looking at page 130, line 2.2, of the estimates, we can see that there's an estimated increase of 31 per cent for the operating expenses surrounding air quality management. Could you please elaborate on the source of this increase and whether you expect it to be temporary or an increase that's going forward? Again, that's page 130, line 2.2.

Ms Phillips: You're looking at page 130, hon. member?

Mr. Loewen: Page 130, 2.2.

Ms Phillips: We have had some changes, but overall we do see these pieces remaining relatively stable. We have had some changes in air because of just simply realigning ministry priority initiatives. So as projects are concluded, the FTEs are then realigned. There has also been some realignment in small amounts in the environmental

monitoring and science division. As we complete that work of consolidating the monitoring work in one division in the . . .

Mr. Loewen: So that's something that'll be continuing, then, these changes?

Ms Phillips: We have had some increased FTE costs as a result of a shortage in air quality specialists to manage ambient air quality to meet what are called the CAAQS, which are the Canadian ambient air quality standards. I don't know if there's further information to be provided from officials on this. You will see that there will be a little bit of flex in some of these budgets as we consolidate with EMSD.

Mr. Loewen: Okay. Thank you very much.

Moving down on the same page, we can see modest increases in lines 3.1, 3.2 for land policy and public land management. What are the changes that have precipitated these increases, and how does the ministry foresee future requirements?

Ms Phillips: Under public land you are querying 3.2?

Mr. Loewen: Lines 3.1 and 3.2 both have a little increase.

Ms Phillips: Yeah. All right. We'll start with 3.1, which is land policy. Some of that work is around the policies and programs related to brownfields and contamination and remediation. We have undertaken quite a robust consultation with municipalities in particular on brownfield redevelopment. As you will recall, hon. member, we also amended the MGA to enable quicker remediation of brownfield sites, and there is brownfield voluntary reclamation certificate work coming forward as part of government's ongoing consultation with municipalities. So there has been a little bit of a bump there in particular because of contaminated sites work that we have directed that the department undertake, within the context, of course, of flat FTEs within the department. We're still sitting at 2,349, I believe, and that has not changed from last year.

Mr. Loewen: Okay. Thank you.

And then 3.2?

Ms Phillips: Public land management. You know, we have been asked over and over again by those who use our public land, whether they are recreationalists or leaseholders, to improve our processes, our approval standards, make sure that our compliance and inspection are responsive to a landowner's needs. We have heard those concerns and made sure that we have the appropriate resources in place in order to do that. Again, this is a result of moving some resources around internally and responding to people's concerns that we heard from the very beginning. We made it a priority within the ministry to make sure that our public land is managed in a way that is more careful and thoughtful and to make sure that we have the right level of enforcement out on the landscape as well.

3:50

Mr. Loewen: Okay. Thank you.

Now, looking at line 3.3, rangeland management, I just want to see if you can give me a little bit of an update on the grazing lease transfer times since we're talking about rangeland management. How long can Alberta ranchers expect to wait to have a grazing lease transferred?

Ms Phillips: What line of the estimates does the question refer to?

Mr. Loewen: Line 3.3, rangeland management.

Ms Phillips: Is that with respect to the budgetary allocation?

Mr. Loewen: Yeah. We're talking about 3.3, rangeland management, and I presume rangelands would include grazing leases.

Ms Phillips: They do. Rangeland agrologists evaluate requests made on public land, and they also complete all the required First Nations and Métis settlement consultation. They manage and ensure . . .

Mr. Loewen: My question has more to do with and, in fact, it's specifically to do with grazing lease transfer times. Now, when a grazing lease is sold from one rancher to another rancher, there's a process involved in your department that has to do with transferring that within the government. Of course, there are also legal requirements.

The Acting Chair: Hon. member, can you make that reflect what's in the budget, the question around the budget?

Mr. Loewen: Yeah. It's 3.3, rangeland management. Rangeland management has to do with grazing leases, so obviously these expenditures have to do with grazing lease transfers, which are done by the government on behalf of ranchers. So it specifically relates to that.

But go ahead, Minister. Like I say, I'm talking about grazing lease transfer times and how long Alberta ranchers are waiting at the current time.

Ms Phillips: Well, certainly, if the question does not refer to the budget estimates, then we do have a recreational access regulation. We have a number of other policies under way within rangeland management. There's a dispute resolution framework as well. I'm just having trouble relating a policy of the department to a budget estimate's line.

Mr. Loewen: Okay. Well, obviously, wouldn't rangeland management cover the cost of the government transferring these grazing leases?

Ms Phillips: It does.

Mr. Loewen: Minister, if you're not going to answer the question, that's fine. I'll move on.

Ms Phillips: Okay. As long as we're speaking through the chair, I'm cool with that.

Mr. Loewen: Okay. But I will ask this question just because we're here. Do you have a goal in mind or a time frame in mind that would be reasonable for grazing leases to be transferred in?

Ms Phillips: I think that every situation is certainly different, and that's why we have provided the appropriate resources and not cut that budget line by a significant amount, say 20 per cent.

Mr. Loewen: Okay. Thank you very much.

Continuing on page 130, there is a \$1.6 million increase in the estimate for water policy from the previous fiscal year, which had come down from the year previous to that. Were the cost savings from last year an anomaly, or is the increase due to a new demand for spending?

Ms Phillips: What is the line item? We're on 4.1, hon. member?

Mr. Loewen: It's continuing on page 130.

Ms Phillips: Okay. And the line that the member is referring to is 4.1?

Mr. Loewen: Yeah.

Ms Phillips: That is in water policy. Certainly, water policy is part of renewing and reviewing the water conservation policy, direction to the Alberta Energy Regulator, and also a policy focus on cumulative effects management tools and implementing the lower Athabasca regional tailings management framework. That has been a large piece of work that that particular division has undertaken. Certainly, there's some long-term liability and environmental risk associated with ensuring that fluid tailings, process-affected water, and pit lakes have the appropriate level of oversight. We're making sure that we are seeing that reflected in the tailings management framework.

There's also the wetland policy. We have both some regulatory change coming and we have updated the wetland policy, so that has been a really important piece of work that has taken a few more resources.

Again, we are seeing some changes in the budget, moving around between line items, because of the consolidation of the environmental monitoring and science division, which is the former AEMERA, that we brought into the department. So what we're seeing are some of those resources now bolstering our existing department resources. We will recall that the reason why we took that decision in the first place was not only because it is in the public interest for public safety and so on for monitoring to be a core business of government but also because we knew that there was some overlap happening. In this sense we're making sure that all of those evaluation, monitoring, reporting, long-term needs of water resource management are appropriately captured within the various lines of government.

Mr. Loewen: Okay. Thank you.

On the topic of water policy I'm wondering if the minister can provide any update on the progress that has been made since the Assembly passed Motion 503 last spring. Motion 503 had to do with allowing industry to have requirements that provide wetland remediation where it disturbs or removes wetlands.

Ms Phillips: If I may, then, clarify which line item that we are talking about, because right now we seem to be querying about a policy response to a motion of the Legislature which isn't reflected in the estimates.

Mr. Loewen: Line 4.1. It's under your water policy.

The Acting Chair: I would say, hon. member, that if you can phrase your question in – it's okay to talk about policy, but you have to relate it to what's in the line item in the budget, how much is being allocated under this and that sort of . . .

Mr. Loewen: I believe that it isn't all just line items. It has to do with government policy that's stated in these documents. I'm talking about water policy.

The Acting Chair: I understand.

Mr. Loewen: If the minister doesn't want to answer it, then I will . . .

Ms Phillips: Oh, I've got lots of answers on wetlands if we want to talk about that.

Mr. Loewen: But you don't want to specifically talk about Motion 503. If you don't have any comments, then . . .

Ms Phillips: I'm going to refer to the budget, actually, because we are in estimates. Budget 2018 includes a \$10 million budget for monies collected through the wetland regulatory applications to be allocated towards wetlands replacement projects.

Mr. Loewen: Does this have to do with the regulatory process?

Ms Phillips: Yes. We have a budget of \$10 million for monies collected through the regulatory applications to be allocated towards the replacement projects, and we're ensuring that we're streamlining our approach for standard wetland approvals. We'll continue to engage with AAMDC and its members on that, certainly.

Mr. Loewen: Here's another question for you. Is the government spending any money or allocating any money to Motion 503 and its regulatory process?

Ms Phillips: Well, typically the budget estimates don't have a specific line item for motions that are passed by the Legislature. They reflect . . .

Mr. Loewen: Obviously, if it's not being looked into, then there wouldn't be. We'll carry on. We'll go on to the next one. Thank you very much, Minister.

Under section 4.4, looking at flood adaptation expenses, could you please inform us on the progress that has been made in the completion of flood mapping that was done following the 2013 southern Alberta floods?

Ms Phillips: Once again we're under water, 4.4?

Mr. Loewen: Yes, section 4.4.

Ms Phillips: Okay. Flood adaptation speaks to a number of different branches.

Mr. Loewen: It's specifically the flood mapping. As you know, the process of flood mapping has been under way for a while. Where are we at in that flood mapping process?

Ms Phillips: Sure. We are investing \$16.7 million this year to implement adaptation resilience measures. We have 11 provincial river hazard studies currently under way, that will deliver 1,100 kilometres of new and replacement flood mapping through more than 30 communities. More than 60 provincial hazard studies have been completed, covering 1,200 kilometres of river through 100 communities. Since the 2013 floods flood hazard maps have been completed and finalized for Nisku and the McDougall Flats upstream of Sundre. They've also been completed for Whitecourt and Banff, and we've got some that are under way right now as well in the Bow, Elbow, Highwood, Red Deer, Sheep, South Saskatchewan, Peace, and Athabasca river basins.

Mr. Loewen: Okay. What percentage is done now of Alberta's flood mapping?

Ms Phillips: Well, a percentage of every waterway in the province?

Mr. Loewen: That's going to be flood mapped, yes.

Ms Phillips: That is going to be flood mapped? Well, that's quite a different thing. New studies will create more than 1,100 kilometres of flood mapping through the 30 communities.

Mr. Loewen: Did you have a percentage of completion?

Ms Phillips: No. We do this in the areas where it's most critical that we do it; for example, Black Diamond, Bragg Creek, Canmore, Calgary.

Mr. Loewen: Of course, it's prioritized. I understand that.

Ms Phillips: If there's nobody living there, then we don't do it there.

Mr. Loewen: But I believe that last year there was a percentage given, so I'm wondering: where have we progressed since last year on a percentage basis?

Ms Phillips: I would have to look into if there was a percentage given. I don't recall that to be the case. But we've got new areas, 750 kilometres of them, that are being completed.

Mr. Loewen: Could you undertake to provide that, please?

4:00

Ms Phillips: We'll just give the entire list of what was done last year and what is being done this year.

Mr. Loewen: Okay. Sounds good. Thanks.

On this topic, I just want to skip ahead to line 12 on page 131. On the other items that have had dollars previously allocated to them, can the minister give us an update on the respective progress of implementation for infrastructure recovery, parks flood recovery, and community stabilization?

Ms Phillips: Okay. Is the nature of the question: why does it have budgetary allocations in '16-17 and nothing going forward?

Mr. Loewen: Yeah, and the progress of implementation for those three things.

Ms Phillips: Yeah. Essentially, all of those items in line 12 are now reflected in the previous items that we just discussed. These line 12 ones were a part of the response to the 2013 flood. Now all of that work is simply wrapped into our ongoing undertakings of the department.

Mr. Loewen: With the spring season and warmer temperatures approaching, how do you feel you're prepared for another season of flooding if that happens?

Ms Phillips: As the hon. members can see, we are investing considerably in capital grants as well as hazard mapping, municipal infrastructure, and, of course, moving forward with some of the feasibility studies that have come out of the Bow River upstream work. Obviously, we made the commitment to the Springbank piece as well. There are certainly overland issues happening right now, and that's why we continue to invest in ACRP, which is the Alberta community resilience program. That provides that funding to smaller municipalities to make sure that they can have the infrastructure in place so they don't get overwhelmed by some of this stuff.

Mr. Loewen: Is the government satisfied with the progress it has made in implementing mitigation measures?

Ms Phillips: You know, there's always more to do. Flood mitigation is ongoing work costing hundreds of millions of dollars. That's why, for example, we've made a commitment to the city of Calgary for \$150 million of ACRP funding over the next decade, because we know how important it is to communities. That's why we have that ACRP funding in place for communities outside of

Calgary as well. That is why we have redoubled our efforts around flood hazard mapping. That is why we've invested in things like the river forecasting app, which I commend to everyone to have on your phones, especially at this time of year. That's why we have kept a lot of the funding stable for things like the watershed resilience program.

There is always more to do, particularly in the context of adaptation to climate change, when we know that severe weather events are becoming more frequent and, in fact, severe. Are we satisfied? We are satisfied, within the current bounds of our budget right now, that we are doing everything we can to respond to community requests.

Mr. Loewen: Now, speaking of community requests and stuff like that, have you heard anything from different municipalities in different areas on this front of concerns?

Ms Phillips: Absolutely. We hear from municipalities all the time, and that's why it's the job of the officials to go through a really robust process on the flood adaptation line item. That's where those FTEs are. They evaluate projects based on risk and based on a full review of what the municipality has in place and the pressing need. That's why those projects are announced yearly, and that's why we made a commitment to ensuring that the funding for those capital grants remains stable.

Mr. Loewen: Okay. We'll carry on on page 130, lines 5.1, 5.2, and 5.3. The estimates show a substantial decrease for fish and wildlife policy made up for by increases in costs for fisheries and wildlife management. Is this a conscious reallocation of resources from policy to management?

Ms Phillips: What we did was that we had some realignment of program elements that we had voted for in Budget '17. It's because we ensured that we had \$8.6 million for the management of whirling disease. We realigned into a new element for fish and wildlife policy, and we had a small deficit because we had some of those ex gratia payments due to the end of the commercial fishery that the previous government had undertaken, but we still had some of those payments moving. We also had some realignment of funding due to management and recovery of caribou. We had a \$12 million increase in '17-18 for the management and recovery of caribou, which was partially offset by the realignments that I talked about.

Mr. Loewen: Okay. Thanks.

We'll move on to fish here, more specifically line 5.2. Does the nearly \$4 million increase for fisheries management reflect any kind of acknowledgement that there are issues that need to be fixed?

Ms Phillips: Absolutely. That's why we funded the investments in whirling disease and the recovery of our native trout populations, which we have to do in response to the federal Species at Risk Act.

Mr. Loewen: Okay. Will these extra expenditures serve to help remedy the problems?

Ms Phillips: That is certainly the intent, hon. member.

Mr. Loewen: Okay. How about the problems that have caused increasing closures of our lakes, rivers, and streams?

Ms Phillips: Well, we have a number of areas where we actually have expanded walleye fisheries. There were no recreational fisheries closed for 2018. The sport-fishing changes that have been made increased fish harvest opportunities at 23 healthy fisheries and increased protection at 85 in need of recovery.

Mr. Loewen: How many lakes were decreased opportunity?

Ms Phillips: There is a change to permit the harvest of all nontrout from stock trout ponds.

Mr. Loewen: Did you have a number on how many lakes? You have the number of lakes that have increased. How about the number of lakes that have decreased?

Ms Phillips: Well, there were no recreational fisheries closed for 2018.

Mr. Loewen: How about decreased opportunities?

Ms Phillips: There were no recreational fisheries closed for 2018. Sport-fishing regulations: changes have been made to increase opportunities at 23 healthy fisheries, and we have increased protection at 85 in need of recovery.

Mr. Loewen: Okay. Could you break down how the fisheries management funds will be allocated?

Ms Phillips: In 2018 Alberta anglers will be able to submit draw applications for more than 20,000 walleye.

Mr. Loewen: No. I'm sorry. Could you break down how the fisheries management funds will be allocated?

Ms Phillips: The fisheries management funds?

Mr. Loewen: Yeah. Sorry.

Ms Phillips: Okay. That is in line 5.2. What we have done: decisions to direct program funds in that particular area are based on resource inventory and monitoring plans. What that program does is that it continues to sustain the fishing resources according to the fish conservation management strategy, and it involves extensive consultation with fisheries stakeholders in the setting of our management objectives.

Mr. Loewen: Is there any kind of breakdown for that, or does it just kind of broadly cover all those things?

Ms Phillips: Well, the program provides the expert advice with regard to fish biology; the fisheries management and, in fact, just counting them; the fish and aquatic ecosystem conservation; the work with stakeholders and partners; support to the broader scientific community. It also manages the whirling disease program and the aquatic invasive species program.

Mr. Loewen: But, again, there's no breakdown for that. Okay. That's fine.

Ms Phillips: Well, we've got \$2.6 million going into hatcheries, for example. We have \$1.5 million to ensure sustainability, and there are a number of other pieces with this as well, certainly the aquatic invasive species and, as I said, whirling disease, where we allocated an extra \$9 million in last year's budget.

Mr. Loewen: Okay. You talked about \$2.6 million to the hatcheries. Is there any change of strategy in what the hatchery will be working on?

Ms Phillips: You know, I think I would defer to officials on the precise nature of fish eggs and the Alberta government's management thereof. But, certainly, we did have to undertake some review of hatcheries in response to whirling disease and ensuring

that it did not spread. I wonder if there is anyone here from fisheries management . . .

Mr. Loewen: Maybe more specifically, the government hatchery: I'm presuming that some of these funds went to the government hatchery.

Ms Phillips: You know what? We'll undertake to – because we have a number of hatcheries out there on the landscape. We have public hatcheries and brood trout stations and so on, but we also have arrangements with private hatcheries. They were affected by the management decisions that we had to take with whirling disease, and we undertook to treat them fairly in that.

Mr. Loewen: Okay. Talking about whirling disease – it was great that you brought that up because it's what I was going to ask next – where are we at in terms of managing it? Is there any kind of bright spot at the end of the tunnel yet?

4:10

Ms Phillips: Let me just pull the update on this matter, because it's really serious, right? It has every opportunity to wipe out our native trout populations. We ended up spending a reasonable amount of money, more than we anticipated, because of those new positive samples, \$9.7 million budgeted in Budget '18, to prevent the spread.

Certainly, we're taking a lot of our cues from other jurisdictions that have had to manage for this risk. We've hired additional staff to help contain the spread. We're collaborating with the U of A to validate a rapid nonlethal detection method. We've got the whirling disease lab in Vegreville, that opened in spring of '17. That is Canada's first lab exclusively dedicated to testing for it. We had two class A fish farms that were unable to eradicate whirling disease, so we've had to develop a comprehensive decontamination protocol and so on as well.

You know, whirling disease is one of those wildlife diseases where its prevalence and risk are increased by the various factors that contribute to climate change. With any of these things, whether it's aquatic invasive species, terrestrial invasive species, these are the kinds of things that we talk about when we're talking about adaptation to climate change. Those risks to fish and wildlife and to human health are real.

Mr. Loewen: Okay. Thank you.

Going to the business plan now, 1.4 in the third bullet point. Sorry; I might be jumping back and forth on that business plan.

Ms Phillips: Community-based monitoring and citizen science?

Mr. Loewen: Yeah, citizen science programs. You just had a consultation process on fishing regulations, and I thought that overall it was fairly well done as far as, you know, different parts of the province and having different information available to anglers to comment on, but it didn't appear that any of the things that the citizens wanted ended up in the regulations. I'm just trying to think how you incorporate citizen science into management when in this last consultation it didn't really happen.

Ms Phillips: Well, you know, there are a number of different communities and perspectives that are taken into account in terms of fisheries management. Citizen science oftentimes refers to partnerships with organizations, schools, academia, and others on gathering data out on the landscape.

I'm going to actually ask Alberta's Chief Scientist, Dr. Fred Wrona, to talk a little bit about how citizen science is informing our overall monitoring program. If Dr. Wrona could come to the

microphone. The hon. member is quite right that citizen science is sort of a new undertaking in terms of overall approach to monitoring.

Dr. Wrona: Thank you, Minister, and good afternoon. I'm Dr. Fred Wrona. I'm the Chief Scientist for Alberta Environment and Parks. Regarding citizen science, we've embarked on a number of engagement sessions with various organizations within Alberta, particularly as it relates to communities and their priorities related to how science and their activities in science can help inform the monitoring programs that we do, the related evaluation reporting exercise that we undertake. That's through discussions with groups, such as the WPACs in Alberta or airshed organizations in other areas, that are related to how they perceive the issues on that landscape and also help to inform the types of monitoring and evaluation designs that we actually then implement. That dialogue is a new area for us.

Citizen science is a very new area that's being developed, where we're actually looking at applications like apps on phones or other approaches that actually can engage Albertans as part of the data acquisition system that we have and that they feel to be contributory to the actual evidence that we're collecting in terms of state of environment. This is a new area that we've been working on within the environmental monitoring and science division. Stay tuned in terms of how those are progressing.

Mr. Loewen: That sounds good.

Just so I'm clear, it's not just organizations, but you'll be collecting data from everyday Albertans, too.

Ms Phillips: Well, yeah. It really depends on the citizen science program, but decisions are still made based on data and evidence. It's just that through technology we have a number of different ways to gather data and evidence, but that data and evidence are still subject to scientific rigour in terms of whether it forms part of monitoring.

One thing I will say, though, is that in the grant that we just gave to the Fish and Game Association as a result of some of the consultation that we had with them, there was going to be work with them on a citizen science initiative. They seemed interested in doing that partnership with us.

Mr. Loewen: Okay. Thank you very much.

Moving on, when we're talking about the science-based policy and everything, I'm a little curious. I've heard this, and I wondered if you could comment on it. The current pike strategy, I've heard, is based on actual walleye management. Do you have any comment on that at all?

Ms Phillips: I guess I would ask which line in the budget estimates we are referring to.

Mr. Loewen: This is in your department, obviously, and this has to do with fisheries management. If we want to go through and find – you know, we could go to line 5.2 if you like, or we could go to your business plan and talk about the business plan and fisheries management there. If it's something you want to undertake to provide, that's fine.

Ms Phillips: No. We can talk about walleye and pike, sure. Senior fisheries biologists provide a science overview of walleye and pike population changes. They provided that to the public in terms of numbers of populations and so on and changes since the 1980s and also provided to the public some analysis around the limitations to productivity in Alberta – that is to say, fish making more of

themselves – and lessons learned from previous recovery work. We're going to continue to engage with Albertans on these fisheries management topics. This has been a very robust consultation, as the hon. member points out, but they are species specific.

Mr. Loewen: I just want to get back to the walleye management and pike management. My particular question – and this is what I've heard from other people – was on the pike strategy, that it is based on a walleye management strategy. Is that the case or not?

Ms Phillips: I'm going to say no because recovery strategies of any sort are based on a species-specific analysis and then how they more broadly relate to the rest of the ecosystem.

Mr. Loewen: Okay. Thank you. That's good.

I guess, kind of stepping back to the fish hatchery, you've undertaken to provide some stuff on that. But I just wanted to know: has the ministry considered using the government fish hatchery to stock walleye?

Ms Phillips: You know, there have been a couple of interesting proposals around walleye stocking, and there are also some challenges associated with it. I have asked for a little bit more information on this because we know that walleye are popular. We know that people like to fish them, they like to eat them, and they're good for tourism. I have seen some proposals to this effect, and I think it's fair to say that we're evaluating them.

Mr. Loewen: Okay. Thank you. That's good. I appreciate that, for sure.

Now, Dolberg Lake has had major changes to its regulations. I know that we're talking about a specific lake now, so if you want to undertake on this one. You commented in the Legislature about it the other day, you know, that the changes to it were science based. I'm just kind of curious: what kind of science is used to create a 50-centimetre limit on trout in a stocked pond?

Ms Phillips: Senior fisheries biologists provide this analysis. It's just not my job as minister to engage in amateur wildlife biology.

Mr. Loewen: I would hope that you're not involved in amateur wildlife biology, for sure.

Ms Phillips: I would hope not.

Mr. Loewen: Okay. Do you want to undertake to provide that for me, then?

Ms Phillips: Around the 50-centimetre limit?

Mr. Loewen: Yeah. What science was used to create the 50-centimetre limit on the trout in a stocked pond?

Ms Phillips: Well, again, I think we're veering off the actual budgetary piece, but we agreed to a review of all of the science that informs many of the sport-fishing changes with the AFGA. It was something I committed to at their AGM the last time we were there.

Mr. Loewen: Thank you.

Okay. When it comes to the \$24 million allocated for wildlife management expenses, can you provide a breakdown of the major areas of spending and the government's biggest priorities in this area?

Ms Phillips: Sure. That's line 5.3. Let's just find that. Wildlife management is inventory efforts, of course, which is a big piece, again going back to that there has to be something to hunt and fish. Some years we need to be able to change those regulations in order

to better respond to what communities are asking us for, such as in the case of, for example, the Suffield elk herd or where we have species at risk. For example, we need to do a grizzly bear recovery plan. Those programs are done to manage populations.

Mr. Loewen: No. I just wanted to kind of see if there was any kind of a breakdown of major areas of spending with that. If you don't have that here, we can undertake that, too.

4:20

Ms Phillips: Well, we are talking here about our chronic wasting disease programs, our ungulate damage reduction programs.

Mr. Loewen: How much in each? Is it allocated there?

Ms Phillips: I think I have that. I need a moment here to pull it up. Chronic wasting disease, \$0.7 million, and the grizzly bear recovery plan is \$0.4 million, for example. We'd have to kind of undertake some of the breakdown on that. I know I have it somewhere.

Mr. Loewen: That's perfectly fine. I know you might not have that already available. I appreciate that, so let's undertake that.

I just want to move on to caribou management. Now, obviously, there's been a suspension of some of the aspects of the draft plan that were already being implemented. Does this suspension include, like, the caribou rearing facilities, or are they still going ahead?

Ms Phillips: We're proceeding with the rearing facility, at least the technical pieces of it. That piece is provided for within the \$14.6 million.

Mr. Loewen: Okay. Is there any construction, or when is the construction expected to start?

Ms Phillips: I will have to defer to officials on the timing of those investments.

Mr. Loewen: If you want to undertake that, too, that's fine.

Ms Phillips: No. We can provide that. Deputy Denhoff knows.

Mr. Denhoff: The process is that we're providing funds to groups to do seismic replanting, for example, and then on the actual caribou rearing facility funds will be provided as well. There were funds spent last year on the beginning work on seismic replanting, and then there's another – I'll have to double-check the exact amount – I think \$5 million this year of provincial funds. But that's part of the push to Ottawa, to try and have them contribute as well.

Mr. Loewen: Okay. That sounds good. It's good that you brought up the seismic line reforestation because that was my next question, but is there a timeline as far as when the facilities will start getting built?

Ms Phillips: ADM Goulden will provide that detail.

Ms Goulden: At the moment we're working on site selection. There are quite a number of stakeholders that need to be consulted on the site selection because once the rearing facility is in place, you can't really move it around. So we're making sure that we have good stakeholder input on site selection as well as all the science that we need on that. We are looking to start construction next year on that. This would be part of what we would be doing this year.

Mr. Loewen: Okay. That sounds good. Then, obviously, the seismic line reforestation has been ongoing already, I guess, so that's going ahead.

Has there been any consideration of having smaller rearing facilities rather than the 100 square kilometres, the 50 square kilometres?

Ms Phillips: Yeah. B.C. tried this, and it was a catastrophic failure. I think that's the most charitable way to describe it. Deputy Denhoff actually led the original recommendations on the size of the rearing facility. There's still a lot of science to go into this. This is one of the reasons why it was proposed that it be 100 square kilometres, because the previous experiments with this had just not worked.

Mr. Loewen: Okay.

Ms Phillips: Deputy?

Mr. Denhoff: Yeah. I would just say that that's a big part of the consultation. I mean, there was a rough recommendation made based on discussions that we had at the time with scientists and others in this field, but a fair bit of work still needs to be done. It may be that, at the end of the day, a combination of indigenous input and science input and practical people on the ground adjust that. It was a question of having sufficient food supply and room to roam and still being able to exclude predators, which is a big challenge. I mean, none of these are a perfect solution in and of themselves.

Mr. Loewen: Yeah. Okay. I understand. Thank you very much.

Any details yet on the financial support from the federal government on this?

Ms Phillips: Not yet.

Mr. Loewen: Not yet. Okay. That's good. I shouldn't say, "That's good." Thank you for the answer, the hopeful answer.

Since the province has indicated to the federal government that there'll be a pause on development and implementation until the socioeconomic impact study is done, any developments on that socioeconomic impact study yet?

Ms Phillips: Well, it has gone out to RFP, as I understand it. ADM Goulden tracks this file a lot closer than I do.

Ms Goulden: Yes. We have a contractor to do the socioeconomic study. The issue is always: what are you analyzing? At the moment we're working quite a bit with stakeholders to get their own social and economic information. Many, many companies and municipalities are submitting that information to us. Again, we're trying to make sure that we're comparing apples to apples when we do that.

Mr. Loewen: Okay. Thank you. That's good.

Moving to the business plan again, I've got here a second bullet point. I'm not sure which one it's under, but it's on the caribou range plans. You've committed to further consultations with industry and municipalities. I guess that you've probably somewhat answered that question already as far as that you're seeking input from these groups to submit their information for the socioeconomic impact study. Kind of moving along in that similar vein, you've committed to sending a delegation to Ottawa. I'm just curious how you'll be choosing the delegation.

Ms Phillips: Yeah. Deputy Denhoff will provide that information.

Mr. Denhoff: We provided a letter to the list of stakeholders who were engaged in the consultation process around range planning, and those folks have had that letter for, I think, a couple of weeks now. We've received a series of proposals back from individuals,

from associations, both industry groups and others, and from that the minister will try to make a manageably sized delegation. We might have 30 or 40 suggestions, and it's trying to balance the delegation. I think we're very close to being able to sort the final delegation list. We have pretty good, representative suggestions from folks from forestry, oil and gas, communities, and others.

Mr. Loewen: Yeah. I presume there's lots of interest in that.

Mr. Denhoff: Yes.

Mr. Loewen: That's good. So the minister is going to make the final decision on who goes?

Ms Phillips: Well, while there are a number of people invested in and interested in this file, most folks are known to us, and their geographic locations are known to us in the most problematic areas. It's going to come down to, in my view, that we make sure that the northern communities that have been most active and engaged in this file have representation, that indigenous people have representation, and then we've got some forestry and oil and gas companies that have representation.

Mr. Loewen: Okay. Sounds great. Thanks.

Now, I think the question has been asked previously in different situations about the moratoriums on forestry, about suspending them. Has there been any more thought about that? Will the moratoriums be suspended while this process is going on?

Ms Phillips: Deputy?

Mr. Denhoff: I'm not sure I quite understand the question.

Mr. Loewen: The forest harvest moratoriums.

Mr. Denhoff: The only areas I'm aware of where there are voluntary forestry constraints are in the Little Smoky-A La Pêche. Is that what you mean?

Mr. Loewen: Yeah.

Mr. Denhoff: Certainly, we're working really actively. In fact, I just met the other day with companies on that issue. That's probably where we have the best sense of socioeconomic impacts, and it varies by solution. Each company has its own proposed solution. During the course of this year we'll need to sort out, ultimately, a range plan for the Little Smoky-A La Pêche. It's arguably one of the most impacted, but we're still in discussions with the companies because they have presented some additional ideas on how they think they might manage the forestry cut in the area. We need to look at those and have further consultations. Every time, as you know, you move one lever, another lever moves with another company. I think it's fair to say that the companies have been working really constructively, trying to give us some suggestions on alternate approaches, and we'll review those over the next while.

I don't expect anything imminent in that it's a part of our discussion with Ottawa as well. Ottawa has a lobby they want us to follow, and we think they should be prepared to contribute to the costs associated with that. That may have an impact on how the different companies deal with the approach as well.

Mr. Loewen: Okay. Now, you mentioned that those forest harvest moratoriums were voluntary.

Ms Phillips: Just to clarify, hon. member, they're not moratoria. They are voluntary, as I understand it, voluntary agreements.

Mr. Denhoff: Yeah. I mean, during the process – and I’m a bit disconnected from the middle part; I was there at the beginning, and I was there now – it was a question of sitting down with the companies and saying: “Where do you think you can go without impacting on caribou? Here’s what our scientists think. Here’s what other scientists think.” As a voluntary matter the companies have stayed out of certain areas, particularly in the core areas that were highly at risk, but I don’t remember, unless something has changed, that we issued an edict that said that you can’t go here or you can’t go there. It was more of a negotiated resolution, keeping in mind we had oil and gas interests, forestry interests, indigenous interests, and others and then, of course, the science interests. So I don’t think we’ve actually had a formal moratorium. I’d have to double-check for you.

4:30

Mr. Loewen: Okay. Maybe if you could double-check that. I’m just kind of curious if it was voluntary, if it was kind of a situation where . . .

Ms Phillips: ADM Goulden has some further clarification.

Ms Goulden: The forestry companies in Little Smoky and A La Peche are not allowed to cut in the core of the Little Smoky and A La Peche areas, but that’s not a moratorium on forestry. They still have an annual allowable cut that they’re allowed to cut. The issue has been where they’re allowed to cut. I think what was confusing us is that we don’t use the word “moratorium” with regard to forestry when we’re talking, even with them. That’s not the word that we even hear back from them.

Mr. Loewen: What is the word that you use, then?

Ms Goulden: It’s about where. It’s a location or geography thing around their annual allowable cut.

Mr. Loewen: Okay. So there are areas that they’re not allowed to cut, where the government has instituted . . .

Ms Phillips: You get an AAC. You get an allowable number of sticks, but it’s where you get those sticks from. So that is some of the urgency, certainly from the companies’ perspective, in terms of their long-term plan over the next 60 years of recovery of that habitat, because that’s how long-range plans are.

Mr. Loewen: Yeah. But there’s no plan to allow them to go back in and cut these areas yet?

Mr. Denhoff: Well, the companies, to my knowledge, haven’t expressed a recent interest to go back into that core area. I mean, as you know, this has been a matter of debate for decades, and there were various schemes approved at various times. In most of them industry either voluntarily or, in previous administrations, was encouraged by government to go here or not go there. This is sort of a can that was kicked down the road for a long time. The idea now is not to kick it down the road anymore but to try and find a resolution that voluntarily the companies can live with.

I don’t remember there being a lot of concern about the actual functional core. It was more about the boundary areas outside of the core: when they could get into those, how much, what levels of activity, and that sort of thing. That’s not to say that somebody wouldn’t have preferred to go into the core if they could. But, you know, frankly, in forestry planning around the province, every forest management plan has an area where you can’t go here and you can’t go there. So, in that sense, I wouldn’t make it sound like we’re doing something different there that you don’t do in a lot of

areas. We always have areas that are sensitive in forestry management practice, where the companies and government negotiate where you can and can’t go.

Mr. Loewen: Yeah, of course, but this one would have been inspired by the caribou situation, obviously.

Mr. Denhoff: In part, yes.

Mr. Loewen: Obviously, it wasn’t necessarily a voluntary one. They were told they can’t go in there now.

Mr. Denhoff: Well, I’d be careful with that because if you’re a company – and we did offer. I negotiated, and I said to one of the companies at one time: all right; go fill your boots. They were very concerned about the brand, and they were very concerned about the potential for a boycott. After I said, “Okay; if that’s the only way you can do this without laying people off, go ahead, and let’s figure that plan out,” then the company backed off.

You know, this is not a problem of one year, one company, one administration. This is a problem that’s been around for 40 years.

Mr. Loewen: No doubt.

Now, because the forest companies can’t harvest in those areas, has that created any unusual harvest practices in the other areas that they can harvest in?

Ms Phillips: You’ve had, correspondingly, a surge cut to respond to the pine beetle.

Mr. Denhoff: Yeah. I was just going to say that it’s fairly complicated because there are a series of factors involved, from pine beetle to caribou. Any time you have a forest management plan, if the company can’t go into quadrant A and they have to go into quadrant C, they’re going to, you know, adjust their harvesting over there. So where we’ve ended up is that the companies are harvesting in the areas they can go into and obviously harvesting less or not at all in the core. You can’t sustain that for 70 or 80 or 100 years, but the companies have so far been able to sustain it as we work through this.

At the end of the day, whether it’s in six months or a year or a year and a half or two years, things will have to be resolved in a way that the companies know where their long-term fibre supply is. But, you know, we did find some pieces here and there to move folks to and loosened up some of the issues. Of course, lumber prices are at sort of 30-year highs right now, so I’m sure everybody would like to harvest every stick of wood they could in the province.

The real issue right now is intriguing. The companies, if they went in and cut that wood right now, would have nowhere to send it. They’re piling it up in warehouses in Edmonton and Hinton because of the rail problem, tens and tens of millions of dollars’ worth. You know, we’re constantly hectoring the federal government, as are they, to get CN to do something about it. It’s kind of an odd situation. On Monday morning people want to cut more, and on Tuesday morning they’re in saying: Eric, we can’t get our lumber shipped out.

Mr. Loewen: Okay. Thank you.

I want to go to 1.3.

Ms Phillips: We’re in the business plan again, Member?

Mr. Loewen: The business plan, yes, the first bullet point under 1.3.

Ms Phillips: Our parks system. Yes.

The Acting Chair: Just a quick reminder, while there's a quick break, that there's no need to touch the consoles.

Ms Phillips: Sorry.

Mr. Loewen: It talks about the 17 per cent target. What I'm wondering is: does the 17 per cent target include the national parks?

Ms Phillips: I believe it does, yes, for what's within Alberta.

Mr. Loewen: So the 17 per cent would include Wood Buffalo, Jasper, and Banff national parks?

Ms Phillips: Yeah.

Mr. Loewen: Okay. You'll be going from 12 and a half per cent in the 2016-17 year to 16 per cent in 2018-2019. That's a 3 and a half per cent increase. Where's that from? Where's that 3 and a half per cent from?

Ms Phillips: The bulk of it is through the lower Athabasca regional plan process. There are a number of those parks that have been committed to under the regional plans but haven't been subject to order in council yet. There may be some other opportunities through the North Saskatchewan regional plan process, that we've got out to consultation right now. The Castle parks also contributed to some of that growth as well.

Mr. Loewen: Okay. Now, some of the ones out of the lower Athabasca: which ones are they, or in what areas are they?

Ms Phillips: We're talking about, like, the Richardson backcountry and Birch Mountains, Dillon, Kazan. I'm going to have a hard time remembering them all, but, yes, there are a number of them.

Mr. Loewen: Could you undertake to provide them?

Ms Phillips: Yeah. I think it's even on the AEP website.

Mr. Denhoff: Yeah. The target is aspirational, so it's the idea that you would try to create 16-odd per cent. A number of these were recommended I think in 2014 or earlier by LARP, and all kinds of consultation was done; you know, indigenous and communities. Also, in most of those cases or all, in fact, of those cases compensation was already provided for any tenure. Those are the ones where aspirationally you would see, potentially, the easiest things, which are on the horizon of the next several years. Then there are other things that might be longer term.

Mr. Loewen: If I could, I'd have you undertake to provide what the 3 and a half per cent would be. Obviously, the 3 and a half per cent didn't come from thin air. It had to have come from a calculation of some chunks of land.

Ms Phillips: It's mostly the LARP, honestly, and then there are a couple of other pieces. There's another piece that we refer to as A9, that is under consultation right now in Environment Alberta.

Mr. Loewen: Those are the things that I'd like to see. I'd like to see the complete list . . .

Ms Phillips: Yeah. Well, there'll be an announcement on it.

Mr. Loewen: . . . and not just, you know, what you can remember. I understand you can't remember them all, and that's perfectly acceptable.

Ms Phillips: Yeah. There are a lot.

Mr. Loewen: But if you could undertake to provide where that 3 and a half per cent comes from, I'd appreciate it.

Ms Phillips: Well, the LARP ones have been long announced.

Mr. Loewen: You know, like I say, the LARP doesn't quite cut it. That's a plan. It doesn't identify, you know . . .

Ms Phillips: Well, the LARP actually identifies a number of conservation areas that are subject to order in council.

Mr. Loewen: Agreed, but that doesn't mean that that's the list of the actual parks that are going to be created to make the 3 and a half per cent. That's what I'd like to see.

Then, also, we're going up half a per cent a year to get up to 17 per cent. If you could undertake to provide what those half per cents are.

Ms Phillips: Yeah. I mean, some of this is aspirational, too, with respect to working out what is actually counted within the target 1 process. One of the things that I really wanted to see through that process was a way to count other – what are they called? – effective area-based conservation measures. Like, how much do our conservation easements on private land count? Those kinds of things, I think, should be recognized. Part of that is making sure that we can weave that in in a way that still has integrity in terms of its conservation outcomes, and we're hopeful that that will be the case through this target 1 process.

4:40

Mr. Loewen: That actually was great because it led me right into the next part of the question, these other effective area-based conservation measures that you talk about. It says that they had to be excluded because the data is not complete. Obviously, it seems like you will be trying to complete that data to add them into the process.

Ms Phillips: You know, when you have a target that is to – I mean, this target is part of the International Union for Conservation of Nature, right? These are Canada's international targets through the biodiversity convention, right? They are aspirational. They're certainly not binding, but they provide some interesting guidance in terms of just ecosystem integrity and how much you want to set aside for appropriate ecosystem function. But I think there's an ongoing conversation to be had there with the feds around private easements and the role of private land, and I'm not sure if we're quite there yet with the feds on the clarity and what counts. So that was part of why we sort of were the first to put up our hands to co-chair the target 1 initiative in the first place.

Mr. Loewen: Okay. Thank you.

Going back to caribou again, I just wondered if there's been any analysis done on the relationship between the caribou populations and other large predators, you know, other than wolves, like grizzly and cougars.

Ms Phillips: We don't see those activities as much with the other large predators, but we do have issues with other ungulates basically hanging around and also becoming attractants for caribou, so certainly there's had to be a management plan on those as well. In the Little Smoky-A La Pêche area is where our caribou herds are in the most distress.

I don't know if there's any other detail that can be provided from the gallery or the deputy.

Mr. Loewen: If there's anything to add, you could undertake to add it.

Ms Phillips: No, not really. The biggest problem is, of course, wolves.

Mr. Loewen: Yeah. And if there's no analysis done on the other ones, then that's the answer.

Okay. I'm going to go back to the socioeconomic impact study again. When that is done, will Albertans have access to that?

Ms Phillips: I believe so, yes. I don't think there was ever any intent not to, because they form part of the range plans – right? – and the range plans are public.

Mr. Loewen: Okay. That sounds good.

Then, after that's done, was there going to be kind of further consultation once results are available for people to look at?

Ms Phillips: Yes. I mean, range plans aren't a static thing, right? They articulate a path towards recovery of critical habitat that might take, you know, 60 years. So they're not meant to be chipped in stone. They are sort of living documents as habitat is recovered and things change over time. As things change over time, then there's more socioeconomic analysis and other analysis to underpin that.

Mr. Loewen: Okay. That's plenty good. Thanks.

Okay. I just wanted to move on and talk about parks a little bit. On page 131 of the estimates, under Parks, there's been an increase of just over \$1 million to public safety and security. I think that's line 7.4. Is this meant to address any particular problems that have arisen in Alberta parks?

Ms Phillips: Yeah. Absolutely. It's meant to respond to – almost anyone who has an opinion on Alberta parks thinks there needs to be more enforcement, and that goes for public land as well. So we met those concerns through reallocating within the ministry.

Mr. Loewen: Okay. That's great. Thanks.

Immediately following that, on line 7.5 we can see that 2017-18 represented a significant spike in spending on parks infrastructure management. That cost has come down this year. Is it expected to kind of stabilize the expenditures there in future years? That's line 7.5.

Ms Phillips: Yeah. What happened there is that some of this was parks division's implementation of LARP. Again, as we discussed, because that's quite a large amount of land base, the funding for that program addresses the significant amount of existing park assets and new park assets. It's because we have so many existing park assets rated in poor condition. Additionally, some of that spike was for our implementation of the South Saskatchewan regional plan. That's where we have so many of the recreational pressures – right? – because that's Kananaskis and south. As those projects are completed, then you'll see a stabilization.

Now, we are going to have to grapple with the fact that there are still park assets that are rated in poor condition in the North Saskatchewan regional plan. For sure, Albertans will have opinions about that, and I'm sure they are providing those opinions right now in response to the regional advisory council advice. And that's good. That's what regional planning is for. It's for the public to say to us, "We want appropriate recreational infrastructure here; we want better campgrounds there," and so on and so forth.

The Acting Chair: Okay. That's the end of the first hour.

We'll move to the third-party opposition. Mr. Clark, would you like to go back and forth with the minister?

Mr. Clark: I'd like to go back and forth with the minister if that's all right with you.

The Acting Chair: Okay. You have 20 minutes, Mr. Clark.

Mr. Clark: Thank you, Mr. Chair. Thank you, Madam Minister. Thank you to all your staff for being here. There's lots of ground to cover. I'm going to start with the climate leadership plan. It's been roughly two years, maybe a little more, since the climate leadership plan was originally introduced. What lessons have you learned in that time? Is there anything you would do differently if you were able to jump in your time machine and go back a couple of years? Is there anything you'd do differently in how you've implemented this plan?

Ms Phillips: You know, hon. member, I think it's fairly hard to provide an analysis on that given that in many ways we were building the airplane while flying it. But I will say that I'm very pleased with the progress report, and I'm very pleased with both the provincial and the federal Auditor General assessments of the climate plan so far. If there's one thing that I am particularly proud of, it is that our system of output-based allocations has been essentially adopted by the federal government within the pan-Canadian framework. That means that Alberta is setting the pace for how we price carbon for large final emitters and how industrial policy decisions and capital investment decisions are made over the next 20 or 30 years, not just in Alberta but elsewhere.

If there's one thing that I think I'm sad that we haven't gotten to yet, it's the adaptation framework, and we're getting there. It is a remaining outstanding piece of work, and I know there's a really nice opportunity to engage with rural municipalities, with municipalities of all sizes, with communities, with citizen groups, with civil society to really grapple with the big challenges of climate adaptation. I don't know that if given the resources, we could have moved that quicker. I'm glad that we're doing it in 2018. I think that it's an important and significant piece of public policy work that affects us all.

Mr. Clark: Thank you. I appreciate that answer. We'll definitely get to the adaptation piece. That's something that I'm quite interested in as well.

To be very clear, you know, the Alberta Party and I, certainly as a member and just as a citizen, a person in the world, believe very much that climate change is one of the essential challenges of our time. It's something that we need to grapple with, and we do need policies that are thoughtful and appropriate to achieve the outcomes that we're striving for in terms of reducing carbon emissions.

One of the concerns I have and some of the feedback that I've heard even from people who genuinely do care about reducing carbon emissions and addressing climate change is that some of the aspects of this plan breed questions, I guess, and one of those is the scale of the rebates in the climate leadership plan. To be clear, where the carbon levy, the carbon tax – call it what you will – has a real impact on someone's ability to put food on the table, absolutely, that should be offset through rebates, but I have a difficult time believing that two-thirds of households fall into that category. Have you given any thought at all to making that rebate somewhat more focused as opposed to it being quite so broad?

Ms Phillips: You know, we chose two-thirds, or roughly 65, 66 per cent, of Albertans to receive the rebate based on a couple of things. One was the experience that we saw in the province of British Columbia, which, of course, has had an economy-wide price on carbon since 2008. A large part of the way that they redistribute

those funds is essentially based on a more generous rebate for about two-thirds of British Columbians, so we had that analysis in place.

Additionally, Dr. Leach undertook an analysis as part of the CLP and recommended 60 per cent. We were in the middle of a recession, hon. member, and we knew how much Alberta families were suffering at that time, even middle-income families. There was a lot of instability and a lot of insecurity, so we bumped it up to 65, 66 per cent to make sure that we were appropriately capturing middle-income families, single-parent households who find themselves at middle income, and so on. That was really important to us.

4:50

I think that the modelling on other jurisdictions on how they do rebates and so on also tells us that it's about that 60 to 65, 66 per cent. We erred on the side of a little bit more generosity, and I think that was the right thing to do given the economic situation of the province at the time.

Mr. Clark: Thank you for that.

The other thing I hear from a lot of people, which is certainly a view that I share, is that people don't always see the connection between the money that's coming in through the carbon levy and direct action on climate change, be it carbon reduction, energy efficiency, investments in green technologies or innovation, what you will. They see a lot of that money going into general revenues.

Would you give any thought, going forward, to making this plan truly revenue neutral – you know, I recognize there has been the small-business tax cut – just simply shifting that, with it not being about revenue generation but it truly being about: we're going to tax something we don't want, which is carbon emissions, and we're going to reduce taxes on things we do want, which is investment in business and people allowed to keep some of their hard-earned money through reductions in personal and corporate taxes? Would you consider, going forward, reducing personal and corporate taxes by the same amount the carbon levy brings in to make this truly revenue neutral?

Ms Phillips: We inherited a different fiscal picture than in other places where we see economy-wide pricing. Alberta maintains, even with the implementation of the carbon levy, an \$11 billion tax advantage over other jurisdictions, and that was why Dr. Leach made the recommendations that he did: reduce the small-business piece, ensure that we have rebates in place for households, and ensure that we have robust programming in other places where we can't effectively administer some kind of exemption where we have a particular pinch point in the economy such as, for example, greenhouses or marked fuel for agricultural use.

So we undertook that because of Alberta's (a) significant tax advantage and (b) the number of emissions reduction opportunities that were being missed throughout the economy due to the lack of an energy efficiency strategy or a thoughtful reinvestment of the price on pollution into innovation, clean tech, renewables, those kinds of things. We know we have so much potential, and it was in many cases a lack of government leadership that ensured that we weren't realizing that potential. So there were ways to economically reduce greenhouse gas emissions throughout the economy using the reinvestment of the price on pollution in a way that would reduce our GHGs faster than simply leaving this to a tax cut in a jurisdiction that already enjoys an \$11 billion tax advantage.

Mr. Clark: Thank you very much for that.

So the last question. Again, the feedback I hear from a lot of my constituents and a lot of Albertans is the burden of the costs that are passed on to school boards and therefore schools, not-for-profits,

seniors' homes, those sorts of things. While I acknowledge that those organizations can take advantage of some of the energy efficiency investments, to do so, that requires them to expend other money in areas where they probably don't have the money to do that even though the cost for doing so would be somewhat less than it would be otherwise. It certainly does not offset the amount of money that they spend. Again, had you given some thought or would you give some thought, going forward, to exempting categories of not-for-profits and schools in particular?

Ms Phillips: We found that a number of these things were quite difficult to enact and that the more efficient way to meet some of these concerns was through energy efficiency programming.

Deputy Denhoff will provide a little bit more information on costs and some historical information on costs.

Mr. Denhoff: If I go at it in reverse order, on the energy efficiency side we do have specific programs for nonprofit groups to try and reduce the costs as much as possible. First of all, we provide direct grants to them to do a plan for their energy efficiency project. Then we provide a significant grant for them to actually implement the project. In a number of cases you'll see rec centres or swimming pools or whatever where they've looked at their five-year or 10-year energy costs and saved quite a bit of money.

The most interesting thing, though, is that when I meet with a lot of folks, they say, "You know, our costs are going way up." Then as I get into that, particularly with organizations, whether they're school boards or business groups, I say: "Okay. Well, what was the 2005 to 2018, say, natural gas price or gas-at-the-pump price? What were the averages?" If you look at natural gas prices, which are an input for nonprofits on heating, and you look at 2005 to '18, they averaged \$4, \$4.25 a gigajoule. If you look at 2013 to '18, they were averaging, I don't know, \$2.75 to \$2.80. If you look at the last 12 months, including the \$20 carbon tax, they're way below the five-year average. They're way below the 10-year average. If you look at the last 12 months, including 2018, they're still way below 2005.

So I say to the planners in some of these groups: "Now, you must have, three and four years ago, planned. You do a five-year capital budget. You do a five-year operating budget. You don't do a six-month one. What were the prices for gas that you were planning on?" Generally they kind of look at their shoes and say, "Well, we're looking at four bucks" or "We're looking at three bucks." And I say, "Well, then you're saving a fortune over what you originally thought you were going to be paying." We have record low natural gas prices, and we have very low, of course, prices at the pump, particularly relative to other jurisdictions.

So I don't want to minimize it. Obviously, for a nonprofit, if they're in a building that the landlord owns and the landlord doesn't want to invest in energy efficiency, there could be an issue. But even there we've said, "Look, let's talk about that and try to figure out ways we could help with a different type of energy efficiency product."

Mr. Clark: Thank you very much.

You know, one of the challenges I find is that I come at this from a place of wanting to address this challenge. Public buy-in is really important, so minimizing barriers to public adoption of these policies, I think, is always important. Some of the things I've talked about here today I think would help do that. Just so you know, that's where I'm coming from.

One of the questions I did want to ask specifically – I know we've got some high-level CO₂ emissions data in the business plan, which I'm going to get to in a minute – is: how granular is your data in terms of actual energy savings from, you know, individual line item

energy efficiency initiatives, say, the amount of household or business natural gas usage we expect to curtail as a result of carbon pricing?

Ms Phillips: As of December 31, 2017, all of the EEA, Energy Efficiency Alberta, the Crown agency that we set up to do this, programs, overall, that they have delivered since about a year ago – April 2017 was when they started delivering programs – have saved Albertans \$300 million in energy costs over the lifetime of those installed products.

In residential retail products, because there are different buckets of funding, 9 million energy efficient products were purchased, which represents \$74 million spent. The expected energy savings are \$200 million. More than \$50 million was spent at more than 600 retail locations across Alberta on energy efficient products. This is outdoor timers, appliances, smart thermostats, that kind of stuff. A total of 1,247 window insulation and tankless hot-water heater contractors upgraded homes across the province. There were 150,000 households that participated in the residential no-charge program. There were a million gigajoules of energy annually saved there, at a reduction of 50,000 tonnes of GHGs. There were also 4 million cubic metres of water that were saved through those programs, so that's 1,600 Olympic swimming pools, I am told.

The business, nonprofit, and institutional program: we've had 2,000 organizations participate in this program. That BNI program is part of the original suite of programs aimed at nonprofits, and there is more to come. So that's 40,000 gigajoules per year of expected energy savings. The total rebates so far are \$3.5 million, or an average of \$2,600 per project, so that gives us an idea of scale. It's quite considerable. For that BNI program we have expanded it and relaunched it in February, so there are \$10 million of incentives now associated with that.

As for the residential and commercial solar program: 556 households and businesses so far. That's 19,000 megawatt hours of new energy, so 2,700 homes powered for one year of energy savings so far in the residential and commercial solar program. We fully expect, in particular, those programs to expand now that we have that piece of legislation in front of the House around property assessed clean energy loans because, again, to your point, hon. member, about upfront costs, that mechanism of allowing people to finance these things on their property taxes we know removes quite a few barriers, particularly on the commercial side.

Mr. Clark: Yeah. Thank you.

Ms Phillips: So if you want more, Member, on GHG reductions, we can talk about that.

Mr. Clark: Sure. That's fine. I will dive into that. If I look at page 70 of the business plan, 1(c), the total greenhouse gas emissions from source categories is 276 – I assume that's megatonnes – and when I look at the table on page 71, it says 274 for 2014. There is just a discrepancy between 276 and 274. Is that just a rounding thing?

5:00

Ms Phillips: You know, when you're doing emissions projections, it is a somewhat inexact science until you have the measuring, reporting, and verification in place, which is why it takes a couple of years to get the data back from Environment Canada.

Mr. Clark: Sure. The 2014 numbers are just different by a couple there, so I just wanted to flag that and see if that, in fact, is . . .

Ms Phillips: I can make sure that we get the appropriate number . . .

Mr. Clark: Yeah. That's fair.

I want to tie this to the recent report of the Auditors General of Canada, the perspectives on climate change report, which is a very interesting one. One of the findings was that we're not expected to meet our 2020 targets and the 2030 targets are going to require substantial efforts. You know, I recognize, based on the table here on page 71, that Alberta's emissions will drop, but does that get us to our 2030 targets? Are we at risk of missing that? If not, can we anticipate further changes between now and then to get there?

Ms Phillips: I want to be really clear about targets. Those are federal targets. The Harper government articulated a target, which was a 30 per cent reduction from 2005 levels by 2030. The new federal government, elected in October 2015, reaffirmed that target as part of what's called the nationally determined contribution. So that was Canada's NDC at the Paris negotiations. It's not Alberta's target; it's the federal target.

Our position on targets all along as a province has been that we are an energy producer, and we will do our part. If there is a scaled-up level of ambition that is desired by the federal government, then they are going to have to make the appropriate investments to make that real. But barring significant action from competitor jurisdictions, from our energy-intensive, trade-exposed competitors, we have set the level of ambition according to what we believe our economy can do and to also turn the page on Alberta's previous position of climate inaction and the reputational risks that both our energy sector and others suffered because of that. You know, the fact is that Alberta is an energy producer, so we are forecasting essentially what amounts to a peak, and then there's a climb through energy efficiency investments, the phase-in of renewables, and the investment in innovation. Those investments reflect the level of ambition and a level of practical decision-making that we believe we can undertake.

What we did not do – and we were very, very clear about this – was articulate a target that we had no intention of keeping. We saw that in previous governments, both federal and provincial, and I was not interested in an exercise that wasn't real. We took the position that rather than talking about targets, we would just undertake action, and that's what we have done. Through the forecasting now we are estimated to reduce our annual GHGs by between 16 and 18 megatonnes in 2020 relative to our projected without CLP implementation and beyond that to 2030, where you have coal-fired electricity pollution being zero, you have our methane emissions down, and so on. We may even get to something in the 20-, 22-megatonne neighbourhood, depending on our investments in innovation in the oil sands.

Mr. Clark: Okay. Just so I'm really clear, you have no intention of setting any Alberta-specific targets?

Ms Phillips: Not at this time. Targets are an international conversation, and they are set by the federal government. From our perspective, as long as we are actually accomplishing the action of reducing greenhouse gas emissions, I'm far more interested in focusing on that.

Mr. Clark: Based on this table we've got on page 71 of the business plan, would you say that Alberta's carbon emissions have peaked? If I look at the last line there, 2017 policy and economic expectations with climate leadership plan plus potential reductions from innovations, that tells me that 2014 was our peak year and that we will go down by roughly 50 megatonnes between now and 2030. Is that the likely trajectory? Is it safe to say that Alberta's carbon emissions have peaked?

Ms Phillips: I'm not sure. It really depends on a number of different economic factors and, again, because we are energy producers. According to this what we've got is that in and around 2020 we have a peak, but it really depends on a number of different factors in terms of oil sands production and, of course, the innovation investments in lowering the carbon in the barrel.

That's certainly the intent, but we do know that we provided for growth in oil sands emissions up to 100 megatonnes from the current 67.

The Acting Chair: Thank you, Minister.

That brings us to the end of that round. We will take our five-minute break and return at 5:10 p.m.

[The committee adjourned from 5:06 p.m. to 5:12 p.m.]

The Acting Chair: Okay. We'll bring the meeting back to order, please.

We'll move to the independent members. Dr. Starke, you have 20 minutes. Would you like to go back and forth with the minister?

Dr. Starke: Yes, Chair. If we could, that would be great.

The Acting Chair: That's okay, Minister?

Ms Phillips: Yeah.

The Acting Chair: All right. Please proceed.

Dr. Starke: Well, Minister, thank you. I appreciate the opportunity to ask some questions with regard to Environment and Parks. I think we've done this a couple of times before, so some of these questions will probably seem repetitive, but I'm just sort of curious where we're at.

Let's start with the business plan, page 69, key strategy 1.1. The last bullet in key strategy 1.1 is "employing a new methane emission reduction plan." Now, that also appeared in the business plan last year, and I would suggest that this is probably one of those efforts where the work will never be completely done. As you know, I've expressed concern to your colleague the Energy minister about the methane regulations that are being drafted by her department. I guess what I'm wondering is: are there specific initiatives that are being put in place by your department over and above what is being done in the Energy department, or are you sort of largely waiting to take direction from the AER and the methane regulations that will be released there?

Ms Phillips: Well, we've been actively involved in the Methane Reduction Oversight Committee. Of course, that's a multi-stakeholder exercise intended to find that path forward that is the lowest cost for operators to reduce methane emissions. We are working on that updated directive with the AER. One of the first pieces of work around that was to make sure that we had an offset protocol in place so that early action could be incented. That's a potential value to industry of \$200 million annually if programs were fully utilized. We think that what will end up happening is that once we have moved forward with that regulation, then there'll be a little bit more clarity, and people will undertake that early action. We're already seeing it, and the deputy can provide a bit more background on that.

You know, I think it's fair to say that there's been an enormous amount of public policy development work around this reg and ensuring that what we put forward will achieve equivalency with the federal government but at a lower cost than what's been proposed by the feds so far. We have confidence that we will be able to achieve that while achieving the reduction. The 45 per cent was proposed to

us by industry in the first place, and one of the trade-offs for it was the exemption until 2023 for on-site processing. I think that what we will be able to achieve is that target, but it will come from being a made-in-Alberta solution, including the protocols.

Dr. Starke: Minister, on the topic of made-in-Alberta solutions, I just wanted to make sure – I believe you've had these conversations already with the county of Vermilion River, but if you haven't, I would really encourage either yourself or officials within your department. Some 10 years ago, so probably even before this was kind of on our radar screen, the county of Vermilion River won an Emerald award for climate leadership for their methane project to basically pick up and scavenge vented methane from the heavy oil wells in our area. If you look at a map of Alberta, I'm sure you've seen it, too. The methane intensity of the oil patch in our part of the province, in the Lloydminster-Bonnyville area, is significantly higher. There's another sort of red zone, if you like, in the Peace River area. I will tell you that the producers in our area are absolutely interested, not just interested but enthusiastic, about scavenging this waste methane and doing something with it beyond just combusting it.

The county of Vermilion River, just to sort of bring you up to date, started last year a two-vehicle pilot project where they converted two of the pickup trucks that run for the county to bifuel, both gasoline and natural gas. They're estimating savings of \$26,000 per vehicle over the life of the vehicle by doing that as well as reduction in CO₂ emissions of 3.25 tonnes per vehicle per year. They're going to take another seven vehicles and convert them this year.

Just so that it's on your radar that this is the kind of, to me, very practical – you know, it may not be large scale, but when you're looking at the kinds of emissions that occur from the oil patch within our area, we certainly are very interested in reducing methane. We think that in many ways that can have a greater impact on our overall reduction of GHGs than a lot of other programs. By all means, go ahead with them, but this is one that I'd like to see us pursue.

Minister, I'd just like to sort of wrap up the discussion on the methane reduction by saying that this is something that you do have buy-in and support for from industry and from people, but we also have a lot of ideas that we'd encourage you to take a look at.

Ms Phillips: Just to respond really quickly in terms of things that the hon. member can take back to his constituents, there are a number of opportunities now and things that we are reinvesting in around methane reduction. Emissions Reduction Alberta funded a number of technology pilots. That was valued at \$35 million. The business, nonprofit, and industrial energy efficiency rebate program was valued at \$10 million. There are new industrial efficiency programs, both for large final emitters and non large final emitters, that are moving as well, and some of that is methane-reducing technology that people should be apprised of.

Dr. Starke: Are you looking at eligibility for rural gas co-ops in this? The rural gas co-ops could actually act to scavenge, collect, and then transmit some of this collected methane and actually use it to heat homes rather than just venting it into the atmosphere.

Ms Phillips: Well, certainly, all the industrial efficiency and the innovation funding is designed to be the largest application possible, so if there is a reason why natural gas co-ops for whatever reason have been left out of that, we'll endeavour to solve that problem.

Dr. Starke: Okay. Great. I mean, I think there's potential there.

Minister, we talked a little bit earlier – the Member for Grande Prairie-Smoky talked a little bit about getting up to the 17 per cent IUCN target for preserved territorial and national waters. I think, if I recall, that the percentages were 8 per cent national park, 4.5 per cent provincial park, and we want to up that to 17 per cent, which I think is laudable. And I agree that most of that is contained within the lower Athabasca regional plan. I think it's 2 million hectares within the lower Athabasca regional plan. So I'm pleased to see that.

But I want to talk a little bit next about parks capital, and I'm going to actually turn to page 62 of the fiscal plan, the other big coil-bound. The parks fiscal plan: now, you mentioned earlier, actually in about the first sentence in your opening remarks, about I believe it's the \$39 million investment for this year in parks capital and that over the next five years there's \$139 million in capital renewal and maintenance. I went looking for that, and I just want to make sure that I've got this correct. This year the \$38 million investment in provincial park capital breaks down as \$20 million for capital renewal and maintenance, \$2 million for Castle provincial park, \$1 million for William Watson Lodge, \$10 million for the SSRP implementation, and \$5 million for the lower Athabasca regional plan implementation. Is that a correct breakdown?

Ms Phillips: I believe so, yes.

Dr. Starke: Okay. Minister, I've told you this before. I'm really glad that you were more successful in convincing your Treasury Board folks to spend more money on parks than I was. You know, I'm all over that. I'm looking over at your assistant deputy minister in the area. She's way more convincing than I ever was, so that's fine.

But we do, for the first time in some time – and I think I maybe teased you about this a little bit a couple of years ago. You actually have projects on the unfunded list this year. My God, you never had that before. I do want to ask about a couple of them because I think – you know, it's like anything else – all these projects are probably worth while, but we have limited resources, right? Specifically, the William Watson Lodge rehabilitation – you know that I care a great deal about that facility – does appear in the capital plan at \$1 million a year, but I'm thinking that that's not the big rehabilitation that you want to do. Do we have a price tag for that? Do we have a target date for doing the big rehabilitation, if you like?

5:20

Ms Phillips: I don't believe that at this point we've done the feasibility study for the big piece, but Assistant Deputy Minister Donelon is here to provide that detail.

If you wouldn't mind coming to the mic.

Mr. Donelon: Yes. Thank you. The capital plan for William Watson Lodge does not include the major refit that you're talking about at this point, the million dollars. That is the cabin replacement that we're currently working on. We've got two new cabins that are going in this year that'll replace the original cabins from 1982. There's a major refit that is future planned for the main lodge building, which has some significant issues – foundational issues, mould, and those sorts of things – and that's the piece that currently sits with Infrastructure on that list.

Dr. Starke: Okay. Thanks, Steve. I appreciate that.

Minister, I think I may have mentioned this to you before. Just the fact that there is a William Watson Lodge and the vision behind

it and why it's there is something that Albertans, I think, should know more about.

Now, Minister, when you announced that we were going to go ahead with the refurbishment and rebuilding of the Kananaskis golf courses, you indicated that the revenue that was going to be produced through that would go towards the William Watson Lodge refurbishment. Now, is it just that we don't have enough revenue yet because the golf courses don't open until this spring? There's been a bit of a delay. It's taken a little longer than we thought it would.

Ms Phillips: Yes.

Dr. Starke: Okay. Great. Very pleased to see the golf courses open again. You and I may have a differing opinion about that, but I know, in talking to a lot of Albertans who are enthusiasts, to see those two absolute gems is great.

Last year, Minister, I asked about cost recovery on parks visitation. Last year the numbers were \$30.8 million in revenue for \$84 million in expense. Our expense is down, and our projected revenue on page 135 of the budget documents, if I've got the numbers added correctly, is \$32.9 million, or cost recovery increased to 40.4 per cent. Do we have a specific target for cost recovery for parks operations, or do we just sort of do the best we can?

Ms Phillips: We don't have one articulated within the business plan, hon. member, but certainly we look to set those fees in a way that balances the needs of Albertans to access recreation and parks infrastructure in a way that is affordable to them and that covers at least some of our costs. Forty per cent is reflective of the fact that we have increased visitation. And it really also depends on the weather in terms of how much revenue we get.

Dr. Starke: Yes, it does.

Ms Phillips: So it's going to fluctuate every year. It's a value judgment of how much we think that people should pay for a campsite or for, you know, sanitation or any of those things. We think we've set the fees appropriately for now. There were a couple of small bumps, I believe, in '14-15, and they remain stable there. We certainly have not seen a reduction in demand; in fact, quite the opposite.

Dr. Starke: No. The demand will continue to be there, Minister. These are beloved spaces, as you know. I mean, if you talk to the folks from the RV dealerships of Alberta and if you look at the prices that people are paying for these RVs, I would respectfully suggest that I think the fees could even go a little bit higher, especially given the quality of the parks facilities and especially as you're making a special effort to improve those.

But that brings us to another topic. We talked about this last year as well. You mentioned that visitation is up. I'm looking on page 72 of the business plan at performance measure 3(b). Yes, indeed, last year the percentage of Albertans who visited an Alberta park location in the last 12 months was 33.6 per cent, and this past year gone by it went up to 36.5 per cent. That's a significant increase, and that's definitely trending in the right direction, yet our targets for the next year remain significantly and conspicuously unambitious, at 33 per cent. Minister, we're putting these extra resources in, we're spending this extra money, our parks are beautiful, you're enthusiastic about them, I'm enthusiastic about them, yet we only think 1 in 3 Albertans are going to visit the parks. Don't you think those targets should be higher?

Ms Phillips: You know, hon. member, you make a good point. I think that we could revisit those performance measurements in future business plans. However, I will share with you that the deputy believes that “unambitious” is not a word that is usually used to describe my approach to this ministry.

Dr. Starke: That’s why this one sticks out so much, Minister.

Ms Phillips: All right. Well, some of this also has to do with the weather and the economy and so on. But performance measures are reviewed annually, and you may be right that this one should reflect a higher level of ambition.

Dr. Starke: I think, Minister, in keeping also with somewhere else in the business plan – well, right there, key strategy 3.1 – where you talk about the continued implementation of the parks inclusion strategy and the visitor experience strategy. I mean, these are both strategies that are intended to improve the parks experience, especially the inclusion strategy, for Albertans that might otherwise not access our parks. So I think the fact that you’re doing those things is positive.

The second performance measure, 3(c), visitor satisfaction. I mean, I think it would be wrong if I didn’t at least comment that I think the 95 per cent target is great. You know, it’s such a contrast that you’ve got 33 per cent, which I think is kind of lowballing it, and 95 per cent on 3(c). I think: yeah, absolutely; I’d even go higher than that. Now, I noticed that the number from last year to this year is basically, statistically a flat line, 91.4 to 91.2, but I’m glad to see it. Any of the experience that I’ve had, even in the four years since I was minister, has been really, really positive.

Minister, on page 71 of the business plan, key strategy 2.5, the collaborative development of the Castle region tourism and economic development strategy: again, fully supportive of the preservation of that absolute jewel in southwestern Alberta. I think that’s a very positive thing. I am a little bit concerned, though. Do we have a specific strategy for addressing random camping? That’s something that concerns, and unfortunately it is a practice that has become I’m going to call it relatively entrenched. There’s quite a large number of people who do engage in random camping. I don’t mean to characterize them all the same. I think that, for the most part, most of the people who engage in it are very respectful of the environment and leave the place where they’re camping in good condition. Unfortunately, as is sometimes the case, there is a small percentage of them that do not. Do we have a strategy for addressing that issue?

Ms Phillips: We absolutely do. One of the things that we found when we went out and mapped where people go, both in Castle and elsewhere, in Livingstone-Porcupine as well and kind of up the eastern slopes, is that random camping is actually not so random. People are going into specific places all the time. In some cases that’s not a big deal, and in other places they’re too close to waterways, or we see, you know, people cutting wood or these kinds of things that are not helpful.

In Castle, instead of ending that, what we did was that we made random camping nodes, where there is access to garbage cans, firepits, which was particularly important this year, when it was such a dry year, and we upped the enforcement to make sure that people had the right permit. They just needed to get a permit to be back there, and then it was fine. But they needed to be appropriately set back from watercourses and other things that are obvious to many of us but not everyone. So just a little bit more enforcement presence, which was mostly predicated on education – all of those materials were available at places like Beaver Mines store, which

contributed to more visitation for them, which was good – was part of that strategy.

That’s what’s being proposed in the Livingstone-Porcupine planning piece for those public land-use zones as well.

Dr. Starke: Okay. Good. Thank you, Minister.

Minister, I want to ask one more question with regard to a change from last year’s business plan. On page 67 of last year’s business plan – I appreciate that you may not have this, but I’m sure you’re familiar – 1.3, bullet 3, was “revitalizing and modernizing provincial parks legislation, including a revised provincial parks classification system.” That’s not in this year’s business plan. Is that something that for now has been put on a bit of a back burner?

5:30

Ms Phillips: It’s had to be.

Just with respect to, again, your previous comments, hon. member, around the level of ambition in the ministry, yes, the Provincial Parks Act probably does need some pruning and some evergreening, but it was determined that at this point we had so much other heavy lifting to do with species at risk, regional planning, and other priorities.

Dr. Starke: Okay. No. Fair enough.

Minister, in that regard, Plan for Parks, the document that you’ve followed, I think has provided some good strategic direction for our parks. The 10-year period that that was supposed to take a look at ends next year. Is there a preliminary plan for doing up a new plan for parks? Is that something that’s on the radar screen?

Ms Phillips: Yes, and I think what it will allow us to do is to take into account the regional planning that’s been done since and some of the capital investments and priorities that we’ve heard from Albertans since.

Dr. Starke: Okay. Good. You know, I certainly am glad to hear that. Again, as I’ve said before, I commend you on following up on the initiatives that were in there.

Minister, it wouldn’t be Environment and Parks estimates if I didn’t at the very least ask about the status of UNESCO world heritage site designation for Áísinaí’pi, the Writing-On-Stone provincial park. As you know, I strongly feel that this should become Alberta’s sixth UNESCO world heritage site. The five that we already have are outstanding. This one would be that much more of an addition. I’m just wondering: where are things at?

Ms Phillips: The application has gone in to the UNESCO body in Paris, and they’ll be doing a site visit, I believe, this summer for a final decision in 2019. We had some work to do with respect to consultation with the county and with the affected landowners, so I went out there last summer and actually met with them individually myself. Those were really productive conversations and allowed us to take some of the burrs out of the saddle, if you will.

The Acting Chair: Thank you, Minister.

We will move to the government caucus.

Dr. Starke: Thank you, Minister.

The Acting Chair: Twenty minutes back and forth with the minister?

Mr. Rosendahl: Yes, please. That would be great.

The Acting Chair: If that’s okay with the minister.

Mr. Rosendahl: I would like to share our time with the Member for Calgary-Currie and the Member for Calgary-Glenmore as well. We'll be bouncing back and forth between us for the questions. Thank you, again, for being here, Minister, and, of course, to all your staff that you have with you to deal with the questions.

I'll start with one of my favourite ones, of course, the issue of the invasive species and fish diseases, particularly zebra mussels and, in our area, whirling disease, which in West Yellowhead poses a serious risk to the health of our waterways. When I'm referring to the questions, I'm looking at item 5 on page 130 of the estimates. These questions will pertain to that area. How much of the total \$44.3 million allocated for fish and wildlife management will be used to mitigate threats to Alberta's freshwater resources?

Ms Phillips: Of that \$44 million, hon. member, I committed \$9.7 million to prevent the spread of whirling disease. That delineates where the disease exists. It's an education program, and it's also some risk mitigation in the long term. We also continue to invest in watercraft inspection and educational campaigns, as potentially you know, to prevent the introduction of new aquatic invasive species like the zebra and quagga mussels. Those programs continue. We expanded our border inspections as well in order to make sure that we were meeting all of the community needs and concerns with respect to the aquatic invasive species.

Mr. Rosendahl: So with that question in mind, I understand that whirling disease has now been found in another watershed. Is that creating a huge concern when we look at this, and is there additional funding allocated to address this going forward?

Ms Phillips: We believe that even with the detection elsewhere, we are able to meet the monitoring and the educational and enforcement pieces through the existing allocations.

Mr. Rosendahl: Oh. Okay. Thank you.

Looking at that issue, what would be, in your opinion, of course, the economic risk of not investing in programs to protect our freshwater resources?

Ms Phillips: Well, one of the reasons why the irrigation districts in particular are so enthusiastic about our aquatic invasive species program and the border inspection that we undertake and expanding that border inspection, the dog teams that are working for us to detect aquatic invasive species, is because the cost of an infestation is about \$75 million annually and because so much of Alberta's economy relies on appropriately functioning irrigation systems. In particular, in the South Saskatchewan, if we were to have an infestation, it would put a lot of livelihoods at risk. That's why we continue to invest in these programs.

Mr. Rosendahl: Okay. Thank you.

What stakeholders is government working with to implement the programs? Can you elaborate on that?

Ms Phillips: Yeah. For both whirling disease and aquatic invasive species, the budgetary allocations that we see here are only a fraction of the money that's actually being spent on the landscape. For example, Canada Border Services and the Canadian Food Inspection Agency have a role to play, and other provincial governments also have a role to play. The province of British Columbia has been, actually, quite proactive on aquatic invasive species, the province of Saskatchewan less so, and we have concerns there. We have a lot of municipal partners as well. The irrigation districts themselves help fund the aquatic invasive species program, too.

Mr. Rosendahl: Okay. All right. So how do Alberta's plans compare with other jurisdictions in how we're moving forward with this?

Ms Phillips: We have the most comprehensive boat inspection program in the country, and that's a combination of education and enforcement. Certainly, we found aquatic invasive species several times last year at the various border inspection stations that we staff throughout the year.

As for whirling disease, we have a laboratory now at Vegreville, which is the first place where that kind of testing is occurring. On both of those fronts, one of the reasons why I attended the fisheries federal-provincial-territorial meeting last year was to demonstrate to the federal government that we are taking these things seriously and that they also need to partner with us on a few of those items.

Mr. Rosendahl: Okay. Thank you.

What kind of objectives do we look for in fisheries management, and can you measure that in terms of success and what it may look like?

Ms Phillips: Well, I think that in fisheries management the biggest thing is that there has to be something to fish. So it's making science-based decisions on inventories and making sure that we just have the boots on the ground to be able to give us an accurate account of where our fishing opportunities are. That's why there are some places where we've seen some reduction in opportunities, although no recreational closures, and an expansion of some opportunities in other places, where the recovery strategy is working. That's in terms of the northern pike and walleye populations. As for our native trout populations, they're in trouble. There's no question. We have an emergency order in place for our westslope cutthroat. That was one of the reasons why we took the decisions around Castle that we did, because in those headwaters of the Oldman River we see a lot of the spawning grounds for our westslope cutthroat and our bull trout population. They're both in trouble.

When we undertook the scientific assessment of the linear disturbance in the Castle area, where we meet those parks, we found that there were 1,800 stream crossings in the headwaters and only 35 bridges to support that. That's why we need to undertake recreation planning in a way that supports the activity that people want to do but in a way that is compatible with our fish and wildlife and our wild species.

Mr. Rosendahl: Okay. Thank you.

I'll now turn it over to my colleague from Calgary-Currie.

Mr. Malkinson: Thank you very much, Mr. Chair. I know that the creation of the Castle parks is a signature achievement of this government and a very big announcement for you, hon. minister. I'm trying to find out where investments in the Castle are in this budget.

Ms Phillips: They're in the capital funding piece, so in parks capital. You will find them there.

5:40

Mr. Malkinson: Okay. What's some of the investment that's going to be in the new Castle parks region specifically?

Ms Phillips: Sure. We've got new comfort cabins at Beaver Mines campground. We've got a number of refurbishments to Beaver Mines Lake campground as well. There's infrastructure support to rustic camping, in reference to the question from the Member for Vermilion-Lloydminster earlier, and we've got a number of

backcountry sites happening up there. We also have partnered, as we announced yesterday, with the Alpine Club of Canada around three backcountry huts. It's the first partnership between Alberta Parks and the Alpine Club of Canada. Of course, they have a hut network in the national parks, but we don't have that yet in Alberta parks. We have a number of opportunities, not the least of which is in Castle. So we'll have three new huts up there where people can do hut-to-hut hiking, and that is something that the Alpine Club of Canada is really excited about partnering with us on. We will do the initial capital investment, and they will operate them just as their arrangements are in the national parks.

We have also upgraded the Syncline group-use camping area and some of the staging areas and wayfinding at the Syncline cross-country ski trails and a number of new trailheads as well for both winter and summer activities. We have a number of water crossings investments that we're making. Again, even nonmotorized needs that appropriate water-crossing infrastructure so that we're not putting our native trout species at risk.

Then there are things that make life more fun for people when you're out camping, things like boat launch refurbishments. Those kinds of things are happening at both Beaver Mines Lake and elsewhere.

There's also a budgetary allocation for a Blackfoot offering site because the intent of these spaces is that they are co-managed with Piikani, which is the neighbouring First Nation. We have an initial memorandum of understanding with them, and a part of that will be actually investing in a spot of their choosing where we have both a sacred site piece and an educational component where that's appropriate.

Mr. Malkinson: Thank you very much, Minister.

As you know, I like my outdoors in the summer motorized, so I think a lot of my colleagues will appreciate some of those bridges. You know, it's important to be able to enjoy the parks how we need to but in a way that makes sure it's there for wildlife as well. I can also say that the alpine cabins in the national parks – although I've never been to one, that has been on my to-do list in the winter, to do some skiing up to them. So I look forward to seeing those in Castle park.

Now, have there been any new programs that have been introduced in the parks to provide opportunities for kids and families who want to get out and enjoy Alberta's newest parks? I don't have a family, but, I mean, the type of things I would do are perhaps different than those with a family would do in the parks.

Ms Phillips: Well, we did a number of winter recreation activities. And you could go by yourself, hon. member. You don't have to take anyone with you.

Mr. Malkinson: That's good to know.

Ms Phillips: We did a number of different things, and they were really well subscribed by both the community members in and around Pincher Creek and Crowsnest but also as far as Lethbridge. There was a snowshoe-lending program through the libraries at Pincher Creek and Crowsnest. That was great. There were winter survival afternoons, where you could go and learn some of that stuff on Saturday afternoons. There were guided snowshoeing and guided cross-country ski trips that were, you know, both natural history interpretation, with Alberta Parks staff delivering that, but also some stargazing, constellation trips as well. That was really well received.

As we go along, there'll be more of that kind of work. It's about making parks relevant to people in an accessible way that meets them

where they're at in terms of the level of difficulty. Snowshoeing is not as difficult, for example.

Mr. Malkinson: Well, Minister, just going on with that, making sure the parks are accessible to how people want to use them, you know, I do a lot of work with persons with disabilities in my riding due to many of those organizations actually being headquartered in my riding. What work is being done to ensure those with accessibility issues, whatever they may be, are supported in these new park developments?

Ms Phillips: Sure. Well, we began the investment last year for a fully accessible fishing experience at Bathing Lake in the Castle parks. Part of the great thing about having new parks is that you can experiment with things that haven't been done yet, so we invested in that. And the intent is for one of the Alpine Club of Canada huts, that we announced yesterday, to be mostly accessible, like from the perspective of a wheelchair, that kind of thing. Of course, that's a little bit more difficult, but that's why we invested so much in the Bathing Lake project. We're also expanding a lot of the campgrounds that are in Castle so that they can be a little bit larger for RVs and that kind of thing and just meet people's needs where they're at right now.

Mr. Malkinson: Now, what opportunities for investments have been created for local businesses in the Castle park?

Ms Phillips: Well, so far what we have seen is that we've made sure that the Beaver Mines store, for example, is an information kiosk for Alberta parks, so it means that more people are stopping. Culture and Tourism is undertaking a full tourism and economic development strategy. We're also doing things like paving the road up to Castle Mountain Resort and ensuring safe drinking water, not just to Beaver Mines, where Alberta Health Services has had a few things to say about the water quality for some years, but all the way up to CMR, to the ski resort, so that they can meet their growing needs as well. In addition, we're looking at our other road, another access point investment. Certainly, Crowsnest Pass municipality has had a few things to say about the two access points into their community, and we'll work with them on that as well.

Mr. Malkinson: I think that you know, hon. minister, that I've skied at Castle Mountain Resort and definitely would encourage other Albertans to do the same. What other kinds of recreation are being supported in the area through provincial investment that perhaps you haven't talked about already?

Ms Phillips: Well, there's a lot of the sort of trail development, wayfinding, that kind of thing, for hiking and, in wintertime, backcountry skiing. There is also some investment being made in mountain biking infrastructure. That's something that Crowsnest Pass came to us in the first instance, when we first made these parks, and asked for because there are a few economic development opportunities with various mountain bike races. We're open to working with them on that, and we're going to make sure that we've got the resources in place to be able to do it.

Mr. Malkinson: I think you've touched on it already, but you made an announcement yesterday in relation to Castle. Do you want to tell us a little bit more about that? Then I'm going to hand it over to my colleague here.

Ms Phillips: Well, it's the first time that we've had that kind of partnership with the Alpine Club of Canada, and we think that they're the perfect partner for this kind of thing. They've got

experience in a hut-to-hut system which has very low environmental impact. Obviously, in the national parks they have a very high level of conservation value and intent, so that's compatible with these kinds of facilities in our wildland park because these three huts are within the portion that is designated wildland.

Mr. Malkinson: Mr. Chair, I'm going to hand this over to my colleague Anam.

The Acting Chair: Okay.

Ms Kazim: Thank you, Mr. Chair. Thank you very much, hon. minister, for your time today. I would like to ask a few questions with regard to energy efficiency programs. Up until recently Alberta was the only province that did not have energy efficiency programs. Can you please tell us more about what kind of uptake we have seen from individuals, businesses, municipalities, indigenous communities, et cetera, with regard to opportunities made available through Energy Efficiency Alberta, as mentioned on page 139? What are the tangible results achieved by those programs?

Ms Phillips: We've only really launched our first suite of programs so far, hon. member, and we've seen 50,000 households increase their energy efficiency through renovations and energy efficient products. We saw 150,000 households avail themselves of the no-cost programs, and we've seen 1,200 businesses, nonprofits, and institutions avail themselves of the initial suite of programs. All of that has added up to about \$300 million in avoided costs for our participating households, businesses, nonprofits, churches, community associations, others. Those are funds that they would otherwise be spending on energy costs, and they can divert those funds into other activities.

Ms Kazim: Okay. How much are Albertans saving as a result of energy efficiency programs?

Ms Phillips: As I mentioned, our figures show that \$300 million are avoided energy costs. It should be noted that a lot of these programs are now being delivered in an expanded way due to the federal low carbon economy fund partnering with some of our existing programs. That's \$148 million that Alberta has received from the federal government as a result of our participation in the pan-Canadian framework.

5:50

Ms Kazim: What kind of support is available for nonprofit organizations through Energy Efficiency Alberta?

Ms Phillips: Well, you know, there's been a lot of talk about nonprofits, and certainly we have taken those issues very, very seriously. As a result, we've got a number of programs in place. We've got the second phase of the business, nonprofit, and institutional program moving out, which is \$15 million. We've got some affordable housing investments that we're going to be making in partnership with the federal government. We have an energy audit program for nonprofits, and we've got a nonprofit community program at 3 and a half million dollars. Additionally, we have some funds through the municipal climate action centre, \$52 million that we move to them. A lot of that will go towards things like retrofits for arenas, pools, rinks, that sort of thing. It depends on what kind of nonprofit we're talking about.

There are in front of me 293 nonprofit organizations receiving CLP funding under the ACCO budget. That's as of last week. They include everyone from community leagues to seniors' lodges, churches – there are a number of churches on here – museum

societies, as I've said, senior citizens' organizations, senior citizens' delivery services as well as lodges, tennis clubs, ag societies, the Calgary Jewish centre, for example, which I believe is in the hon. member's riding . . .

Ms Kazim: That's right.

Ms Phillips: . . . and arts councils just across the province. Obviously, the number of nonprofits is very, very diverse, and the people who have availed themselves of the nonprofit funding so far are similarly diverse.

Ms Kazim: Okay. That's very good to hear.

How many nonprofit organizations have taken advantage of the NEET program?

Ms Phillips: We've got about 150 on the NEET program, and then we have a number of others under the municipal climate action centre.

The Acting Chair: Sorry to interrupt. That's the end of that time.

We're moving on to the Official Opposition and 10-minute intervals. How would you like to share your time, Mr. Loewen?

Mr. Loewen: Back and forth.

The Acting Chair: Is that okay with the minister?

Ms Phillips: Yeah.

The Acting Chair: Please proceed.

Mr. Loewen: Okay. Thank you.

When last we were talking, we were talking about parks, but I'm just going to kind of slide over to land use for just a second. Now, looking at line 8 and the Land Use Secretariat, there is an estimate of a roughly 40 per cent decrease from the previous fiscal year. Is this indicative of any particular shift in land-use planning?

Ms Phillips: It's indicative of the fact that we have wrapped up some of the heavier lifting within land-use planning, so now some of those FTEs have been redirected towards the implementation of the land-use plans.

Now, as we move forward, what will happen is that through the NSRP process, the North Saskatchewan regional planning process, it may be that we have to move some resources back into the Land Use Secretariat to finish that work. Over time, of course, we've got the upper and lower piece that require our attention. It reflects the fact that for LARP and SSRP some of the actual planning work is now done, and the work is now transferred over into operations of public lands.

Mr. Loewen: Okay. Thank you.

Now, we've heard lots of discussion on the Castle today, and I'm just wondering about the consultation process on the Livingstone-Porcupine Hills land management plans. Now, you've suggested that you've consulted with residents in the area. I'm just wondering: do you plan on having any open houses to inform the general public that use the area for recreation of the proposed changes to the Livingstone-Porcupine Hills area?

Ms Phillips: The linear footprint plan and the recreation management plan have come about as a result of extensive stakeholder consultation. Engagement with First Nations has also been ongoing for both projects since 2015. We've got this public consultation piece right now. At this point, you know, I think what we need to do is move on with the investments in recreation

management and make the investments in the infrastructure that everyone agrees need to be made.

There is no question that we do need some regulatory tools to effectively manage motorized recreation. Everyone agrees on that, too. We will continue with some of the ongoing consultation. Once the consultation window closes, we are always talking to stakeholders.

Mr. Loewen: Okay. I'm just curious about the general public, though. I understand the stakeholders, but for the general public, will there be any open houses, any open meetings for the average person to just show up?

Ms Phillips: The consultation process for the general public is open right now, so any member of the general public can just show up and discuss with us their views online.

Mr. Loewen: Online? Okay. Now, the online process: is it open just to people from Alberta, or is it open to everybody?

Ms Phillips: Oh, no. It's residents. We employ the same approaches that we do to every government survey, so there is not an ability to manipulate the survey.

Mr. Loewen: Are there any restrictions on where the input can come from, or is it just world-wide, anybody?

Ms Phillips: There are restrictions with respect to the IP address and so on, so there is not an ability to unduly influence the survey from any side.

Mr. Loewen: Okay. I'm just trying to think: how will the public know how these plans will affect their lives, too?

Ms Phillips: Well, as soon as we move forward with establishing the public land administration regulation within the public land-use zone, then immediately you have a number of trail management signage, just basic infrastructure, investments that happen, and there will be designated motorized routes. What we'll do is similar to what we did in Castle. We'll make sure that local small businesses and others have that information. Maps, signs, notices, websites, and officer field presence will be used to inform people of the changes.

Mr. Loewen: Okay. Just so we're clear here, there won't be any public meetings that are open to the public, open houses, town halls.

Ms Phillips: I mean, we feel that that phase is now complete in terms of hearing from the public.

Mr. Loewen: Did you have any for Livingstone-Porcupine Hills?

Ms Phillips: Well, we undertook it through the southern Alberta recreation advisory group. There were a number of groups present on that.

Mr. Loewen: But the general public hasn't had a chance.

Ms Phillips: They have that opportunity online.

Mr. Loewen: Just online but nothing as far as an open house or anything like that. Okay.

This obviously will affect local economies and tourism. Have you talked to the chambers of commerce and other groups that this will have an effect on?

Ms Phillips: Municipalities and others have been engaged on this since the very beginning.

Mr. Loewen: Okay. Now, as far as the Bighorn, do you plan on having public meetings to consult on the future of the Bighorn?

Ms Phillips: Well, certainly, the regional advisory council advice, which is from the previous government, not ours, is out for public consultation right now. As that process moves forward, there will be a number of different ways that consultation occurs, just as there was through the lower Athabasca and the South Saskatchewan regional plans.

Mr. Loewen: But public meetings particularly on the Bighorn?

Ms Phillips: I'm not sure what we're referring to here. Is it the existing public land-use zones within the Bighorn region or infrastructure investments in some of those areas or the development of the tourism nodes? What are we talking about here?

Mr. Loewen: The plans for the Bighorn. I mean, are there going to be public meetings that the general public can come to, just like we talked about with Livingstone-Porcupine Hills?

Ms Phillips: Typically through the regional planning process there is a public component. I believe that this was the case during the development of the South Saskatchewan and the lower Athabasca regional plans.

Mr. Loewen: And that'll be specific to the Bighorn area?

Ms Phillips: It's specific to the regional planning process because regional planning is far more than a couple of parks. It speaks to future economic development and so on.

Mr. Loewen: But I'm talking specifically about the Bighorn. I'm asking a question specifically about the Bighorn.

Ms Phillips: I think that there will be certainly an open and public piece related to the North Saskatchewan regional plan because regional planning is just that. It's for the whole region.

Mr. Loewen: Okay. Have you had any meetings already with groups or people on the Bighorn?

Ms Phillips: Not really specifically. Certainly, we have over the years heard people articulate to us that there was desire to see a North Saskatchewan regional plan in place so that municipalities can effectively plan, so that we can ensure that we've got tourism development where appropriate, that we've got enforcement and other capital investments happening in either our public lands or in our protected areas, and we've got appropriate water management, all of those same concerns that we see in the South Saskatchewan. The North Saskatchewan is an even busier landscape in a number of ways. You know, we've heard a variety of perspectives on that, and we'll review the regional advisory council reaction to that advice and discuss that further with the public as that becomes more clear.

Mr. Loewen: As far as the Bighorn area, do you have any plans on that at this point?

Ms Phillips: Those plans were effectively captured with the regional advisory council advice. That was advice generated by the previous government.

Mr. Loewen: What was that advice?

Ms Phillips: It's in the regional advisory council advice.

6:00

Mr. Loewen: Okay. What is that? What did it say?

Ms Phillips: Well, I mean, the report is online.

Mr. Loewen: Okay. Has there been any decision made on whether Bighorn will become a provincial park or a wildland park or anything like that?

Ms Phillips: No.

Mr. Loewen: There has not been any decision on that?

Ms Phillips: No. The decisions that have been made were the decisions of the previous government. In fact, the Conservative Party put together the 2014 advice. We have now released it for public consultation, and that is forming the basis of our deliberations for the North Saskatchewan regional plan.

Mr. Loewen: Okay. Are there any monies in this budget allocated to the Bighorn area?

Ms Phillips: Not at this point. There were small amounts of funding through our grants to off-highway vehicle groups to undertake specific capital investments, so we have given them those funds. I believe it was some \$200,000.

Mr. Loewen: Okay. And that was to OHV groups, I guess, for the Bighorn area?

Ms Phillips: Yeah. There are a number of different groups. Here's the thing about the Bighorn. It has been better managed in many, many ways in a more multistakeholder way than we saw prevailing in the Castle or the Livingstone-Porcupine. Municipalities have exercised a lot of leadership there, as have user groups, so we funded one of them to undertake some of the bridge work and other things, staging area upgrades, that kind of thing, that they're interested in doing.

Mr. Loewen: Okay. Sounds good. Thanks.

Now, do you think the primary source of input for these areas should be from Alberta residents, or do you think it should be from the different groups in the area?

Ms Phillips: I think that at this point we are veering off the estimates and the business plan, so I will defer to the chair.

The Acting Chair: If you can redirect that question to make it allude to the budget, please, Mr. Loewen.

Mr. Loewen: Yes. We could go with page 130, 3.2; page 131, point 8; or section 1.2 under the business plan.

Ms Phillips: Well, regional planning is in consultation with Albertans.

Mr. Loewen: So you don't have, you know, like we talked about . . .

The Acting Chair: Thank you.

We'll move to the third-party opposition. Mr. Clark, how would you like to share your 10 minutes?

Mr. Clark: I'll share my time with the minister if that's all right.

Ms Phillips: Sure.

Mr. Clark: Thank you very much.

The Acting Chair: Proceed.

Mr. Clark: Thank you, Mr. Chair. Thank you, Madam Minister. I'm going to turn to a discussion around flood adaptation and page 130 of the main estimates, line 4.4. I think that in an earlier answer you said that that was where we're capturing the flood mapping work that's under way. I just want to dig a little deeper into that. You'll recall from our discussions at the Public Accounts Committee not so long ago that there was a discussion about the approach you're taking to flood mapping in terms of whether those maps are taking into account substantial flood mitigation infrastructure. In the past I understand that the mapping was done with essentially just naturalized water flows, that don't take into account major barriers like a permanent dam, for example, or something like the Springbank flood mitigation project. I just wanted to confirm that, in fact, that is the approach that your department will take to these flood maps to take into account some of the larger scale mitigation efforts.

Ms Phillips: Yes, I believe so, but I will defer for more detail on this to Rick Blackwood, who is the land-use commissioner.

Mr. Clark: Thank you.

Mr. Blackwood: Thank you very much for the question. Yes, we're working very closely with Municipal Affairs on our new flood mapping protocol, that will take great consideration in regard to how mitigation planned and installed can in the future affect our mapping product.

Mr. Clark: Can I ask, again, perhaps to Mr. Blackwood or to you, Madam Minister: when you work with Municipal Affairs and as you get – and I understand that the Bow River and Elbow flood hazard studies are close to being completed. When those maps are issued, one of the concerns that that may raise is if that map now shows a substantially higher number of businesses and residents in the floodway. If that's done absent some context on what that may mean policy-wise, both in terms of mitigation and also in terms of land use – and I'm very glad to hear you're working with Municipal Affairs – that could cause a great deal of anxiety, at the very least, and perhaps substantial impact on property values. I'm just curious where we are in that process in terms of timing and what consideration you'll give in terms of context when those maps are released.

Ms Phillips: Sure. So Municipal Affairs is the lead ministry for the flood development reg. They led a two-phase stakeholder consultation. Certainly, there will be a two-year delay in the effective date for a couple of places, the town of Drumheller and the RMWB as well.

Is there a little bit more detail to provide, Rick?

Mr. Blackwood: Yeah. Thank you again for the question. We're very much of that mind, as you'd mentioned, and have been working very closely with the Calgary River Communities Action Group and Bowness and Sunnyside in Calgary. We're very much aware of the issues that you raised in regard to how the flood fringe and the floodway are delineated and how those impact on property value.

Mr. Clark: Thank you very much.

Minister, I just want to pick up on something you've said there: the two-year delay in the effective date of those maps. What exactly does that mean?

Ms Phillips: It's for Drumheller and the regional municipality of Wood Buffalo.

Mr. Clark: Yeah. What is the impact of it being delayed? I'm not quite sure what the implications of that are.

Ms Phillips: I think they were based on unique circumstances. There are some historical development patterns in place there, and there are some real impracticalities. You know, some of those communities need to make further progress on flood mitigation and some of our investments. We also need to gain clarity on the possible use of special policy areas for municipalities like them and others. But always development decisions are guided by each municipality's land-use bylaw and policies, including those pertaining to flood hazard areas.

Mr. Clark: All right. We'll delve a little deeper into this with the Ministry of Municipal Affairs later in the week. I know that's their policy area.

I just want to ask specifically now about flood mitigation projects. I know the Springbank project is something that Alberta Transportation is the project proponent on, but there was a berming project for Redwood Meadows and Bragg Creek. I believe that was under your ministry previously. Is it still within your ministry, or has it been transferred to Alberta Transportation?

Ms Phillips: No. Those two projects were funded through the Alberta community resilience program, that I spoke of earlier.

Mr. Clark: Okay. What's the status of those projects? Are they in progress?

Ms Phillips: I may have to take that as an undertaking because we have so many of these projects. In fact, I will do that. I will take it as an undertaking. It's just easier.

Mr. Clark: Thank you.

Apologies if Mr. Blackwood has to come back up. I just want to ask about the timing around when the Bow River and the Elbow River flood hazard studies are going to be completed. I know that they're in progress. I understand your department has issued some documentation with some updated timelines and the various components of that. I'm just curious. It looks like there are areas that are complete; there are areas that are in late stage and approaching completion. I just want to get a sense if that can be translated into days or months or targets for timelines.

Mr. Blackwood: It's our hope to have both those of studies complete late this year, and we'll also be working very closely with the city of Calgary on how we move forward with the Bow River working group report, that was provided to us as well.

Mr. Clark: What a fantastic segue, because that's my next question. The Bow River working group: where is that at? While I know that there is a plan, slow as it may be, on the Elbow River, with the Springbank project, again recognizing that that's not within your purview, I know the Bow River working group is within Environment and Parks and that the flood risk on the Bow River is substantial. I know that there are discussions, potentially, about some pretty major upstream infrastructure, a retention dam, on the Bow River. That's a very long timeline, but I just want to get a sense of where we are with the Bow River working group, what the next steps are, and how soon we may actually see some progress there.

Ms Phillips: As I understand it, hon. member, we've made a commitment to funding two feasibility studies with respect to the Bow River working group's recommendations. There's no question that at least one of their recommendations comes with a very hefty

price tag, so that will have to be taken into account in future capital plans. There's no question about that.

But first we need to start with the feasibility work, and on the precise nature of those studies I will defer to Rick Blackwood.

Mr. Blackwood: We've been in contact with the city of Calgary, and our counterparts at the city and ourselves will be working on a very collaborative process for the feasibility study, and we'll also be using the Bow River working group model to help move us forward because it was multisectoral based and very successful.

6:10

Mr. Clark: Thank you. I was very pleased to hear that that is going to continue.

Are those feasibility studies captured within line item 4 on page 130 of the budget? Is that where we'd find those?

Ms Phillips: No.

Mr. Clark: Is it sort of a small amount that's kind of captured in something bigger? It's not something we'd find as a line item?

Mr. Blackwood: That's correct.

Mr. Clark: Okay. Thank you very much.

I do want to ask, Minister, about the impacts of logging in the Kananaskis on just the overall flood risk. Have you considered options to reduce deforestation or either eliminate clear-cutting entirely or shift where that's happening as a means of addressing future flood risk?

Ms Phillips: With respect to the Kananaskis project certainly the forestry minister can better answer questions on that because he did require a number of setbacks and other environmental measures to control exactly the risks that you identify, hon. member. Certainly, when we phased out logging in the Castle parks, one of the reasons was that we were seeing a lot of linear disturbance and some headwaters concerns, for sure, in terms of managing water on the landscape. I believe that at this point that logging at Kananaskis is something that is within the forestry ministry, and it has required a number of changes to forestry management practices and will continue to monitor that going forward.

Mr. Clark: Okay. Thank you.

I just want to turn to the bigger question of adaptation. In your earlier set of answers you said that that's perhaps something you'd like to look more into. What is the status of the adaptation strategy coming from the climate change office, which, I assume, CCO stands for? The Auditor General in their February 2018 report had identified this as being a shortcoming. Timing as to when we may expect some work on an adaptation analysis?

Ms Phillips: Sure. Well, we started with three projects to help inform our approach. There was a meta-assessment of climate science that we commissioned, projections of Alberta's future climate and climate risk. That's what climate adaptation is about, understanding what the risks to infrastructure and to people and to health actually are. Then we also moved forward with the resilience building project in the Kainai First Nation to get a better sense of indigenous perspectives.

The Acting Chair: Thank you, Minister.

We will move on to the independent member. Would you like to share your time with the minister?

Dr. Swann: Yes. Thanks very much. Thanks, Minister and staff, for being here. To take a few different tacks, on page 70 in the business plan, 1(d), landfills and recycling, your targets are listed up until 2016 and are listed at 565 kilograms. Could you explain what those numbers mean and why they stop at 2016?

Ms Phillips: Sure. Actually, I think what I will do on the business plan with respect to landfills is defer to Assistant Deputy Minister Ronda Goulden. The waste diversion and so on is handled through policy and planning, her division.

Ms Goulden: Can you just repeat the specific question on the waste piece?

Dr. Swann: What does it mean to say that in 2016 landfills were 565 kilograms, and why do the targets not go beyond that?

Ms Goulden: Sure. We have had a decrease in waste disposal per capita, and that's what these numbers are. The actual result for 2016 is 565 kilograms of disposable waste per capita. The decrease is because of the recession, so the increased numbers that you see as a target for 2016 are also built on the idea that as the economy begins to move again, you actually do have more waste as well.

In terms of why it doesn't go out beyond 2016, I can't answer that question at this moment, Minister.

Ms Phillips: Well, one of the methodology pieces is that we have municipal and private landfills, so when it comes to actual 2017 figures, there's going to be a little bit of a lag there because we're getting that data from all kinds of different sources, so it needs to be properly verified as well. We've had this downward trend, hon. member, and likely, as Ronda discussed, it's due to economic activity. There's certainly no question that we have a little bit of work to do in terms of our waste diversion overall and our provincial frameworks to reduce that per capita waste even more.

Dr. Swann: And where is your budget item for moving towards a higher recycling rate?

Ms Phillips: A lot of that is dealt with through the lines for the delegated authorities because we have the Recycling Management Authority and the used oil material program. That's where their budgets are, which I believe in the estimates is within the statement of operations, I want to say, because it's run through the delegated authorities. But, you know, because it's done through the delegated authorities, we don't actually have to – okay; DOAs are not in the estimates because they're not consolidated. Right. They're not consolidated. So all of that recycling framework is within the delegated administrative authorities that deal with them and beverage container recycling as well.

Dr. Swann: So your role in recycling is not monetary.

Ms Phillips: No. It's policy.

Dr. Swann: Can you just comment a little bit, then, on what the next steps are for an EPR for recycling?

Ms Phillips: Well, we're talking to agricultural producers and relevant stakeholders and others right now around an ag plastics program because that's certainly something that the agricultural industry has been keenly interested in. I think there's some work around environmental fees for designated materials that are currently being assessed by the delegated authorities. Used oil, tires, and, I believe, paint are fees that the delegated authorities want to be able to adjust in order to be able to get some of these things

off the landscape. There are a number of other options that we could undertake, but we'll have to consult on those first and enable them within the regulation around extended producer responsibility.

That's certainly the direction that other jurisdictions have gone because it does mean that the cost of diverting waste and minimizing waste in the first place is not borne by the municipality, which is currently the case in Alberta. We have municipalities footing the bill for a lot of our landfill costs. Instead that cost is transferred to the producers themselves of these materials: packaging, household hazardous waste, et cetera. That's how you see recycling run in other provinces almost exclusively, and municipalities in Alberta have been asking for it, but it is a public policy shift that we'd have to do more consultation on.

Dr. Swann: What's the holdup, and how long do you think it would take?

Ms Phillips: I think that it would take some bandwidth throughout 2018. We could at least enable the regulatory change and continue the conversations with communities within the next year.

Dr. Swann: So not likely anything coming forward before the end of this term?

Ms Phillips: I'm not sure if I would say that. Certainly, the ag plastics piece seems to be a pretty consensus conversation, and there's certainly a consensus that the Alberta Recycling Management Authority and the used oil folks would be able to set their own fees for the materials that they're currently collecting so that they can actually recover these materials off the landscape.

Dr. Swann: And those are up to the municipalities to sort out, then?

Ms Phillips: Right now things like electronic waste are up to the municipalities to sort out, and that's why they have been vociferous in their insistence that we begin more fulsome conversations around extended producer responsibility.

Dr. Swann: Okay. Thank you.

In respect to groundwater, section 4.1, I assume, is the citation. As you know, I've raised repeated concerns about groundwater monitoring in the province related to coal-bed methane and related to fracking, and it's not clear to me, especially after talking to the Energy minister last week, who is responsible for monitoring the testing of groundwater before and after fracking. It's not clear to me who should be accountable for ensuring that we aren't in fact doing more damage to our groundwater than we actually realize. Is there a budget item, or am I clear that it is your responsibility to establish in Environment the standards for groundwater baseline monitoring, or was the Energy minister in error this week in saying that she felt that this was under your jurisdiction?

6:20

Ms Phillips: Well, certainly, the groundwater monitoring program is part of a wide range of EMSD, the environmental monitoring and science division. The Chief Scientist is here. It is part of their work.

We do have a challenge in the current groundwater program, which is that there has been historically some inconsistency of the program network design. That's part of consolidating all of the monitoring work within one place, reporting to a Chief Scientist within Alberta, that we can actually get some consistency in terms of the program design. There have been a few challenges with intermittent data, so EMSD is right now working with partners and others to modernize the instrumentation in a similar way as what we have done on the river and stream and lake monitoring

programs. Really, what we're doing there is making sure that we have relevant and continuous quality and quantity of monitoring.

If there's more to add from Dr. Wrona – I don't know if you have some subsequent questions, hon. member.

Dr. Swann: I do. I want to know where we're at and what we should expect in the next year as far as baseline groundwater monitoring.

Ms Phillips: Sure, so the look forward. I think Dr. Wrona can provide us with that.

Dr. Wrona: Thank you. Fred Wrona, Chief Scientist, Environment and Parks. What we're doing is currently looking at the entire provincial groundwater monitoring network and design, and we're doing a design evaluation in terms of both placement of groundwater sites in relation to developments and what that network needs to have in terms of augmentation.

I might add that another significant part of the whole groundwater story is that this is a distributed network, and one of the big areas that we're working on in groundwater monitoring is in the oil sands region. We're under the joint oil sands monitoring program between the federal government and ourselves. That network is actually being evaluated in terms of current placement of groundwater sites but also, I think, as you've raised very rightly, the range of types of groundwater data that's actually collected by industry as part of the regulatory approvals versus the groundwater networks that we actually do on a provincial scale outside of their operational field. It's putting all of those data systems and databases together into a cohesive network that's going to be critical for us. That's what we're working on.

The Acting Chair: Thank you. I hesitate to interrupt.

We'll move on to the government caucus for what's left, the remainder, until 6:30.

Ms Kazim: Thank you very much, Mr. Chair.

The Acting Chair: You have about six minutes. Sorry.

Ms Kazim: Okay. Sure. Thank you very much.

We will continue with our questions in regard to energy efficiency programs. My next question is: how many solar projects have been funded through EEA?

Ms Phillips: Right. So many. Hon. member, let me pull the exact numbers up. We have had 700 households and businesses that have applied so far, so that'll be 22,000 megawatt hours of new energy. We've actually, since we were elected, in 2015, tripled our installed solar capacity in the province, and I think there's more to do there for sure, but the program is experiencing a good uptake. It was approved for \$42 million over two years, and that's the kind of uptake we've seen so far.

Ms Kazim: Okay. That's good to hear.

How many organizations have received funding through the business, nonprofit, and institution program, and what kinds of improvements is this enabling them to make?

Ms Phillips: In terms of program participation we have a number of firms that have been preapproved and nonprofits and institutions and some industrial investments as well that we've made. In total we have 3,300 applications for various projects, and that's in industrial, institutional, nonprofit, and business. So far we've paid out \$8.6 million roughly in rebates. That represents about 58 per cent of the total rebate budget for that initial tranche, the initial two-

year programs, so we're seeing good uptake there. We have 2.2 million gigajoules of energy saved and 361,000 tonnes of CO₂ equivalent savings, so we're seeing good uptake there. Like I said, those nonprofits are a really diverse group. They're everything from churches to rinks.

Ms Kazim: Yes, indeed, they are.

There was a recent announcement for the PACE program. Is that reflected in this budget? Can you tell us how this program will support homeowners?

Ms Phillips: Yes, it is. The proposal right now that the legislation articulates is that the actual administration of those programs is going to be delivered through the Energy Efficiency agency. The legislation itself simply enables municipalities to provide property assessed clean energy loans if they choose to do so, to enact a bylaw in order to provide that option to people. The rebate itself is already in the voted estimates, and that's the piece that is the actual budgetary consideration. PACE itself: obviously, the people are financing their own stuff with the rebate, but they're doing so in a way that minimizes their upfront costs. We expect that what will happen with this is that there may be quicker uptake of the residential and commercial solar rebate programs, in which case by the end of this fiscal year we will be able to re-evaluate those investments. If we're seeing that budget line being fully subscribed, then we will consider that in subsequent budget years.

Ms Kazim: How many solar projects have been funded on First Nations reserves?

Ms Phillips: There are 32 projects so far. The indigenous solar program is one of the reinvestments of the climate leadership plan that's contained within the estimates. There are 32 of those projects, and then there are a number of other projects within the indigenous climate leadership programming. There's training, there are community energy plans, and there's also feasibility for community energy projects, that kind of thing, involved there.

Ms Kazim: Okay. That's good.

How many solar projects have been funded for schools?

Ms Phillips: The first initiative had 88 schools as part of it, and those were the new builds and part of the capital planning process for the new builds. As part of the funds that we distributed to the municipal climate action centre, that \$52 million investment – Minister Anderson made that announcement at AAMDC, the municipal districts and counties – there will be some more investments in existing schools because that was something that we heard from boards. Those programs will be delivered through the municipal climate action centre because a town hall roof is very similar to a school roof in terms of the overall delivery of that program. It made sense to put those funds there.

Ms Kazim: Okay. What kind of uptake are you seeing for the in-store rebates? How is this affecting local business?

Ms Phillips: Well, I am told that the uptake is, quote, crazy. We were just in Home Hardware out in Sherwood Park the week before last, I think, announcing the next phase of the residential retail products program. We've got 600 participating retailers. What retailers tell us is that people are, you know, coming in for those rebated products in order to make those changes in their homes or in their businesses, and then they're of course spending more money in those home improvement stores. Certainly, I know that Home Hardware, for example, is locally owned, and they've really

been enthusiastic partners in this. We had 4.3 million products sold in spring of '17 and 5.1 million in fall of '17 because we did these in eight-week windows.

The Acting Chair: I apologize for the interruption, but I must advise the committee that the time allotted for this item of business has concluded.

I would like to remind committee members that we are scheduled to meet next on Wednesday, April 18, at 9 a.m. to continue our consideration of the estimates of the Ministry of Environment and Parks.

Thank you, everyone. This meeting is adjourned.

[The committee adjourned at 6:30 p.m.]

