

**Mount Arrowsmith Massif Regional Park  
Management Plan**

**APPENDICES  
May 2011**





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## **APPENDIX A: STAKEHOLDERS**

The following stakeholders were contacted with regard to the development of the management plan. Consultations were completed through a number of methods, including personal interviews, telephone interviews and email contacts.

### **A.1 Government & Advisory Committees**

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- Hupacasath First Nation
- City of Parksville
- Town of Qualicum Beach
- District of Lantzville
- City of Nanaimo
- City of Port Alberni
- Alberni Clayoquot Regional District
- Area A, C, E, F, G, H Parks and Open Space Advisory Committees
- Arrowsmith Water Services (AWS)
- Ministry of the Environment, Vancouver Island Regional Office
- Ministry of the Environment, Ecosystems Section
- Ministry of Forests and Range, South Island Forest District
- Ministry of Forests and Range, Weather Station
- Ministry of Tourism, Culture and the Arts – Recreation, Sites and Trails Branch
- Integrated Land Management Bureau
- BC Parks – Rath Trevor Office

### **A.2 Neighbours & Leaseholders**

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- Island Timberlands
- TimberWest
- Cercomm Communications
- Mineral Claim Holder

### **A.3 Tourism & Education**

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- Mount Arrowsmith Biosphere Reserve

- University of BC, Ptarmigan Research
- GLORIA Project
- University of Victoria, Environmental Studies & Geology Departments
- VIU Resource Management Officer Technology Program
- Island Alpine Guides
- Pacific Rainforest Adventure Tours Inc.
- Rainbird Excursions
- Coastal Revelations Eco-Tours
- Local Botany Experts
- Tourism Nanaimo
- Alberni Valley Tourism
- Greater Nanaimo Chamber of Commerce
- Alberni Valley Chamber of Commerce
- Oceanside Tourism Association
- Parksville & District Chamber of Commerce
- School District 69 – Qualicum Beach
- School District 70 – Port Alberni
- Haahuupayak School
- Parksville & District Historical Society
- Alberni Valley Museum
- Qualicum Beach Historical & Museum Society
- Royal BC Museum

#### **A.4 Outdoor Groups**

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- Federation of Mountain Clubs of BC
- Alpine Club of Canada – Vancouver Island Section
- Island Mountain Ramblers
- Alberni Valley Outdoor Club
- Arrowsmith Mountain Bike Club
- Mid Island Wildlife Watch Society
- Arrowsmith Naturalists
- Nanoose Naturalists
- Mid Vancouver Island Habitat Enhancement Society
- Mid-Island ATV Club

- Alberni Valley Hill Climbers
- Nanaimo Climbers Association
- Mid-Island Sno-Blazers
- Arrowsmith Watersheds Coalition Society
- The Vancouver Island Marmot Recovery Foundation
- Outward Bound
- University of Victoria Outdoor Club
- Dover Bay High School Outdoor Youth Group
- Alberni Fish & Game Club
- Parksville & Qualicum Fish & Game Club
- Mid-Island Castaways Fishing Club
- Island Waters Flyfishers
- Bird Studies Canada
- Strathcona Provincial Park Advisory Committee

#### **A.5 Emergency Services**

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- Arrowsmith Search and Rescue
- Alberni Valley Rescue Squad
- Coastal Fire Centre – Parksville
- Mid-Island Fire Zone – Errington/Port Alberni

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## **APPENDIX B: PUBLIC SURVEY**

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# Mount Arrowsmith Massif **Regional Park Survey**

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## WELCOME

- > **The Regional District of Nanaimo (RDN) and partners are developing a first management plan for Mount Arrowsmith Massif Regional Park.**

The plan will create a long-term vision and management goals for the park and will prepare policies, complete with detailed targets and actions, that will guide decision-making for the park over the next 5 years.

The survey includes a total of **10 Questions** and will take **5 to 10 Minutes** to complete.

**Please complete your response no later than  
*Friday, July 2nd.***

To complete this survey online,  
please go to:  
[www.mountarrowsmithpark.ca](http://www.mountarrowsmithpark.ca)

Please see back page for how  
to return your paper survey



# Mount Arrowsmith Massif Regional Park Survey

## 2. DEMOGRAPHICS

> **We would first like to ask you 3 QUESTIONS about yourself so that we can understand the demographics of people who responded to this survey.**

**1. Which best describes where you live?**

- Qualicum Beach
- Parksville
- Port Alberni
- Nanaimo
- Elsewhere in the Regional District of Nanaimo (RDN)
- Elsewhere in the Alberni Clayoquot Regional District (ACRD)
- Other

**2. In which age group are you?**

- Under 19
- 19 to 34
- 35 to 49
- 50 to 74
- 75 or More

**3. What is your gender?**

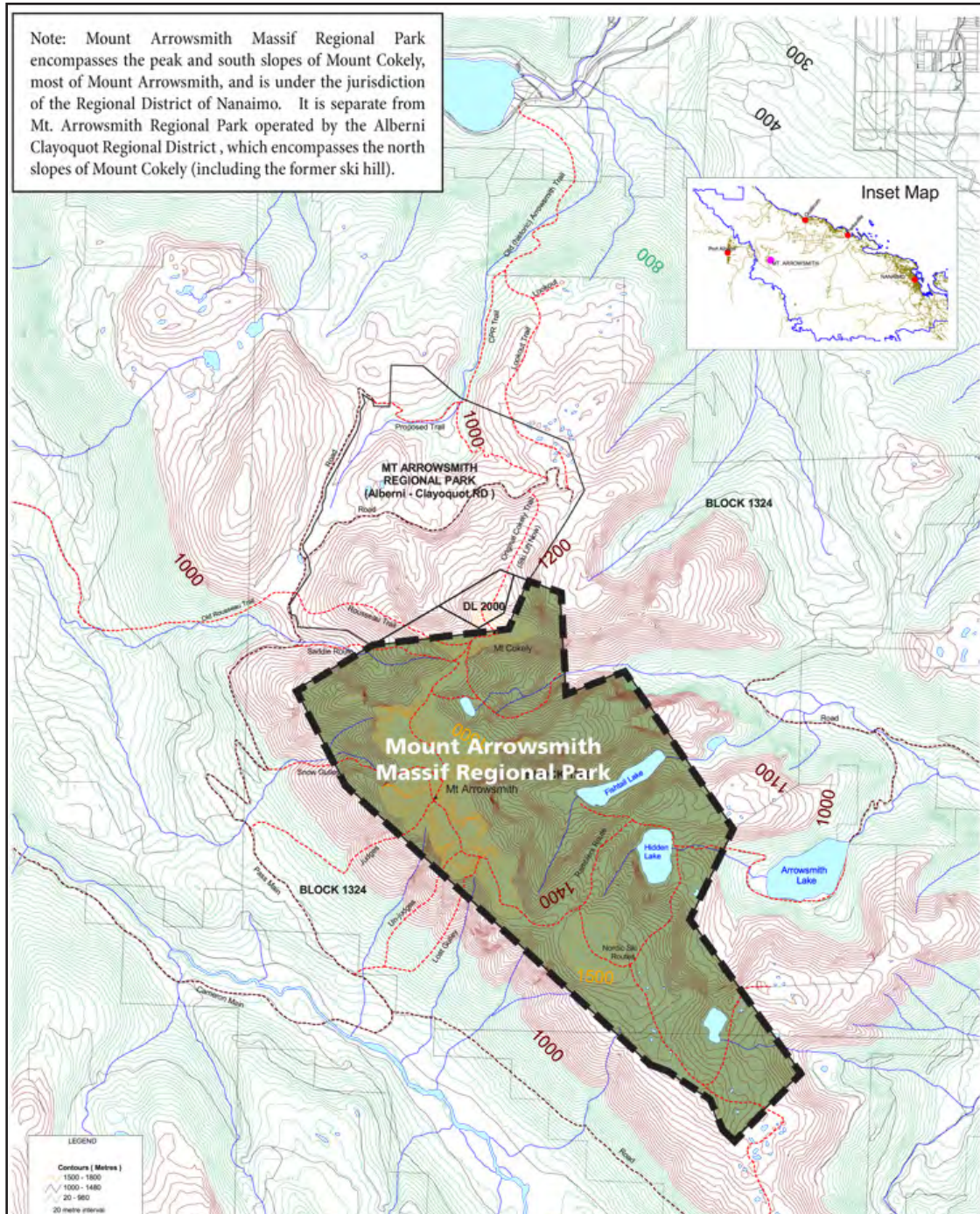
- Female
- Male



# Mount Arrowsmith Massif Regional Park Survey

## 3. PARK USE

- > This section asks for information about your current experiences and impressions of Mount Arrowsmith Massif Regional Park. Refer to the map below for the park boundary and park information.





# Mount Arrowsmith Massif Regional Park Survey

## 3. PARK USE cont'd

### 4. Have you ever visited Mount Arrowsmith Massif Regional Park?

- Yes  
 No → Please proceed to question 5.

> If you answered yes, please proceed to question 4a.  
> If you answered no, please proceed to question 5.

### 4a. On average, how many times a year do you visit the park?

### 4b. When visiting Mount Arrowsmith Massif Regional Park, how do you access the park? (please select all that apply)

- From Albern Highway via Forestry Road (Cameron & Pass Main)  
 By the original CPR Trail from Cameron Lake  
 From Highway 19 via Forestry Roads near Englishman River  
 Other (please specify)
- 

### 4c. When visiting Mount Arrowsmith Massif Regional Park, which trail(s) do you typically use? (please select all that apply)

- Old Arrowsmith Trail / CPR Trail / Lookout Trail / Original Cokely Trail  
 Rousseau Trail  
 Saddle Route  
 Snow Gulley  
 Judges Route  
 Un-Judges Route  
 Lost Gully  
 Ramblers Route  
 Nordic Ski Routes  
 Don't Know  
 Other (please specify)
- 



# Mount Arrowsmith Massif Regional Park Survey

## 3. PARK USE cont'd

4d. What is your level of satisfaction with the following trail aspects?

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Trail Conditions & Maintenance					
Trail Safety					
Ease of Navigation					
Technical Climbing Areas					

4e. Do you have any comments about specific trails within the park?

4f. Do you visit the park with your pet?

- Yes
- No

4g. Do you have any comments about pets in Mount Arrowsmith Massif Regional Park?



# Mount Arrowsmith Massif Regional Park Survey

## 3. PARK USE cont'd

**5. What do you feel are the most significant functions that Mount Arrowsmith Massif Regional Park provides? (please select up to three)**

- Wilderness Experience
- Research/Education
- Visual Backdrop Protection
- Water Source Protection
- Ecosystem/Habitat Protection
- Spiritual & Cultural Significance
- Historical Significance
- Recreation - Hiking
- Recreation - Climbing
- Recreation - Other (please specify)

-----  
 Other (please specify)

**6. What, if anything, limits your use of Mount Arrowsmith Massif Regional Park? (if nothing limits your use, please continue on to the next page)**

- I don't know how to get to the park
- I don't know how to navigate within the park
- The trails are too steep/difficult
- There is not enough parking
- I don't feel safe at the park
- There are not enough facilities at the park
- There is not enough information available about the park
- I don't hike
- Other (please specify)





# Mount Arrowsmith Massif Regional Park Survey

## 4. PARK FUTURE

> The final section of the survey will record your ideas and comments about the future of Mount Arrowsmith Massif Regional Park.

7. **A vision statement, unique to Mount Arrowsmith Massif Regional Park, will help guide the policies and actions of the Management Plan. Please help us create a vision statement by identifying three words from the list below that you feel best describe your vision for the future of Mount Arrowsmith Massif Regional Park.**  
(Please select up to three)

- |  |                                   |                                       |
|--|-----------------------------------|---------------------------------------|
| <input type="radio"/> Recreation                   | <input type="radio"/> Stewardship | <input type="radio"/> Access          |
| <input type="radio"/> Conservation                 | <input type="radio"/> Views       | <input type="radio"/> Spirituality    |
| <input type="radio"/> Habitat                      | <input type="radio"/> History     | <input type="radio"/> Biodiversity    |
| <input type="radio"/> Eco-tourism                  | <input type="radio"/> Community   | <input type="radio"/> Visual Backdrop |
| <input type="radio"/> Adventure                    | <input type="radio"/> Beauty      | <input type="radio"/> Ecology         |
| <input type="radio"/> Safety                       | <input type="radio"/> Education   | <input type="radio"/> Culture         |
| <input type="radio"/> Other Word? (please specify) |                                   |                                       |

8. **Should any of the following amenities be considered for Mount Arrowsmith Massif Regional Park?**

	YES	NO
Directional Trail Signs		
Safety & Conduct Signs		
Interpretive Information - Natural		
Interpretive Information - Cultural/Historical		
Trail Maps		
Benches		

Other Amenities? (please specify) \_\_\_\_\_



# Mount Arrowsmith Massif Regional Park Survey

## 4. PARK FUTURE

9. Please describe up to three improvements/policies you feel should be priorities for Mount Arrowsmith Massif Regional Park.

1)

2)

3)

10. Do you have any other comments or ideas you would like to share?

*thank you!*



# Mount Arrowsmith Massif Regional Park Survey

THANK YOU!

- > Thank you for taking the time to complete this survey. Your responses, along with those of fellow community members, will help inform the Mount Arrowsmith Massif Regional Park Management Plan.

You can continue to be involved in this project by attending one of the upcoming public sessions in:

**Parksville/Qualicum Beach**

Oceanside Place Multi-purpose Room  
830 West Island Highway  
Tuesday, June 22 nd 2010  
6:00pm to 8:30pm

or

**Port Alberni**

Echo Centre Dogwood Room  
4255 Wallace St.  
Thursday, June 24 th 2010  
6:00pm to 8:30pm

- > To return your paper survey:

- Drop it off at one of the public sessions listed above.
- Drop it off or mail it to one of the RDN offices:

**Attn: Graham Gidden**  
RDN Recreation & Parks Department  
Oceanside Place  
830 West Island Highway  
Parksville, BC V9P 2X4

or

**Attn: Graham Gidden**  
RDN  
6300 Hammond Bay Road  
Nanaimo, BC V9T 6N2

- Drop it off or mail it to Hupacasath First Nation offices, marked:

**Attn: Steve Tatoosh**  
Box 211  
5500 Ahahswinis Drive  
Port Alberni, BC V9Y 7M7

- Fax it to the RDN Recreation & Parks Department at 250-248-3159
- Scan and email to GGidden@rdn.bc.ca

**Do you know anyone else who would be interested in filling out this survey?**

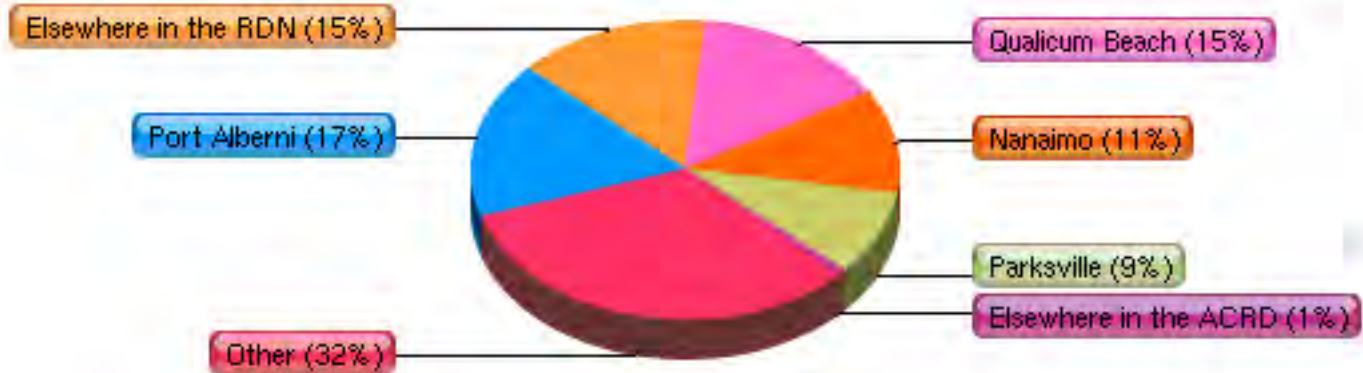
**Please direct them to:  
[www.mountarrowsmithpark.ca](http://www.mountarrowsmithpark.ca)**



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## APPENDIX C: PUBLIC SURVEY RESULTS

### 1. Which best describes where you live?



#### RESPONSE SUMMARY

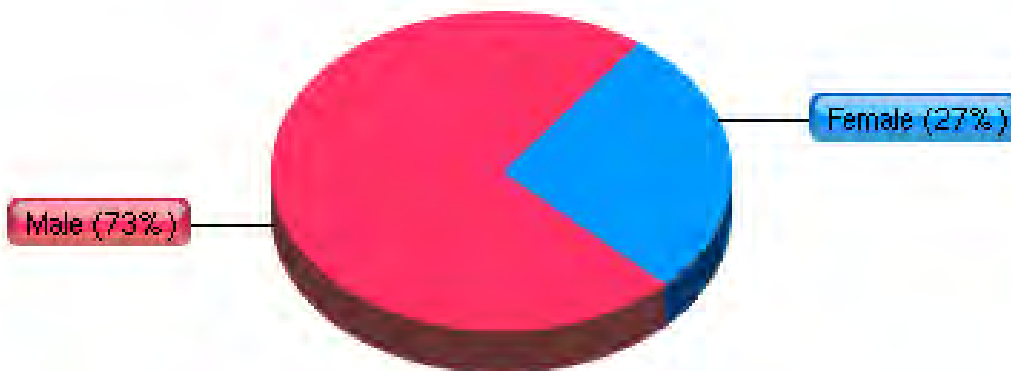
Value	Count	Percent %
Nanaimo	16	11.27%
Parksville	13	9.15%
Port Alberni	24	16.90%
Qualicum Beach	21	14.79%
Elsewhere in the RDN	21	14.79%
Elsewhere in the ACRD	1	0.70%
Other	46	32.39%

**2. In which age group are you?**



RESPONSE SUMMARY		
Value	Count	Percent %
Under 19	2	1.41
19 to 34	26	18.31%
35 to 49	33	23.24%
50 to 74	78	54.93%
75 or More	3	2.11%

**3. What is your gender?**



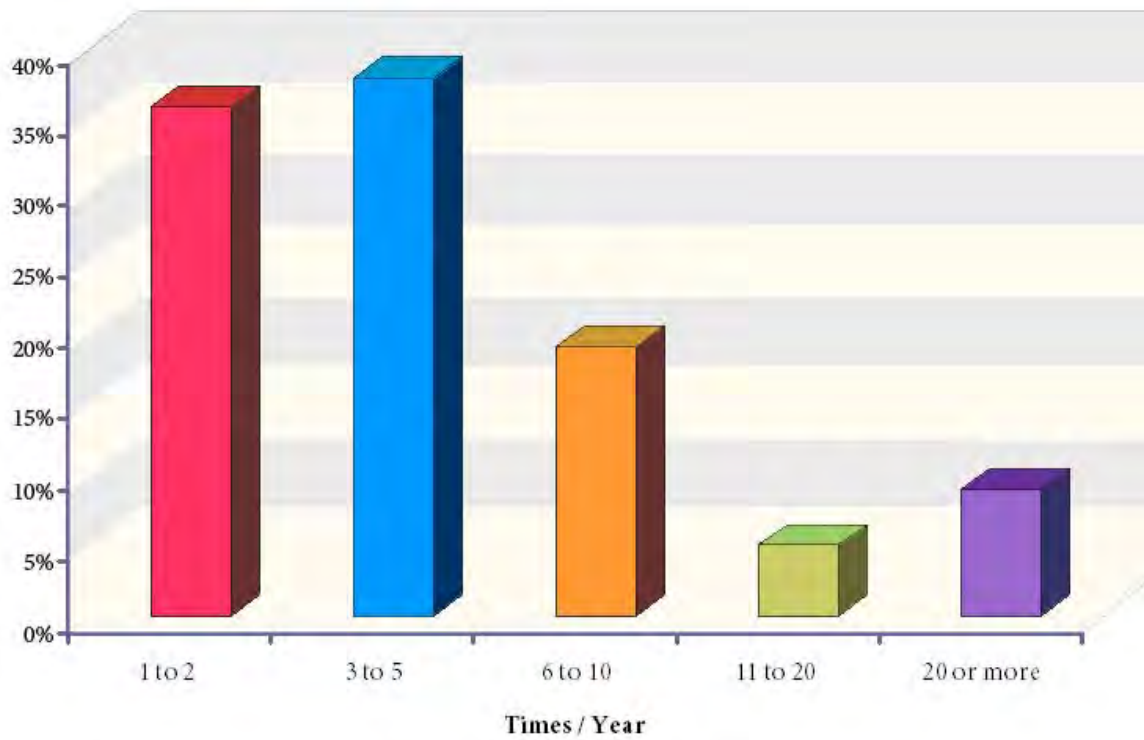
RESPONSE SUMMARY		
Value	Count	Percent %
Male	103	72.54%
Female	39	27.46%

**4. Have you ever visited Mount Arrowsmith Massif Regional Park?**



RESPONSE SUMMARY		
Value	Count	Percent %
Yes	113	90.40%
No	12	9.60%

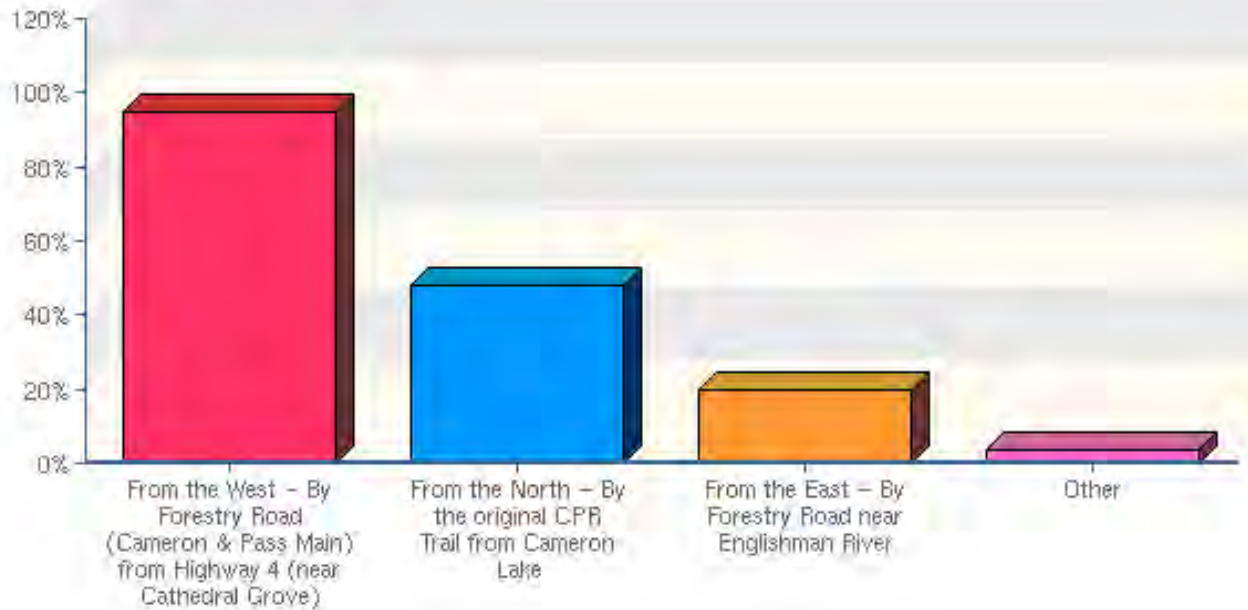
**4a. If yes, on average, how many times a year do you visit the park?**



RESPONSE SUMMARY		
Times / Year	Count	Percent %
1 to 2	36	33.64%
3 to 5	38	35.51%
6 to 10	19	17.76%
11 to 20	5	4.67%
More than 20	9	8.41%

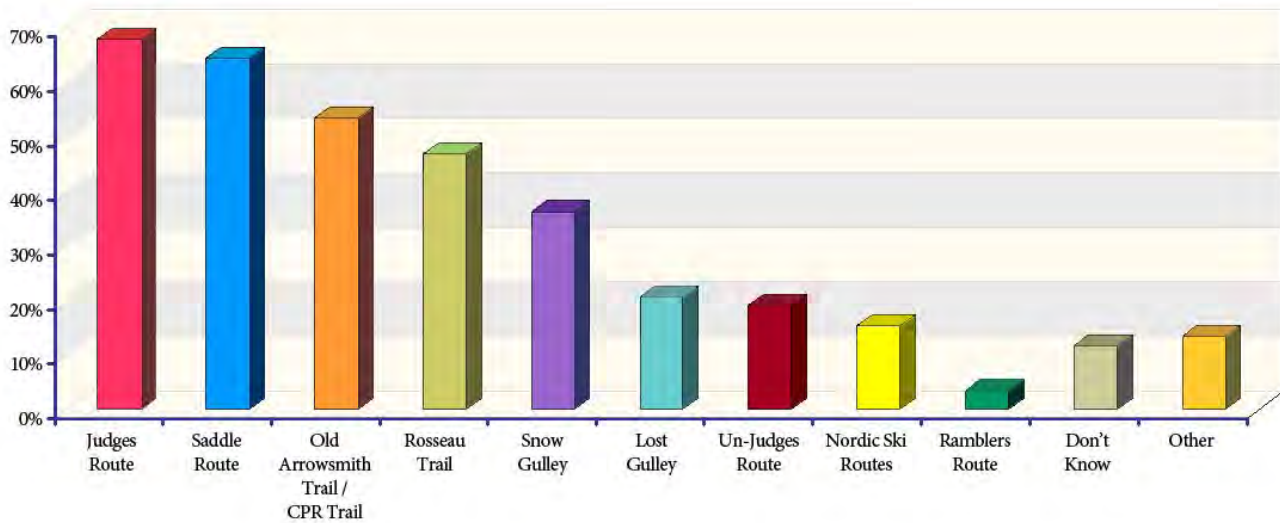


**4b. When visiting Mount Arrowsmith Massif Regional Park, how do you access the park? (please select all that apply)**



RESPONSE SUMMARY		
Route	Count	Percent %
From the West - By Forestry Road (Cameron & Pass Main) from Highway 4 (near Cathedral Grove)	106	94.64%
From the North - By the original CPR Trail from Cameron Lake	54	48.21%
From the East - By Forestry Road near Englishman River	22	19.64%
Other	4	3.57%

**4b. When visiting Mount Arrowsmith Massif Regional Park, which trail(s) do you typically use? (please select all that apply)**



RESPONSE SUMMARY		
Route	Count	Percent %
Judges Route	75	68.18%
Saddle Route	71	64.55%
Old Arrowsmith Trail / CPR Trail / Lookout Trail / Original Cokely Trail	59	53.64%
Rosseau Trail	52	47.27%
Snow Gulley	40	36.36%
Lost Gulley	23	20.91%
Un-Judges Route	21	19.09%
Nordic Ski Routes	17	15.45%
Ramblers Route	4	3.64%
Don't Know	13	11.82%
Other	15	13.64%

**4d. What is your level of satisfaction with the following trail aspects?**

RESPONSE SUMMARY						
Item	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Total
Trail conditions and maintenance	0.9% 1	7.5% 8	29.0% 31	47.7% 51	15.0% 16	107
Trail safety	0.9% 1	8.4% 9	30.8% 33	42.1% 45	17.8% 19	107
Ease of navigation	2.0% 2	9.8% 10	34.3% 35	39.2% 40	14.7% 15	102
Technical climbing areas	1.1% 1	1.1% 1	50.0% 46	34.8% 32	13.0% 12	92
	<b>5</b>	<b>28</b>	<b>145</b>	<b>168</b>	<b>62</b>	

**4e. Do you have any comments about specific trails within the park?**

COMMENTS
<b>Saddle Route</b>
Saddle trail is quite good up to timberline. The trail beyond is bit scary for some challenged with heights or if there is a lot snow in the gully of the saddle. In early July the flowers can be wonderful.
Concerned with erosion on steep sections of Saddle Route, access to Bumps, and Judges Route.
Saddle RTE erosion is a concern.
Saddle Route needs proper routing to avoid spring and summer flowers
The "saddle" route is a very high use area that requires careful attention to management.

## COMMENTS

Saddle Trail needs consolidation into one corridor. In several locations it is starting to braid into parallel routes which is detrimental to the ecology - particularly an issue in the meadow areas near the top of the trail.

### Rosseau Trail

Have been on Rousseau trail several years ago and at that time better marking of the trail is needed for return trip at the point of descending from the ridge. There is only one way down off the ridge and hikers could run into cliffs.

Rosseau trail should be re-established through block 35, including 2nd growth areas. Negotiate an end to logging over and near existing trails beginning on private lands.

### Judges Route

Probably it is appropriate to improve the Judge's Route trail with a view to limiting further erosion.

Judges route needs work to avoid further erosion in some areas.

Concerned with erosion on steep sections of Saddle Route, access to Bumps, and Judges Route.

It would be good to make the Judge's Route even safer (it is already good) by installing ropes in some of the steep scrambling terrain.

Judges RTE erosion is a concern.

Only pray that the lower portions of Snow Gulley and Judge's route trails out of the park remain unlogged.

Only have done the Judges Route, and I love it the way it is.

Judge's Route, the only non-technical route to the summit Arrowsmith is very much used & tricky underfoot with erosion & scree in places. The trails are all satisfactory to a backcountry & rough standard. All require vigilance & some experience off the chip trail.

### Un-Judges Route

I was very disappointed to have encountered a large area of logging debris on the Un-judges route after the logging companies had supposedly said they wouldn't go near the trails.

## COMMENTS

The more obscure routes like Un-Judges and Lost Gully need to be protected, even though they are not well marked.

Un-judges and lost gully are not well marked and as such I have yet to make any serious effort to hike them. Even hikers that tell me they've been up these trails say they are very hard to find for someone who has not been personally shown where they are.

### Access to Trails

Should preserve access trail to the park as part of the park.

I have tried to enter the park from the Alberni Side. The access roads were all blocked, and it didn't seem safe to proceed on foot.

Access is generally across privately-owned lands

I am concerned about the approaches to the trails since all of them sit within private land. Some approaches have already been cut (Unjudges). Will we have continued access to the park?

Access on the road is sometimes difficult in the winter. Would it be possible to schedule snow clearing?

### Wayfinding

More signage needed.

Trails need to be clearly marked and more developed.

As an experienced mountaineer I have no problem route finding on the Arrowsmith Massif, however, for the less experienced I would like to see permanent and consistent format for signage at trailheads. Flagging the routes such as the Judges, Snow Gully, Rosseau Route, Saddle route, Un-judges and Lost Gully are unsightly therefore I would like to see permanent reflective (shine-up in the darkness with headlamps) trail markers indicating the route. This should be done by those experienced with the said routes who know the locations where the inexperienced have problems.

It would be good to put Regional District signs on all routes throughout both parks and at the junction with the highway to Port Alberni.

It's very well marked coming from southern Alberta hiking in Waterton National Park, I like that this is one of the only true hikes in the regional district of Nanaimo.

## COMMENTS

The Judges Route, Saddle Route and Rosseau Trail are the only marked trails. The rest are sparsely flagged routes.

Signage indicating where trails/routes begin will help inexperienced hikers and first-time visitors.

I find there is a lot of smaller trails that branch off from the main trails so it can be a little confusing.

### ATVs

We need to make sure that motorized vehicles (ATV's etc) are unable to access the hiking trails.

Keep off road vehicles OUT!!!

Have been bringing friends up Cokely, Saddle and Judges routes for more than 25 years - all great trails with rewarding views. Fortunately most of the alpine areas are NOT accessible to motorized vehicles - ATV's and Snowmobiles. Lower down, on access roads and routes, however, they can be an annoyance and safety hazard for people on foot, skis or snowshoes. THIS IS A CONCERN as many of these people don't seem to care about their impact on the experience of others. I'm not sure a Park Plan can address this issue as it is impossible to police, but it is a concern.

Trails for OVH (ATVs, etc.) are required.

We need ATV trails - allow clubs to build trails and bridges.

Would like to see atv access to the top of the old chair lift.

### Pets on Trails

Previous unpleasant experiences with off-leash dogs have almost knocked us over or ruined wilderness pictures, sitting areas.

My dad & mom, take me out to many places. I do not like it when big dogs run ahead of their owners and bump into us. My sister is small and doesn't like it either.

Don't like big doggies running up the trails bumping into us. My little sister gets scared too. My dad or mom has to drive us.

Not pleased that sitting along trail edges for a break or photo op can be intruded upon by off-leash pets or barking.

### Other Comments

## COMMENTS

The 'trails' are in fact mostly routes, developed by and for hikers and other self-propelled outdoor enthusiasts, and as such are not maintained. I travel them at my own risk, with my own navigation aids and always aware that my safety is my responsibility.

The beauty of Mount Arrowsmith Park is the ease of accessibility to alpine and "mountainous" terrain with very simple and rudimentary trails and improvements.

I wish there were better access via Hidden Lake/Arrowsmith Lake. Access is normally prohibited

Very much appreciate the efforts of volunteers in keeping the trails cleared and accessible; we usually use the Old Arrowsmith Trail.

Thank you to the people who maintain the trails. Hopefully, we can keep mountain bikers off them.

Can't really comment on the trails, as they are covered in snow whilst I'm up there :)

Some trails are steep sided. Some people just don't clean up after themselves or pets nor yield to younger hikers.

Trails are okay with boots or good runners on.

Trails vary a great deal. Each seem to serve their purpose (eg Un-judges isn't as well marked as the saddle). Trails that I don't "typically" use is just because I haven't had a chance to get there yet.

Pleased that several trails do not show the degree of damage to roots mosses that other park systems display.

Keep them simple and rustic.

Hi I already submitted a survey earlier, thought you should be aware of some concerns that I have seen reflected on an outdoor forum, and I agree with the person's concern that many probably will also be troubled about if restrictions are imposed on any current overnighiter-cross country back-packing, See next page...

Fishtail is a jewel. Better access would be awesome

I've always found the trails fine. Their current level of maintenance seems fine to me, whenever I come across an obstacle or safety concern I remedy it as a matter of responsible hiking.

**4f. Do you visit the park with your pet?**

RESPONSE SUMMARY		
Response	Count	Percent %
No	26	70.27%
Yes	11	29.73%



**4f. Do you have any comments about pets in Mount Arrowsmith Massif Regional Park?**

COMMENTS
They should always be on leash and their feces should be picked up.
On leash only.
Should pick up after their pets.
Big fun of Days in the Park as long as owner has full control at all times no chasing wild life etc.
See next page. (I do not approve of domestic animals / pets in park. Usually conflicts will arise from our experiences.)
I think pets are fantastic.
No pets. People leave dog feces right beside the trail all the time.
Leave them at home.



## COMMENTS

Don't see a problem with allowing dogs on the trail so long as they are kept under control (no mess left behind) and leashed if necessary.

I have run into a number of well behaved dog owners, and try to be responsible myself. I have got some glares from other people, but anyone I have talked to on the trail does not seem to mind.

I don't mind them.

Strictly limit them! This is a fragile alpine ecosystem.

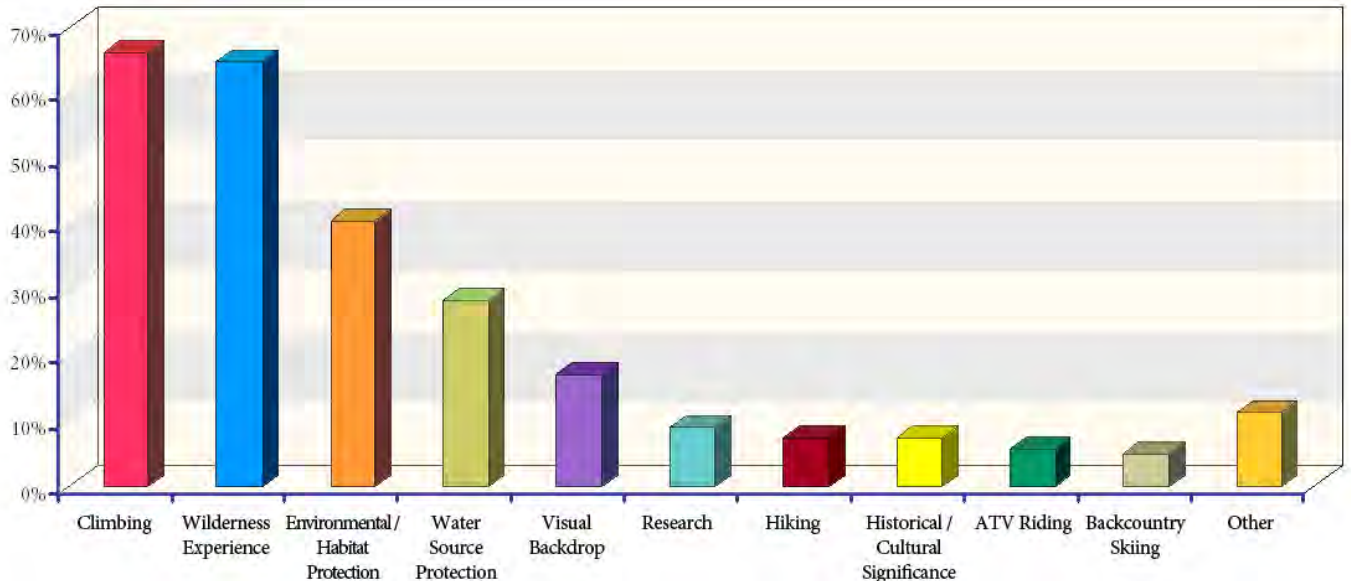
Haven't seen any problem with pets to this point.

I don't recommend--my dog had a hard time-and there was sensitive wildlife (e.g. grouse with chicks and a black bear)--so NO PETS.

Pet's should be discouraged or on a leash.

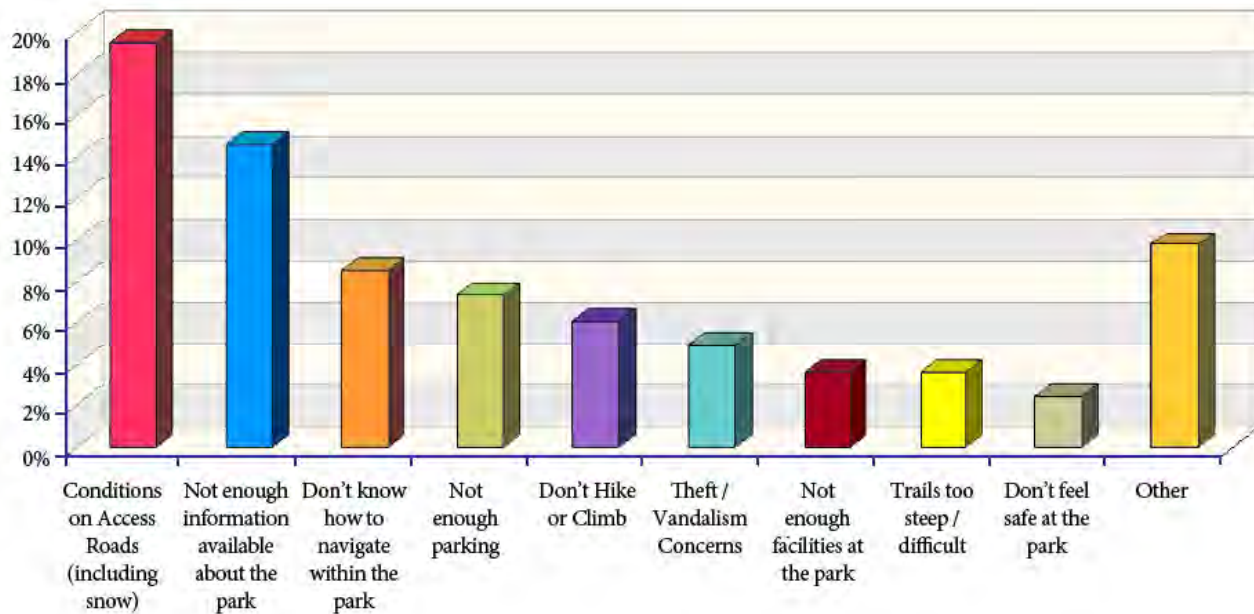
I hike everywhere with my dog. It's good for him and it's good for me. I've not had any problems with him or any other dog I've met on backcountry trails. I would not be in favour of restricting pet access.

**5. What do you feel are the most significant functions that Mount Arrowsmith Massif Regional Park provides? (please select up to three)**



RESPONSE SUMMARY		
Response	Count	Percent %
Climbing	82	66.13%
Wilderness Experience	80	64.52%
Environmental / Habitat Protection	50	40.32%
Water Source Protection	35	28.23%
Visual Backdrop	21	16.94%
Research	11	8.87%
Hiking	9	7.26%
Historical Significance	9	7.26%
ATV Riding	7	5.65%
Backcountry Skiing	6	4.84%
Other	14	11.29%

### 6. What, if anything, limits your use of Mount Arrowsmith Massif Regional Park?

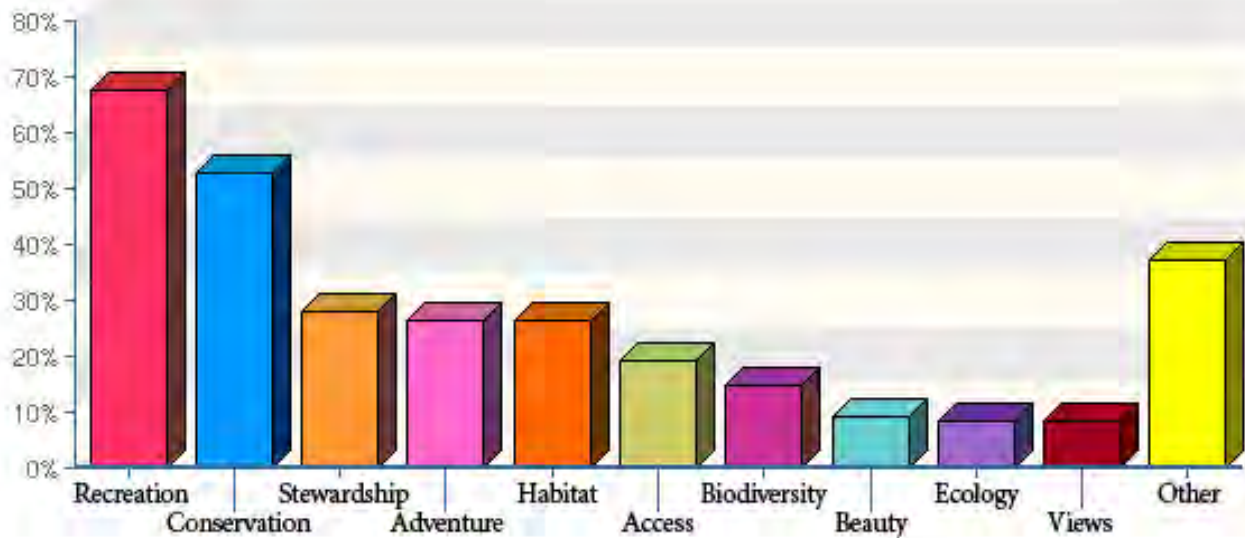


RESPONSE SUMMARY		
Response	Count	Percent %
Conditions on access roads (including snow)	16	19.51%
Not enough information available about the park	16	19.51%
Don't know how to navigate within the park	12	14.63%
Not enough parking	7	8.54%
Don't hike or climb	6	7.32%
Theft / Vandalism concerns	5	6.10%
Not enough facilities at the park	4	4.88%
Trails too steep or difficult	3	3.66%
Don't feel safe at the park	3	3.66%

**RESPONSE SUMMARY**

Response	Count	Percent %
Don't know how to get to the park	6	4.84%
Other	14	11.29%

**7. A vision statement, unique to Mount Arrowsmith Massif Regional Park, will help guide the policies and actions of the Management Plan. Please help us create a vision statement by identifying three words from the list below that you feel best describe your vision for the future of Mount Arrowsmith Massif Regional Park. (please select up to three)**



**RESPONSE SUMMARY**

Response	Count	Percent %
Recreation	82	67.77%
Conservation	64	52.89%
Stewardship	34	28.10%

RESPONSE SUMMARY		
Response	Count	Percent %
Adventure	32	26.45%
Habitat	32	26.45%
Access	23	19.01%
Biodiversity	18	14.88%
Beauty	11	9.09%
Ecology	10	8.26%
Views	10	8.26%
Other	9	37.19%

**8. Should any of the following amenities be considered for Mount Arrowsmith Massif Regional Park?**

RESPONSE SUMMARY			
Item	Yes	No	Total
Directional Trail Signs	82.9% 92	17.1% 19	111
Safety & Conduct Signs	71.2% 74	28.8% 30	104
Interpretive Information - Natural	71.0% 71	29.0% 29	100
Interpretive Information - Cultural/Historical	68.8% 66	31.3% 30	96
Trail Maps	85.5% 94	14.5% 16	110
Benches	24.4% 22	75.6% 68	90
	<b>419</b>	<b>192</b>	

**9. Other amenities? Please specify.**

**COMMENTS**

A couple of port-a-potties.

Another more readily accessible route, other than the CPR trail from Cameron Lake.

As little as possible, keep costs down.

Base camp parking.

Build composting toilet.

Cabins.

Camping.

Concrete picnic tables.

Cross-country ski trail.

Designated backcountry camping areas, tent platforms and maybe even a hut.

Designated camping facilities allowing alpine access.

I think leaving it a wilderness area should be good enough.

Identification of acceptable places to park.

If use increases need for out-houses.

If you're going to increase the use by promoting this park I would suggest public toilets at the base of the saddle route and the base of the old ski lift where power and septic field already exist. This would allow last minute relief before hiking and therefore limit wilderness fecal deposits.

Instruction kits with plastic trowels and/or baggies at the Judges route area to properly dispose of human feces.

Keep as natural as possible.

Keep the park as natural as possible, therefore limit the amenities.

Lavatories will be needed with increased use.

Maintain a wilderness atmosphere and limit any evidence of human presence.

Maybe a trailhead structure.

Nothing is needed, just leave it as is and ensure access.

## COMMENTS

Out Houses.

Outhouse at trailhead.

Outhouses, food caches, tent pads.

Parking at Cameron Lake access.

Parking, garbage collection containers, law enforcement.

Permanent ropes on steep technical sections of the Judge's Route.

Pocket size trail maps available to download should be priority.

REGULAR BIODIVERSITY BLITZES.

Restroom every 100K.

Safe places to park at popular areas on logging roads, 2wd condition logging roads, non-gated logging roads.

Shelter.

Signs should only be placed at bottom of trails, information should be brochure style and web based.

Small, pretty wooden outhouses like we see at Campbell River Mountain Bike Trails near the road, Snowden.

Small shelters.

Small toilet pits at the road like we see at snowden mtn. bike park-trails, Campbell River.

Some form of toilet at judges and saddle routes that are nearly vandal proof.

Something that lowers risk of vandalism to our vehicles.

Some toilet facilities [two] located near the road [saddle & judges].

Strictly limit the amount of added infrastructure ie. kiosks, outhouses, boardwalk, bridges, all cost \$ to upkeep.

Toilets.

Toilets, garbage, wilderness camping.

Toilets, tent platforms for wilderness camping.

Want a hut on summit.

Water slide.

**10. Please describe up to three improvements/policies you feel should be priorities for Mount Arrowsmith Massif Regional Park.**

COMMENTS
Access
Maintenance of access roads.
Maintenance of access roads.
Access.
Access for elderly and disabled – some well marked easy trails.
Access roads should be improved.
Access up the logging road which goes up to Saddle Trail etc.
All roads to the park should be open to the public all year.
Assured access via logging roads.
Assuring access with park corridor to Cameron Lake.
Improved winter access.
Keep roads passable for passenger cars in summer.
Maintained logging road.
Maintaining access for recreational users.
Maintaining the road well up to Arrowsmith/Saddle route.
Open to public.
Road access.
Road access and parking.
Road conditions: I cracked my oil pan last year on a rock that was on pass main.
Year round access on the logging roads to the various trailheads.
Road maintenance.
Road maintenance.
Access for visitors to experience the area (parking spaces, hiking trails, signage, maps).



## COMMENTS

Another access point, readily accessible not subject to the private land owners restrictions.

Increased road maintenance on the logging roads.

Maintain access through private land.

The CPR trail is difficult to access by 2 wheel drive cars.

Yearly funds should be dedicated to gradually making permanent weather sustainable upgrades to the access road.

Road upkeep to some degree from Port Alberni.

Access 24hrs, 7 days a week.

Adjacency & collaborative relationships with Private landowners re: access & maintenance.

Engage local land owners in a discussion regarding the long term future of the area.

Ensure high standard of road maintenance and ensure road use agreement is in place. Potentially the single most limiting factor to park use.

Improve accessibility through the Englishman River approach.

Improved access.

Road maintenance.

Road work.

### User Fees

"No users fees", a similar promise was made regarding access with car top boats canoes and near proximity parking on Horne Lake, then abruptly in 2009 that changed and now fees appear to exist even for canoes and parking must be done far from launch site, leaving gear alone in canoes or boats and some people with disabilities or small children are left with some real issues here. Point is, this change in policy without regard to earlier commitments is wrong: Mt. Arrowsmith should remain fairly open and uncomplicated to all current & future user groups and be safe for young people & physically disadvantaged users.

Park should always remain free, never a fee for use or parking.

### Environmental Protection

## COMMENTS

A covenant to create buffer zones around the park boundaries.

Do not let Economic policies override the environmental values of this land.

Maintain the integrity of the native flora and fauna.

Minimal impact when upgrading trails etc. (ie. No more logging/tree felling, etc.).

Preserve remaining forests.

Protection of resources/environment.

Remove weeds.

Stop degradation of sensitive ecosystems - particularly important on meadows.

Wildlife and habitat conservation.

Increase butterfly/food plants.

Increased public education about the fragile alpine habitat, flora and fauna.

Interpretation & security of the biosphere..., watershed, biodiversity, endangered & rare species.

Maintaining wilderness experience.

Preserve wildlife habitat.

Protect the natural beauty.

Protection of wildlife values.

Water values and wildlife consideration.

Educate about the biodiversity of the area so people will respect the place more.

Maintain the natural environment for a wilderness experience. Signage, benches, metal fencing do not constitute a wilderness area.

Pack in pack out -leave no trace-respect fauna and flora.

Protection of watershed values.

Regional stewardship of water.

Restore biodiversity.

## COMMENTS

Essentially no additional expenditures needed on amenities, park should remain low impact and low exposure, keep it wild & natural & recognize local resident's continued access and do not allow over-exposure to spoil the natural quietness and cleanliness of this area.

### Forestry

Safety concerns when logging being done.

Dialogue with logging companies owning access and adjoining lands.

Extending base area to prevent logging.

No more logging in the area.

Try to limit logging near the trails.

Stop all clear-cut logging.

### Signage & Information

A good sign to be replaced at the summit.

Directional trail signs.

Ease of getting there and more clear instruction on why I should go.

Get rid of all the flagging and put up a few signs to keep people on the right trail so they aren't making their own all over the mountainside.

Improved signage.

Install clear trail head signs (but expect to replace them regularly).

Installing signage on all the trails through the park.

Proper trail marking to avoid trail webs and destruction of habitat.

Remove coloured tape marking trails - they are a form of pollution.

Signage.

## COMMENTS

The trails are naturally steep and difficult, it is a mountain and inherently unsafe. A sign should advise people about this. But trails should remain rough. Limited access will help protect the area.

Trail markers.

Trailhead only signs telling the public it is a mountain park and explaining what that means.

Trail maintenance; clearing deadfall, etc.

Access to maps and signage.

Also by Cameron Lake visual signs and trails.

Conduct / info signs in parking areas only.

Information.

Maps of the park.

Marking trails and trail leads.

Park information should be available.

Providing some signage to show where trails start to match up to hiking guides.

Signage.

Signage and distance.

Signage that promote the wilderness value first.

Trail maps.

Trail maps/trail signs.

Trail markers need to be higher on trees as they get covered up when there are deep snows.

Trail signs at bottom of trails and only at the bottom.

Clearly identify what activities are prohibited (eg. Bikes, picking flowers, etc.)

Conduct information, dangers and equipment required for park safety.

Educating public on how to behave around bears/ cougars/ deers etc.

## COMMENTS

Navigation.

Post signs and telephone #s on who to call when vandals strike or concerns arise in this area.

Proper signage.

Reflective trail markers.

Signage.

Signage at trail intersections.

Signage.

Signage/directions so the public know where they are.

### Trails

Create a trail maintenance coordination program for volunteers.

Develop an alternate Rosseau Route to the heather meadows and first peak to reduce the traffic on the Saddle route.

Development of multi-use trails that would allow equestrian, mountain biking and motorized use as well as hiking.

Erosion control on Saddle Route and Judges.

Fix Judge's Route trail to minimize erosion, and to better mark the trail, including for winter travel.

Preserve natural trails as much as possible.

Proper trail to hidden and fishtail lakes with a stocking program.

Trail work to minimize damage.

Better trail maintenance.

Erosion control.

Investigate how other parks handle trail erosion problems.

Safer trails.

Securing access to the key trails and ensuring the road is ploughed in winter.

Stop trail braiding on Saddle Route.

## COMMENTS

Enhancing safety on the Judge's Route.

Improve trails to reduce environmental impacts and ensure public safety.

Increase boundaries to access roads (to include all of Judges Routes trail for instance).

### Motorized Vehicle Access - Yes

Access for motorized vehicles – ie. ATV and Trail Bikes.

ATV access to the top of the old t-bar.

Designated ATV routes would be very beneficial for local and out-of-area riders.

Legal road access into park for ATVs.

### Motorized Vehicle Access - No

ATV Ban.

Ban or limit ATVs, snowmobiles.

Enforce non-motorised access ie. ATVs, Skidoos.

Keep out the ATVs and snowmobiles.

Keep the quads out.

Limit motorized vehicle access.

No ATV's!!!

No motorized vehicles or bicycles off the roads.

Protection of the Park & adjacent areas from motorized misuse. i.e. snowmobiles on Cokely Summit.

Work to keep out motorized vehicles (snowmobiles, ATVs).

Banning snowmobiles.

Ensure no motorized access and use.

Improve gates to exclude ATV-Motor Bikes.

Motorized vehicles restrictions.

No 4X4's !!!!

**COMMENTS**

No motorized recreational vehicles allowed, ie. snowmobiles, ATVs.

Restrict ATV and snowmobiles to main road only.

ATVs, dirtbikes and snowmobiles should not be allowed in park.

No motorized vehicle access with stiff penalties.

NO motorized vehicles, e.g. dirt bikes, quad bikes.

**Parking**

Access parking.

Parking.

Parking large enough to unload ATVs.

Safer parking.

Designated parking areas.

**Camping**

Creation of designated core camping areas (outhouses, tenting pads, food cache, grey water).

Leave no trace camping.

No fires.

No fires allowed.

Wilderness (hike-in) camping.

Camping is as Canadian as hockey.

Designated (low impact backcountry) campsites.

Designated camping areas.

Designated camping areas in the alpine to protect sensitive areas.

No fires.

Put some designated camping areas in.

Toilets and tent platforms for camping.

**COMMENTS**

**Pets in Park**

No doggies.

No doggies.

Areas for dogs off leash.

Pets on leashes and their feces packed out.

Pets should be limited or not allowed.

**Amenities**

Toilets

Chairs & tables.

Fire pits near roads and start of trails somewhere.

Fire-pits near the roads near the trails.

Concrete picnic tables.

Small covered area (storm shelters).

A hut to help with winter hiking.

Garbage container at the trail head to help ensure are trails are kept clean and natural.

More boardwalks.

**Garbage & Vandalism**

Garbage.

Less vandalism.

If any facilities added, must be with vandalism alarms to outside.

**Commercial Activities**

Commercially guided groups registered, ones with an educational component not charged any fees.

Limit or exclude commercial use.

No commercial activity.

**Other**



## COMMENTS

Compliance monitoring for illegal activities.

Encourage research.

Get the ski hill going again. Have the road accessible for skiing.

Keep it simple.

No improvements, leave it natural and minimalistic.

The park should be enlarged to incorporate a wider area.

Applying for world heritage status.

Clear windfalls from forested areas.

Expansion of the protected areas.

Funding for trail projects.

Possible closures during fire seasons.

Promoting "clean" hiking/ back-country usage.

Remove when and if possible ugly antenna farm (with gas engine generator!!) on Mt. Cokely (Solar).

The old ski lodge area needs some organization/ structure/ signage/ vehicle control.

Monitoring by park personnel to prevent damage and abuse, and to maintain condition of area.

Moratorium on any more communication towers on summits.

Park boundary markers on key trails so those of us who can be the 'eyes and ears' know if things are occurring within the park.

Weather station for avalanche forecasting.

**11. Do you have any other comments or ideas you would like to share?**

**COMMENTS**

Open up the park to ATV Clubs / open up to ATVs with identifiers (licenses - club or provincial).

Excellent. With the aging demographics it is important that agencies begin to recognize the limited abilities of some to be able to enjoy the outdoors.

Parks are for all. Multiuse trails are necessary. Present roads should remain open to all users.

Acquire the lower slopes of Arrowsmith to protect the forest that leads to the alpine.

I would not like any improvements, not to destroy the natural beauty and plant biodiversity. Information about access up the logging road going up to Saddle Trail maybe on a website or a message on a phone line: road conditions or logging safety concerns on that road.

I am excited and look forward to the future of this beautiful mountain.

Thanks for the opportunity for input.

Mt. Arrowsmith is not for everyone. Any improvements should not imply that it is just a stroll in the park. They should not lead the unwary to put themselves at risk or attempt to reach places unsuited to their abilities and experience. Any interpretive or directional signs should be unobtrusive.

There are several reasons I said no to interpretive information. With the internet, books and brochures there is a lot of both natural and cultural information available that park users can carry with them on the hikes. Keep costs down by only have trailhead signs. I hate to say it but vandalism is an issue and even trailhead signs may have to be replaced. Weather over the long term also causes signage to deteriorate. Trail maintenance is an ongoing issue especially after severe winters, therefore it is essential to have crew repair the trails as soon as weather permits.

## COMMENTS

It is fantastic to have Mount Arrowsmith protected as a Regional Park, hats off to the many volunteers, staff and caring citizens that have contributed to this. Please keep things simple, all parks do not have to be open and accessible to everyone, and only by limiting access will you be able to protect the unique and valued features of the area.

The bottom line here, in the newly created park is, keep it natural... keep it wilderness. There is no need for any additional infrastructure at this time. Protection of the wilderness values are paramount.

In my opinion, the only place directional signs are needed is in the trees where you can't see where you are going, and might need advice at a junction. If you put them in the alpine, where people can see ahead enough to make their own choice, you will just encourage them to go where they might get into trouble. They should be able to tell from their pocket trail map that Mt Arrowsmith is to the right and Mt Cokely to the left, and if it's foggy, they shouldn't be exploring up there anyway, at least not if it is their first time up.

We have completely stopped any ideas of actually leaving a vehicle parked and then camping up on the mountain due to the vandalism and theft - due to this we are very concerned that the park will never gain the kind of public support with such reckless individuals being allowed to do whatever they please with no kind of policing of property. We would volunteer at least once a year to drive up and forgo any actual hiking and if trained in some manner or at least be given some kind of ID to be 'delegated' to monitor people's vehicles/property to provide some basic kind of deterrence to thieves and vandals. If I knew someone was there like a park ranger or like person we'd take far more trips up there and stay longer.

I would prefer to have the Arrowsmith massif park remain a wilderness setting as the park already has a special eco designation. Minimizing human impact is essential to preserve this wilderness area.

Do not advertize for more hikers. You need to take a clean it up as you go approach! The hiker will come anyway!!!

I would like to see the area remain open to everyone not just a limited interest group like hikers. Quad riders should be allowed to ride to the top of the old chairlifts along the existing old roads and trails. Not everyone has the ability to walk or hike.

## COMMENTS

Thank you for undertaking this planning, protecting the designated park, and conducting this survey. As a new resident of the area, I view conservation of our nearby natural environment as a top priority, and I will support your efforts.

Combine new park with the old park under one management - RDN Nanaimo.

Try to return area to its natural state. Discourage development, logging, encourage non mechanized use.

I would love to see the watersheds off Mount Arrowsmith toward Parksville restored to grandeur. This would require protection along all the rivers so that they could return to their natural state. If we could return the rivers to their natural state then maybe they would support salmon again. We may then be able to help support the salmon populations and possibly provide food for our communities as well. I'd like to learn more about the history/culture of the Hupacasath and the area as well.

Thank you to Peter and the others for undertaking to do this.

Snowmobiles pose a risk in the winter, and ruin the peaceful nature of the place. Most of the sledders I've encountered have little to no avalanche training. A lot of parks ban snowmobiles, and I think it's a good idea.

Please do not place "eco-tourism"- economy above Environmental values. The beauty of this entire area lies in its low-key local values, and its status as the only real last tall alpine mtn. this end of Vancouver Island, without all the trappings & mayhem and "tourons" witnessed close to other urban areas. Less exposure is better, and equals less costs to the residents overall. Really value the wildlife and birds & clean water & silence over tourism hands-down.

No ugly parking meters like at Rathrever or englismen, park should be free. Open all day or night, takes a long time to hike or get home.

## COMMENTS

We would volunteer to take our truck and camper up several times a year for at least one weekend 2 overnights, to act as deterrents to vandals, pass on information about the park, promote the park, talk safety with appropriate training official uniform and /or signage. Basically act as park stewards as is done in Yellowstone or even smaller parks such as East Sooke Park. Bright, informed and cheery greeters to provide all comers to act responsibly, care for the park, and maybe most of all deter vandals - this experience crushed our enthusiasm in visiting the park many times. When and other parts of the team would be there would possible be advertised to bring more people out such as families and they'd know they would be safe to trek around. This would also bring total newbies to this fab mountain and provide more potential volunteers to pool from.

Never allow recreation homes in area--unless a major ski development is worked out with gondola access--which might be possible if working with Timber West.

Access for snowmobiling in the winter.

Thank you for giving me the opportunity to have input...I am very happy to see the progress that has been made to date and look forward to continued advancement and preservation of this precious wilderness.

The most beautiful park on the island. Untapped resource.

I understand that Peter R leads hikes up Arrowsmith that are organized by the Recreation Centre. It would be great if this could be offered monthly - maybe involving other trip leaders to minimize the impact on Peter. I suggest that the trail link with the Vancouver Island Spine Trail when developed: [www.vispine.ca](http://www.vispine.ca). This will travel through Port Alberni - from the Beauforts to the Log Train Trail into Port Alberni and then south along Alberni inlet. Mt. Arrowsmith will be an excellent side trip. At this stage, I suggest noting within the Mt Arrowsmith Mgmt Plan that the park could connect with the proposed VI Spine Trail.

Thank you for this survey. I appreciate the chance for input and hope that the biodiversity of the park will have a voice.

The less invested dollar-wise, the better. Keep it simple & wild. Do not encourage "eco-tourism." A comprehensive pet policy needed that recognizes the value of wildlife & visitors first & foremost. Continued non-restrictive access day & night, all seasons. Respect the wishes of surrounding prior user groups, residents. No user fees.

## COMMENTS

I would consider volunteering helping with the board to aid in their decision making.

Keep it simple the more signs, etc. brought into the park the more unnatural it looks.

This has always been a wilderness experience - rough but well established trails, minimal signage - no facilities - for people who are prepared to fend for themselves. It should remain this way. Due to its location and the nature of the terrain, this will never be a boardwalked, accessible to everyone park. Improvements in signage would help novice hikers find their way, and basic warning "be prepared" signs MAY deter those who shouldn't be up there. As I have seen excellent Alpine Club signs removed or vandalized, so this will require some ongoing maintenance. Most of the major routes are well described in available guidebooks, but detailed maps and trail information could be made available free (on-line perhaps). Access except for the Cameron/Pipeline trail is dependent on logging roads and will always be so, but if there could be agreements with the companies to ensure reliable - well maintained roads - it would be a positive step ensuring future use of the park \*Your pick 3 words concept for this survey is frustrating - hard to categorize and define wilderness exp.

Wildlife values trump recreational values and self propelled/leave no trace recreation should be the only kind allowed.

Mount Arrowsmith is a globally recognized Important Bird Area as it supports an endemic species of White-tailed Ptarmigan. This should be referenced in the Management Plan, signs and other information materials. Please contact me at [BCprograms@birdscanada.org](mailto:BCprograms@birdscanada.org) and I would be pleased to provide more information about this.

Thanks, I look forward to the draft plan.

I've lived here for 5 years, and have been an active member of Arrowsmith SAR for 2 years. My family hikes and bikes extensively in the area. We look at Mt. Arrowsmith with awe & wonder. Until now, I didn't even know the park existed or was safe to access. What's wrong with this picture?

Can we link the park to Trans-Canada trail? Can we link it to the railway right of way by Cameron Lake (and via that to Q.B.?)

Wilderness values/protection trump recreation. Recreation should be only self propelled, non motorized and "leave no trace" by visitors.

COMMENTS

May sound selfish but with security a concern make the park hiking only.

Combine both parks.

Concerned about future private land access.

Continued from other page ... Quote from Public Forum directed to Mr. Rothermel's attention, [reflective of my and several colleagues beliefs too]... .." -----  
----- On a number of points you stated I am hopeful that our representatives in the RDN are flexible on some outdoor usages for Mt.Arrowmith-Massif. On Fire usage, there is always a core group that finds that contentious. I see no problem with seasonal openings that go by the principle of Klitsa-Gibson Plateau Policy of "thumb-thickness diameter Fuel". At the sub alpine bases this shouldn't present a problem. "Technically No Camping" policy would be unfair to a number of prior & current user groups willing to hoof it up there for an overnighter & continuation of multi-day traverses. The RDN needs to be flexible on this matter. Most backpackers of this caliber are responsible & practice "pack it out routines" anyhow. Having just emerged from previous Crown Land status, it would be wrong to stop people from this experience, also the Hupacasath First Nations also are likely to use this right too. The Park Planning Process needs to encompass future generational values. Camping is as Canadian as Hockey. The Pet Policy for Mt. Arrowsmith needs to be more comprehensive than just "leash and poop pack out". Areas that have defined wildlife or water or ecological-sensitivities would take a front seat on this policy. Easier to deal fairly with these issues now than trying to tackle conflicts later in the usage of Mt. Arrowsmith "...  
. Thank you.

I would like to see the park kept in a more primitive state (no additional upgrading of trails etc.) unless it is necessary to control erosion or other damage.

Keep this park for the users that use it; backcountry hikers and campers. Don't over regulate the users.

Camping should be allowed in designated areas of the park that will provide access for those who wish to climb or hike to the summit. Unfettered access should be allowed with out bureaucratic hindrance.

## COMMENTS

Let's work to expand the park all the way down to Labour Day Lake. The area is a great opportunity to allow many people from urban areas an opportunity to explore and enjoy some fine alpine terrain on Van Island. If managed properly, the result could attract new generations of responsible backcountry enthusiasts and naturalists without compromising the region's wilderness integrity.

Not only this needs to be saved. Labour Day lake is a natural beauty that is going to be destroyed by logging as well

Personally I find the park is getting a lot of "wear" It is beginning to look like a well used place not so much wilderness area.

Prohibit ATVs in the Park.

Include phone numbers for rescue services on any signage.

The creation of formally recognized buffer zones would protect the ecologically significant areas beyond the current boundaries of the park.

Need signage along access road as well as within park. Locals know how to get up to there, but inadequate signage is a problem and a deterrent for visitors. Directional signage and mapping badly needed at start of all major routes. In case of Saddle route, also needed where trail leaves the old logging access road. Very confusing at present!

Establish a "charitable" org or whatever and ask everybody to donate money or time. It's a dilemma --once you have discovered this incredible place you want to keep it a secret from folks who may not respect it's grandeur and fragility.

I love exploring Mount Arrowsmith Massif Regional Park. One of the reasons is because it is mainly a "local's" destination. My assumption is that any costs incurred due to improvements made to the park will need to be recouped through revenues generated by the use of the park. I hope that it doesn't become a heavily advertised tourist destination as I feel it could lose some of its magic and beauty. It's a good "pack out what you pack in" kind of place. Thank you for taking the time to ask the public what they think and care about.



## COMMENTS

The best thing the RDN could do would be to not to impose their rules on the park users. For instance I heard the RDN will not be allowing camping, campfires, etc. etc. Back county access is already shamefully limited in the RDN areas. If anything more should be done to keep these areas free from all the regulations of the City. There should be no "rules" other than what senior levels of government (federal and provincial) require.

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## APPENDIX D: PUBLIC SESSION #1 SUMMARY

The first public sessions for the Management Plan were held on Tuesday, June 22<sup>nd</sup>, 2010 in Parksville/Qualicum Beach and on Thursday, June 24<sup>th</sup>, 2010 in Port Alberni. Attendees were introduced to the project and asked to provide input on issues, ask questions about the project and mountain, map their knowledge of the mountain and provide their ideas for the future of the park.

### D.1.1 Park Use & Access

**Q. A preliminary list of park use and access issues and opportunities is presented below. Which of these do you think are priorities for this plan?**

Issue	Sticker Count
Trail conditions in the park	9
Garbage, Vandalism, Arson	9
Trail access to the park	8
Road access to the park	6
Overnight camping	3
Multiple recreational uses	2
Parking	1
Tourism uses	0
Public amenities	0
Public safety in the park	0
Commercial activities	0

### Comments:

- Pit Toilets??
- Consideration of youth and disabled access, even if “machine” vehicles need to be used.
- ATV, dirt bikes usage.
- No motorized recreational vehicles, please.
- Saddle route needs some “engineering” to ensure wildflower areas aren’t trampled.
- Maintain alpine areas as “routes” vs. built trails.

**D.1.2 Park Use & Access**

Q. A preliminary list of nature, environment and culture issues and opportunities is presented below. Which of these do you think are priorities for this plan?

Issue	Sticker Count
Ecological sensitivity	13
Adjacent forestry activity	10
Watershed protection	4
Visual significance	3
Water quality	2
First Nations heritage	2
Research	2
Historical significance	1
Education	0
Fire risk & protection	0
Volunteers	0

**Comments:**

- Wilderness protection
- Over-use of some trails = erosion & ecological damage
- Comprehensive pet policy
- Environment not economic concerns.
- Erosion control needed on trails.

**APPENDIX E:  
PUBLIC RESPONSE FORM FOR DRAFT  
MANAGEMENT PLAN**

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## Mount Arrowsmith Massif Regional Park

### Response Form

## Welcome!

We are requesting your feedback on the **DRAFT Mount Arrowsmith Massif Regional Park Management Plan**. The purpose of this plan is to guide the operations, development and stewardship of the park for the next 10 years and beyond.

The following response form asks for your comments on will allow you to comment of the DRAFT vision statement, management goals, policies and actions.

Your input is very valuable as we look to complete a successful management plan.

The entire DRAFT Management Plan can be downloaded from [www.mountarrowsmithpark.ca](http://www.mountarrowsmithpark.ca)

*Please complete this response form no later than  
Wednesday, November 10th, 2010*

## Mount Arrowsmith Massif Regional Park

### DRAFT VISION STATEMENT

*The purpose of a vision statement is to set the tone for long-term management and planning of the park.*

#### DRAFT VISION STATEMENT:

Mount Arrowsmith Massif Regional Park is a significant landmark on Central Vancouver Island. Its familiar peaks continue to be accessible for wilderness recreation in sub-alpine and alpine environments. Recreational and ecological values are balanced through stewardship so that important ecosystems and habitats are protected. First Nations stories and other historical accounts of the mountain are recorded and celebrated and research activities are supported and encouraged. Mount Arrowsmith Massif remains an important ecological, recreational, spiritual and visual resource for its neighbours, friends and visitors.

#### Do you agree with the draft vision statement?

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

#### Comments?



# Mount Arrowsmith Massif Regional Park

## DRAFT MANAGEMENT GOALS

### DRAFT MANAGEMENT GOALS:

*Management Goals set the framework for policies & actions and provide a basis by which to evaluate planning and management decisions for the park. Draft Management Goals were developed based on stakeholder and public input from this process.*

#### Draft Goal #1: ECOSYSTEM CONSERVATION

Manage the park to maintain its unique natural habitats. Monitor existing ecosystems to minimize impacts as recreational use of the mountain increases. Encourage the study of the sub-alpine and alpine environments to increase knowledge of the area's unique flora and fauna.

**Do you agree with this draft management goal #1?**

Strongly Agree



Agree



Neutral



Disagree



Strongly Disagree



Comments?

#### Draft Goal #2: WILDERNESS RECREATION

Maintain sustainable recreation use in the park, with the goal of balancing our recreational footprint with the sensitive ecology of the mountain. Encourage recognition and respect of the mountain's wilderness conditions by park users, stewards and maintenance providers.

**Do you agree with this management goal #2?**

Strongly Agree



Agree



Neutral



Disagree



Strongly Disagree



Comments?





# Mount Arrowsmith Massif Regional Park

DRAFT MANAGEMENT GOALS

## Draft Goal #3: PARTNERS IN STEWARDSHIP

Work with the Mount Arrowsmith community – including Hupacasath First Nation, the Federation of Mountain Clubs of BC, the Alpine Club of Canada, the Alberni-Clayoquot Regional District, neighbouring landowners and volunteers – to steward and maintain the park.

**Do you agree with this management goal #3?**

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?

## Draft Goal #4: ACCESS

In cooperation with neighbouring landowners, ensure that Mount Arrowsmith Massif remains accessible for public use and enjoyment for generations to come.

**Do you agree with this management goal #4?**

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?



# Mount Arrowsmith Massif Regional Park

DRAFT MANAGEMENT GOALS

## Draft Goal #5: EDUCATION

Support alpine research, education and training activities that fit within the area's wilderness context.

*Do you agree with this management goal #5?*

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?

## Draft Goal #6: CELEBRATION OF HERITAGE

Seek opportunities to learn more about the unique history and culture of the mountain and disseminate appropriate information to the public so the significance of the area can be appreciated.

*Do you agree with this management goal?*

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?



# Mount Arrowsmith Massif Regional Park

## DRAFT MANAGEMENT POLICIES & ACTIONS

### POLICIES & ACTIONS:

Through input from committee members, stakeholders and public, a list of key issues were generated for MAMRP. Draft *Policies & Actions* have been developed to respond to the key issues within the context of the *Vision & Goals* for MAMRP.

**\*\*This survey seeks your feedback on TEN (10) key issues identified through earlier consultations as highly important.\*\***

*NOTE: You may comment on as many or as few of the TEN (10) Key Issues as you would like. Each Key Issue references a page number in the Draft Management Plan that will provide more information on the topic. For detailed information about Policies & Actions, please refer to the Draft Plan (pages 43-68).*

---

#### KEY ISSUE #1: CONTINUED TRAIL ACCESS (p.49)

*Issue:* All existing trail routes cross private property to access the park.

*Key Policies:* Work cooperatively with neighbouring landowners to ensure continued public access.

*Key Actions:*

- Renew/develop access agreements with ACRD and Island Timerlands for continued access on existing trail routes;
- Restrict new route development on private property.

***Do you agree with these actions?***

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

---

**Comments?**

#### KEY ISSUE #2: CONTINUED ROAD ACCESS (p.50)

*Issue:* Private roads are typically used to access the park.

*Key Policies:* Ensure that vehicle access from the west (Hwy 4) remains passable for park visitors.

*Key Actions:*

- Maintain ongoing discussions with neighbouring landowners;
- Monitor road conditions to ensure they remain passable for passenger vehicles;
- Provide information to park users on roads, road closures and current conditions.

***Do you agree with these actions?***

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

---

**Comments?**



# Mount Arrowsmith Massif Regional Park

DRAFT MANAGEMENT POLICIES & ACTIONS

## KEY ISSUE #3: TRAIL ACCESSIBILITY (p.53)

*Issue:* Steep terrain and rugged trails limit accessibility for park users. Most users recognize the wilderness & rugged setting of the park.

*Key Policies:* Maintain current levels of accessibility on park trail routes. Increase public information about range of difficulty of routes. Do not permit motorized vehicle use within park as per RDN Bylaw 1399.

*Key Actions:*

- Identify varying levels of trail route difficulty and provide accurate descriptions of fitness needed for routes.

**Do you agree with these actions?**

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?

## KEY ISSUE #4: CLIMBING (p.53)

*Issue:* MAMRP is a popular destination for rock and ice climbing.

*Key Policies:* Work with local associations to encourage safe and environmentally sensitive climbing.

*Key Actions:*

- Work with climbing groups to document popular climbing locations;
- Monitor permanent protection locations (e.g. where there are bolts) for climbing safety and environmental impacts;
- Provide information/signage to discourage inexperienced users.

**Do you agree with these actions?**

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?



# Mount Arrowsmith Massif Regional Park

DRAFT MANAGEMENT POLICIES & ACTIONS

## KEY ISSUE #5: WILDERNESS CAMPING (p.54)

*Issue:* Wilderness camping is currently an activity in MAMRP.

*Key Policies:* Recognize wilderness camping activity within MAMRP and permit low-impact & safe camping practices. Do not permit campfires within MAMRP.

*Key Actions:*

- Amend RDN bylaw No. 1399 to allow wilderness camping in MAMRP;
- Work with user groups to identify preferred camping locations;
- Develop a Wilderness Camping registration program;
- Monitor environmental impacts of camping at designated sites.

**Do you agree with these actions?**

Strongly Agree



Agree



Neutral



Disagree



Strongly Disagree



Comments?

## KEY ISSUE #6: TRAIL CONDITIONS (p.56)

*Issue:* There is public concern about erosion and loss of existing trail routes on private land.

*Key Policies:* Continue park improvements as needed in a manner that respects the wilderness and private property.

*Key Actions:*

- Develop and maintain a project list of potential trail improvements;
- Create an input system where users can identify issues and provide suggestions;
- Consult with Island Timberlands about planned forestry activities that would impact existing trail routes, provide public information about closures & develop with IT a strategy for future re-establishment of routes.

**Do you agree with these actions?**

Strongly Agree



Agree



Neutral



Disagree



Strongly Disagree



Comments?





# Mount Arrowsmith Massif Regional Park

DRAFT MANAGEMENT POLICIES & ACTIONS

## KEY ISSUE #7: VOLUNTEER STEWARDSHIP (p.56)

*Issue:* Continue volunteer-based trail improvement system.

*Key Policies:* Coordinate with partners, existing user groups and other organizations for continued park improvements and general park stewardship.

*Key Actions:*

- Continue the RDN Park Warden Program at MAMRP;
- Document general standards for trail maintenance;
- Coordinate with Hupacasath First Nation, FMCBC, ACC and others to complete projects;
- Maintain a record of trail work & completion dates.

*Do you agree with these actions?*

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?

## KEY ISSUE #8: SIGNAGE & INFORMATION (p.57)

*Issue:* Navigation within the park is an issue.

*Key Policies:* Develop a comprehensive information strategy within the park as well as remotely (including website, brochures & publications).

*Key Actions:*

- Work with neighbours to post information at key trail locations, even where trails are on private forestry land;
- Provide consistent flagging along major trail routes;
- Develop flagging standards and colour system for route marking;
- Consider a system of monuments linked to GPS coordinates for main routes;
- Develop a plan to routinely check flagging/signage;
- Develop website and brochure information for MAMRP;
- Develop interpretive materials about park (coordinate with volunteer efforts);
- Coordinate with partners to broadly distribute park information.

*Do you agree with these actions?*

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?



# Mount Arrowsmith Massif Regional Park

DRAFT MANAGEMENT POLICIES & ACTIONS

## KEY ISSUE #9: CODE OF CONDUCT (p.60)

*Issue:* There are limited amenities available in the park if it is important to protect the wilderness setting.

*Key Policies:* The RDN will provide information to support and promote respectful use of the park.

*Key Actions:*

- Ensure that park information includes details about appropriate garbage & waste management;
- Encourage park users to report incidences of vandalism and theft;
- Provide code-of-conduct information about pets in the park.

*Do you agree with these actions?*

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?

## KEY ISSUE #10: ECOSYSTEM PROTECTION (p.61)

*Issue:* The MAMRP is highly valued for its natural ecosystems.

*Key Policies:* Work with partners to increase the knowledge base of natural ecosystem information about the park. Plan and manage the park to minimize negative impacts on identified ecological resources.

*Key Actions:*

- Consider further analysis to determine where Red-Listed species occur in park;
- Ensure rare/unusual plants not affected by trail improvements;
- Encourage research & study of the area for long-term planning;
- Maintain GIS mapping of rare/unusual flora & fauna.

*Do you agree with these actions?*

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

Comments?



## Mount Arrowsmith Massif Regional Park

### ADDITIONAL COMMENTS

#### COMMENTS ON OTHER POLICIES & ACTIONS

Several other Policies & Actions are included in the plan related to:

- Balanced Management (p.47)
- ACRD Mount Arrowsmith Regional Park (p. 48)
- Education & Research (p. 63)
- Interpretation & Tourism (p. 64)
- Emergency Services (p. 66)
- Future park expansion (p. 68)

*We invite you to review the DRAFT policies in the plan and provide comments:*

#### ADDITIONAL COMMENTS

*Do you have any additional comments you would like to share?*

## Mount Arrowsmith Massif Regional Park

Thank You!

Thank you for taking the time to review and comment on the DRAFT Management Plan for Mount Arrowsmith Massif Regional Park. Your input is very important to us.

*Do you know anyone else who would be interested in providing feedback?*

Please direct them to [www.mountarrowsmithpark.ca](http://www.mountarrowsmithpark.ca)

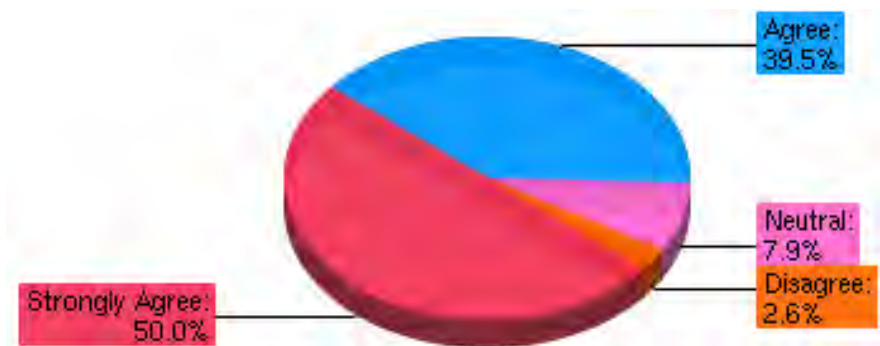




## APPENDIX F: PUBLIC RESPONSE FORM RESULTS

### F.1 Do you agree with the draft vision statement?

Mount Arrowsmith Massif Regional Park is a significant landmark on Central Vancouver Island. Its familiar peaks continue to be accessible for wilderness recreation in sub-alpine and alpine environments. Recreational and ecological values are balanced through stewardship so that important ecosystems and habitats are protected. First Nations stories and other historical accounts of the mountain are recorded and celebrated and research activities are supported and encouraged. Mount Arrowsmith Massif remains an important ecological, recreational, spiritual and visual resource for its neighbours, friends and visitors.



#### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	19	50%
Agree	15	39.5%
Neutral	3	7.9%
Disagree	1	2.6%
Strongly Disagree	0	0%

## COMMENTS

Strengthen First Nations significance.

The vision is good but it does seem too long. I definitely identify with the last sentence.

Vision statements and particularly haggling over them make my eyes glaze over.

Should say "low impact" wilderness recreation.

The October open house 2010 meetings did not appear to be placed into local papers, and if they were, they were not very noticeable. I hope that the RDN, unlike the Horne Lake public stakeholders process, picks up it's ears and note the many comments expressing a desire to not impose user fees and not "change the goal posts" later on down the road. Issues such as handicapped and disabled and children access need to be recognized, and that means allowing sidespur-access-points on Private holdings to remain Open, please, The use of [licensed 4-stroke machines ORV] should be allowed into the future. Signage and compliance with a No-pet or restricted Pet policy needs placements around the parklands entrances. It only takes one bad experience to ruin the experience. Water Quality needs to be ensured, hygiene from peoples pets-droppings must be dealt with. Free unregistered overnight camping in a thoughtful manner of course, needs to remain as "legal, unfettered. Fires in a small for-mat, especially outside the Summer months, and in the subalpine, should be allowed. Talk of volunteers must come with a condition to volunteers "...all parks users will not have their privacy nor outdoor experiences intruded upon nor photographed nor violated in any way, unless of course blatant damage or noise or harm is being done to the wilderness/ecosystem..." "..." privacy of all naturalists and park users must be observed"... . [It is noted that in one RDN Park in 2010 a volunteer with obsessive tendencies is purposefully intruding upon park visitors' personal spaces. This is not right, and not justifiable. Parking 24-7-12 without permits, nor fees, of course, is an expected given. Given that "stakeholders-public" are the tax-base for any park, our concerns should be heard. More on my mind, but I'll see how this is presented to the policy of the Park .It is a nice parkland, viable ecosystem. Some Huts that can contain two-four tent pads may be a way of placing camps=tents down in a sensitive manner. Vandalism has not been an issue, to me, and my late-evening-night astronomy near the vehicles has helped deter the unsavoury elements, imo. Thank you, from myself and my family. Keep it a wild simple set-up, there is none like it around here.

Hello, I will post my few main comments of concern here .Nov

## COMMENTS

09/2010 today's date 3:25 pm PST Much of the draft Vision I am favorable to, regarding ongoing public access discussions with the Timber company. It is an unfortunate reality that road closures are necessary during fire-seasons or road-failure due to weather. It gives the forests and mountain breathing space & safety from the flood of tourists. Residents come from a wide geography around Cokely-Arrowsmith and have other resource abilities to access the parkland if needed. Some parts of the draft plan I disagree with. People should not have to "register" with the bureaucracy to be "allowed" to grab a backpack & tent on the spur of the moment. At least not for small groups. This activity should not be encumbered. The idea that some one may come along and ask for 'your documents or papers' is rather vulgar to the sense of backcountry freedom that has been enjoyed traditionally for so long. \*\* An exception may be that large-group tourists or commercial groups may need to sign in beforehand would be prudent. Along another line of environmental concern is that some posted signage in the fall advising commercial or profiteering mushroom pickers are not allowed to conduct such activity in or near the park boundaries. Each year I am having to remind people to respect the fungal-ecology around here. Putting one or two mushrooms into a pocket is one thing, totally unacceptable for people out to exploit for money, and even the Hupacasath should adhere to some environmental concerns. My other concern, a criticism relates to the language I read in the following Files provided by this process RDN >...copy >..."MAMRP - Public Draft MAMRP – Public Draft - Appendices "... . In it I read several references related to B.C. Parks and Environmental standards as a guide directing some of this draft Plan. Then, on the RDN proposed policy on Pets, there is a mention that "public opinion is split" on allowing dogs in this parkland. "Split" is an inconcise word to this issue. When one compares Pet policy {Dogs, horses , goats , etc} inside B.C. parks, or Municipal, or National , one finds very Distinct Wording very Openly Posted on signage that cannot be removed. When I browse several Public Canadian internet forums on the subject of allowing Pets/Dogs, there is an average of 85 percent belief that it should not be allowed in any wilderness setting Parkland, or Trails even , and concurred with by other Pet Owners too. The majority belief is to just leave the pet[s] at home. One of the failings , if you will , of Nanaimo Regional District Parks is the ambiguity on it's pets - policy and the lack of signage and restrictions of pets in its parks. Too many conflicts do occur. MAMRP needs a very defined policy , & due to it's wilderness and visitor satisfaction expectations, pets should not be allowed, certainly not loose and something better than "voice command ", and the core areas of ecological concerns off limits.\*\* "Dog

## COMMENTS

training-Rescue training" by individual citizens, Organizations, or Pet-Services Industry must not be allowed inside the park . Other aspects of the Draft Plan I am neutral towards, and some I disagree with, such as trying to blend the Two Parks into one, i.e. Alberni Clayoquot Regional Park should remain as an individual entity to reflect it's uniqueness and historical contexts to this area. I am open to limited responsible vehicular access inside the boundaries, as this large park meets various needs and physical requirements of individuals. Simple Latrines built inside the trail-head approaches would be a welcome, cost-effective addition. Everyone can bring their own paper and abide by some basic codes of cleanliness. Leaving the trails as primarily single track , basic primitive is okay, and benches, as suggested in the survey, are not required unless only a few are sawed directly from fallen on-site windfalls , left on ground & temporary to nature's ways. Having said that, the use of trail-clearing machines should not be used in most situations except for the largest of fallen debris. Hand tools are encouraged. I agree that water quality philosophy is a good goal to maintain. I am open on the use of small fires for adverse weather needs. Parking areas are generally within Timber company road allowances, so this is a non issue for us, and common sense factors in on this parking. Several small raised dry, overhead-sheltered OR non-overhead Tent sites built in strategic Plateau settings could address some issues. I believe the best overall approach, as stated by others in the appendices, is.. "as little as possible investment or amenities"... "simple "... "and wilderness values foremost"...and resident & visitor satisfaction and ..."peace and quiet values" ensured..." less is better"... As a wild clean gentle place, we enjoy this area immensely. Thank you, Merci.

---

Access to FSRs should be maintained for all motorized vehicles. This is only for the lower portions of the park.

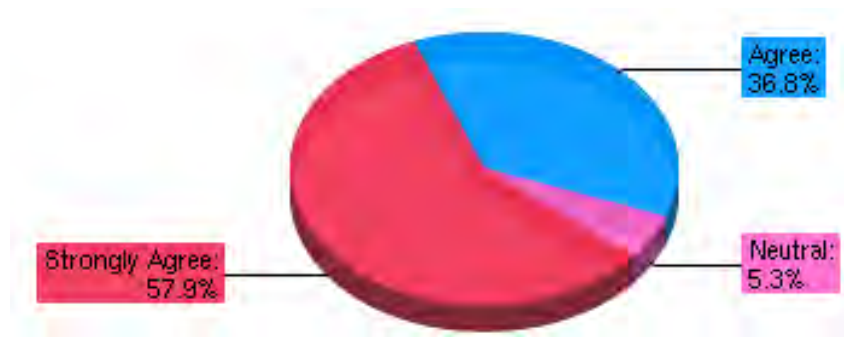
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## **F.2 Do you agree with draft management goal #1?**

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### **Goal 1: Ecosystem Conservation**

Manage the park to maintain its unique natural habitats. Monitor existing ecosystems to minimize impacts as recreational use of the mountain increases and undertake appropriate restoration activities. Encourage the study of the sub-alpine and alpine environments to increase knowledge of the area's unique flora and fauna.



RESPONSE SUMMARY		
Response	Count	Percent %
Strongly Agree	22	57.9%
Agree	14	36.8%
Neutral	2	5.3%
Disagree	0	0%
Strongly Disagree	0	0%

**COMMENTS**

Are the goals in order of importance?

---

Can also encourage stewardship activities, educational. Habitat restoration

---

Don't allow this monitoring to overly restrict recreational use.

---

The biggest local environmental impact is industrial logging. However, erosion on the two most popular routes on Mt Arrowsmith is unfortunate.

---

Higher reaches should be kept pristine but blocking lower portions to motorized recreation excludes too much of the population.

---

Maintaining the natural habitat may mean limiting some recreational uses. This action I would support.

---

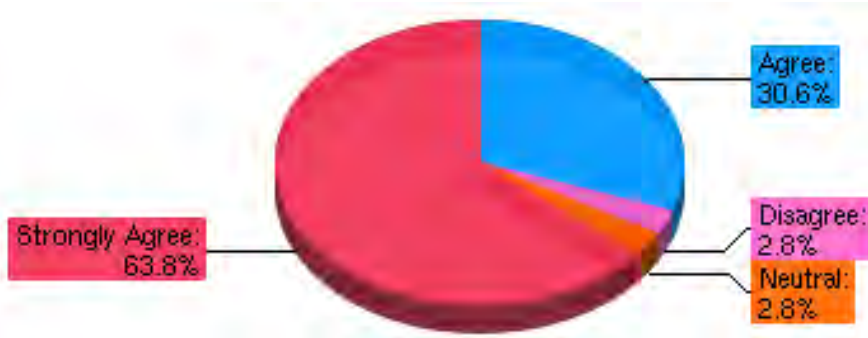
Curious why this is goal #1. Seems like from the public input, wilderness recreation is the most important/desired aspect of the park.

---

### F.3 Do you agree with draft management goal #2?

#### Goal 2: Wilderness Recreation

Maintain sustainable recreation use in the park, with the goal of balancing our recreational footprint with the sensitive ecology of the mountain. Encourage recognition and respect of the mountain's wilderness conditions by park users, stewards and maintenance providers.



#### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	23	63.9%
Agree	11	30.6%
Neutral	1	2.8%
Disagree	1	2.8%
Strongly Disagree	0	0%

#### COMMENTS

Recreation should NOT mean mechanized recreation, which is in conflict with leaving a low footprint on the sensitive ecology.

This text doesn't reflect the recreation values. It seems to emphasize environmental sustainability and is thus redundant with Goal #1. I suggest blending the intent of this text (which I agree with) into Goal #1 and redoing this one to highlight the key NON-MOTORIZED recreation values such as: hiking, trekking, rock climbing, cross country skiing, ice climbing and wilderness camping (no fires).

**COMMENTS**

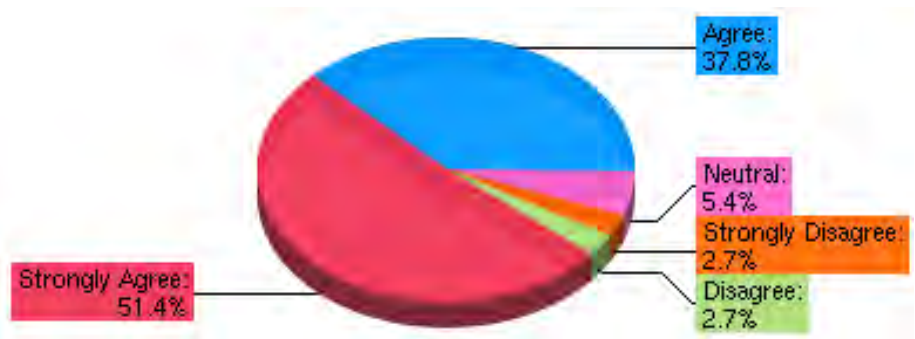
The hard part to digest in all these matters is the yahoo factor. So many of us really do endeavor to toe the line, pick up after others only to see the effects of those who would shoot up gates, tear up tracts with skidoos and ATV's and generally destroy the sanctity of our parks and protected areas. All the plans in the world doesn't stop these people. I for one would pay a levy of 50 dollars a year for patrols that had teeth to confiscate their vehicles, guns, property etc to deter them.

Some of the trails along the saddle route are 'braided' I mean there are multiple route which split and join. Some of them are getting quite-eroded. Particularly through the meadow. I think you should explore ways to encourage people to use one route by enhancing it. Also there is a liability issue where the ropes are on the saddle route. Consider replacing ropes.

**F.4 Do you agree with draft management goal #3?**

**Goal 3: Partners in Stewardship**

Work with the Mount Arrowsmith community – including Hupacasath First Nation, the Federation of Mountain Clubs of BC, the Alpine Club of Canada, the Alberni-Clayoquot Regional District, neighbouring landowners and volunteers – to steward and maintain the park.



**RESPONSE SUMMARY**

Response	Count	Percent %
Strongly Agree	19	51.4%
Agree	14	37.8%
Neutral	2	5.4%

### RESPONSE SUMMARY

Response	Count	Percent %
Disagree	1	2.7%
Strongly Disagree	1	2.7%

### COMMENTS

Engage the stakeholders in protecting the ecosystem.

Good luck! You'd better have a back up plan.

Non profit-driven or other exploitation of the Parkland.

At the same level or more?

There is a need for more input from other groups, such as the motorized community. Users that have already established trails should be accommodated

The British Columbia Off Road Motorcycle Association and the Quad Riders ATV Association of British Columbia should be key players at the table. I think you will find their expectations reasonable.

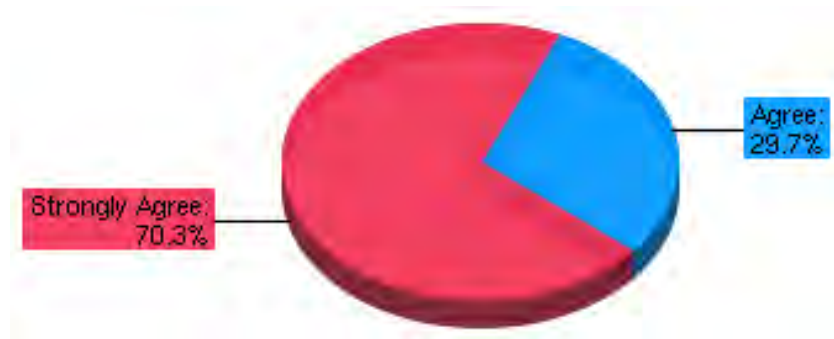
Is there any plan to establish a management committee? What model of decision making will be applied? Will Regional District elected officials have the final say if there isn't a consensus?

## F.5 Do you agree with draft management goal #4?

### Goal 4: Access

In cooperation with neighbouring landowners, ensure that Mount Arrowsmith Massif remains accessible for public use and enjoyment for generations to come.





### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	26	70.3%
Agree	11	29.7%
Neutral	0	0%
Disagree	0	0%
Strongly Disagree	0	0%

### COMMENTS

If possible include winter access.

Include local hiking clubs, like Tuesday hikers.

This is critical!

We still suffer from the sad legacy of the E&N Land Grants of 1883 and later.

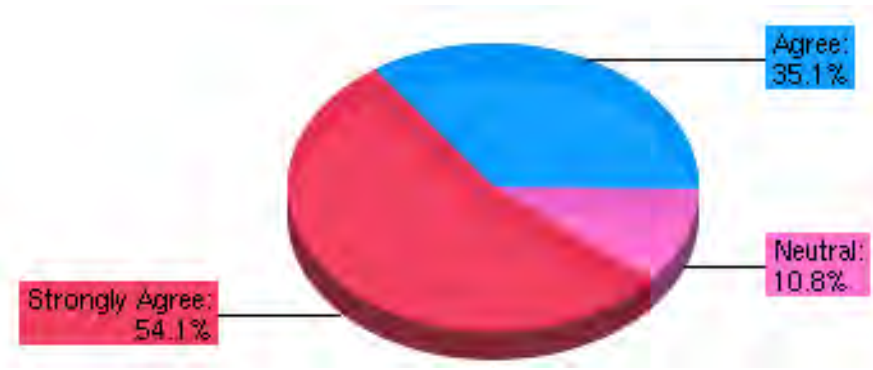
We also need to say something about how the access will be financed. Where is the money coming from to plow the road, grade it, maintain it? How about the hiking trails?

Especially the landowners whose existing roads are used to access various hiking routes on Mt Arrowsmith. These roads need to be MAINTAINED year round.

## F.6 Do you agree with draft management goal #5?

### Goal 5: Education

Support alpine research, education and training activities that fit within the area's wilderness context.



#### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	20	54.1%
Agree	13	35.1%
Neutral	4	10.8%
Disagree	0	0%
Strongly Disagree	0	0%

#### COMMENTS

Said activities not to interfere with wildlife nor naturalists, user groups on location.

Is there a relationship with an academic institution?

Use the alpine research by engaging universities to participate in programs.

What are education and training activities?

As long as it does not become an elitist activity barring others from reasonable access to some of the areas.

### F.7 Do you agree with draft management goal #6?

#### Goal 6: Celebration of Heritage

Seek opportunities to learn more about the unique history and culture of the mountain and disseminate appropriate information to the public so the significance of the area can be appreciated.



#### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	18	47.4%
Agree	10	26.3%
Neutral	7	18.4%
Disagree	3	7.9%
Strongly Disagree	0	0%

#### COMMENTS

First Nations stories and lore are lacking and needed.

I am particularly interested in the First Nation cultural history.

Some interpretive signage may be useful, about alpine plants.

This is written very passively: make more active.

Depends on what is meant by "appropriate info disseminated to public". If any history is pertinent pre- & post park status, then that should be openly available and given equally to the public.

## F.8 KEY ISSUE #1: CONTINUED TRAIL ACCESS

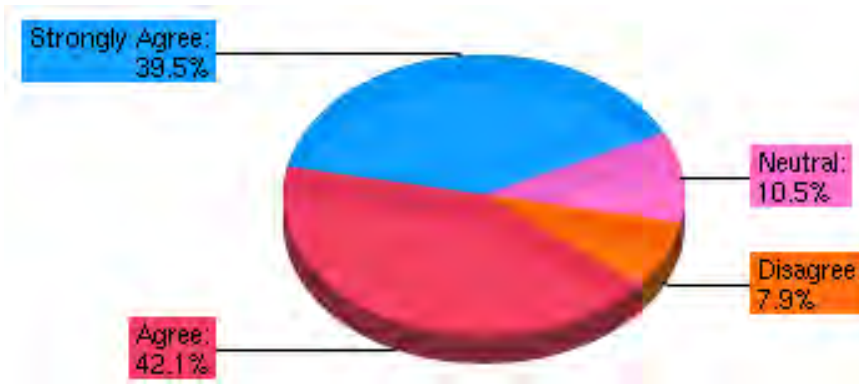
**Issue:** All existing trail routes cross private property to access the park.

**Key Policies:** Work cooperatively with neighbouring landowners to ensure continued public access.

**Key Actions:**

- Renew/develop access agreements with ACRD and Island Timberlands for continued access on existing rail routes;
- Restrict new route development on private property.

**Do you agree with these actions?**



### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	15	39.5%
Agree	16	42.1%
Neutral	4	10.5%
Disagree	3	7.9%
Strongly Disagree	0	0%

### COMMENTS

I would like to see one or two new trails.

Safe access needed and ability to close the access if conditions warrant this action.

Should monitor potential impacts and recreational use.

## COMMENTS

There is already a large diversity of trails, so new ones shouldn't be required.

Trails on private property with permission.

A commitment or agreement from Timber companies to leave buffer zones of 200 feet each side of trails without selective heli-logging occurring, and protection of water gullies exiting nearby park[s] and insurance of overall water quality exiting the parklands. All trails that are agreed upon should be left as "general public recreational access & activity status".

New route development is definitely not a priority, but it shouldn't be totally ruled out, particularly if an existing route had to be shut down for some reason. In negotiating access RDN should recognize that as a regional government and land manager they have significant leverage over the private forest companies owning the adjacent forest lands.

Look back over access history to Mt Arrowsmith and have options for future redevelop of these old trails eg, old Rosseau Trail from Cameron River. Although it no longer exists it may be nice in the future to develop as a hiking trail. These should be considered new routes and be restricted.

### F.9 KEY ISSUE #2: CONTINUED ROAD ACCESS

**Issue:** Private roads are typically used to access the park.

**Key Policies:** All efforts will be made to obtain vehicle access from the west (Hwy 4) for park visitors.

**Key Actions:**

- Maintain ongoing discussions with neighbouring landowners;
- Monitor road conditions to ensure they remain passable for passenger vehicles;
- Provide information to park users on roads, road closures and current conditions.

**Do you agree with these actions?**



**RESPONSE SUMMARY**

Response	Count	Percent %
Strongly Agree	24	63.2%
Agree	12	31.6%
Neutral	2	5.3%
Disagree	0	0%
Strongly Disagree	0	0%

**COMMENTS**

Maintain all existing roads to the various trailheads not just the main roads.

What do you mean? Legally acquired the R/W?

Would a 4 x 4 be required? Who is responsible for road maintenance?

Some commitments from Timber company to allow easier access from the east -side/ Arrowsmith lake/Englishman River without gate closures. We paid for the Dam at the Lake several years ago with our taxes- referendum, now we would like that access ability.

The park cannot afford to build roads, or even, it seems, maintain existing ones. Therefore it behooves them to maintain a positive relationship with local timber companies that have the resources, if not the motive, to support road upgrades.

Try to make the trails from the East side more accessible. The roads leading up are always gated and locked to the public.

Again, what is the plan for financing road access? Sorry, I didn't review the plan in detail. I am only responding to the survey.

### F.10 KEY ISSUE #3: TRAIL ACCESSIBILITY

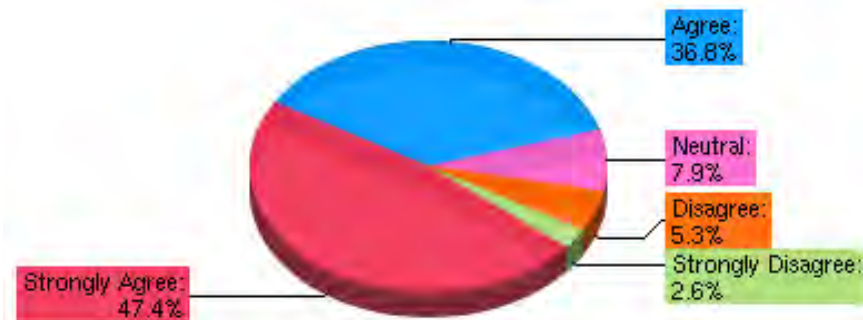
**Issue:** Steep terrain and rugged trails limit accessibility for park users. Most users recognize the wilderness & rugged setting of the park.

**Key Policies:** Maintain current levels of accessibility on park trail routes. Increase public information about range of difficulty of routes. Do not permit motorized vehicle use within park as per RDN Bylaw 1399.

**Key Actions:**

- Identify varying levels of trail route difficulty and provide accurate descriptions of fitness needed for routes.

**Do you agree with these actions?**



#### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	18	47.4%
Agree	14	36.8%
Neutral	3	7.9%
Disagree	2	5.3%
Strongly Disagree	1	2.6%

#### COMMENTS

Definitely no vehicles on park lane.

Keeping out motorized access is important (most of the park is unsuitable for them anyhow).

Non-motorized is key.

## COMMENTS

Route difficulty is relative, but adequate warnings for unprepared hikers is valuable - but those or are unprepared tend not to pay attention to warnings anyways (i.e. people that get lost on the Grouse Grind).

I think Judge's Route should maybe be looked at and considered for improving the trail, since with more people over the years, the steep parts might get more and more eroded.

Some areas of pullouts with permitted PARKING AREAS for ORV's should be established for riders to safely & legally leave their machines in Park day or night.

Please educate those that many routes on Mt.Arrowsmith should be undertaken by experienced hikers/climbers and keep the routes in their natural way. Hopefully, the routes on Arrowsmith will not be altered in such a way that will take away from the difficulty of the climb.

We do not require an all or nothing approach. To ensure accessibility for a greater portion of the population there must be motorized access on the lower reaches and FSRs in the park. Mark "NO MOTORIZED VEHICLE" (due to grade and sensitive habitat) trails.

While difficult to accomplish, the RDN should take control of the ACRD Ski Park and try to keep off road vehicles out of the park.

Allowing any form of mechanized recreation is the death knell of any wilderness area, and it already rampant in some areas of the mountain. The short and long term damage is distressing. Yet there seems to be no will to reduce this through simple policing and monitoring of vehicles with ATVs or snowmobiles on the back.

### F.11 KEY ISSUE #4: CLIMBING

**Issue:** MAMRP is a popular destination for rock and ice climbing.

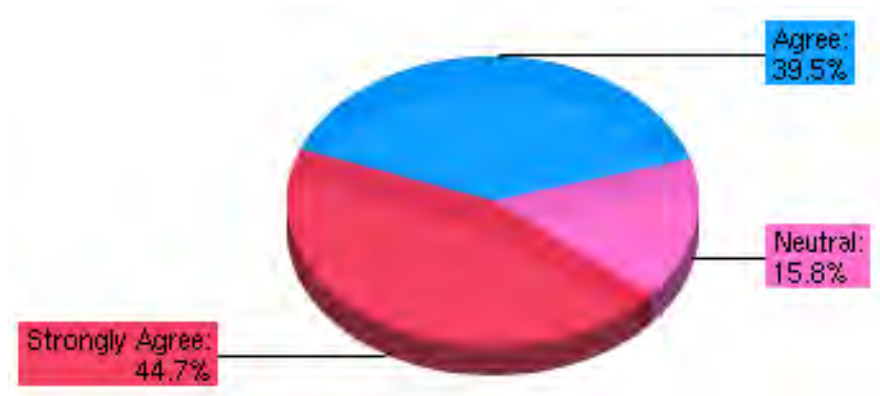
**Key Policies:** Work with local associations to encourage safe and environmentally sensitive climbing.

**Key Actions:**

- Work with climbing groups to document popular climbing locations;
- Monitor permanent protection locations (e.g. where there are bolts) for climbing safety and environmental impacts;
- Provide information/signage to discourage inexperienced users.



*Do you agree with these actions?*



**RESPONSE SUMMARY**

Response	Count	Percent %
Strongly Agree	17	44.7%
Agree	15	39.5%
Neutral	6	15.8%
Disagree	0	0%
Strongly Disagree	0	0%

**COMMENTS**

Don't put in any more permanent anchor bolts.

Identify active groups involved with establishing climbing routes but do not restrict new development work but work with those groups.

Encourage placement of protection to increase climbing safety. I've never seen signage in other climbing areas, why would it be necessary here?

I don't know if signage is needed to discourage inexperienced people. Maybe at the trailhead if there was a trailhead sign.

Some clarification on bolting should be brought forward. Some routes require no bolts and can be climbed with gear while others require bolts. Annual examinations of bolts and anchors should be undertaken.

## F.12 KEY ISSUE #5: WILDERNESS CAMPING

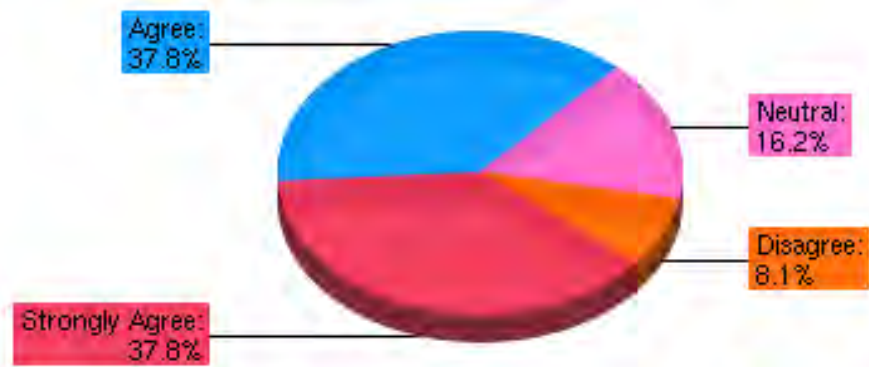
**Issue:** Wilderness camping is currently an activity in MAMRP.

**Key Policies:** Recognize wilderness camping activity within MAMRP and permit low-impact & safe camping practices. Do not permit campfires within MAMRP.

**Key Actions:**

- Amend RDN bylaw No. 1399 to allow wilderness camping in MAMRP;
- Work with user groups to identify preferred camping locations;
- Develop a Wilderness Camping registration program;
- Monitor environmental impacts of camping at designated sites.

**Do you agree with these actions?**



### RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	14	37.8%
Agree	14	37.8%
Neutral	6	16.2%
Disagree	3	8.1%
Strongly Disagree	0	0%

### COMMENTS

Assess impacts of campfires at designated sites.

Disagree with camping of any kind in the area.

## COMMENTS

Not sure a registration program is needed or will work.

Need to have a method to restrict the nearby of campers at on site at any time and total number per season.

Registration only for groups > 4 –commercial.

Although I have yet to feel the need to camp in the area, and find it hard to reason why others would

Please allow campfires Nov. 1 to Mar. 31. ATVers ride all winter while most hikers and climbers stay at home.

I commend the RDN on a balanced approach to the unique situation of wilderness camping in the MAMRP.

Definitely support campfire ban. Overall wilderness camping shouldn't be a preferred use of the area as almost all of the park is accessible to daytrippers with less impact.

I agree with identifying preferred camping locations, but park should be open for camping everywhere.

Mt Arrowsmith is generally a day trip for most people and only a very few actually camp overnight. Amend the bylaw to allow wilderness camping, however, here are only a few locations for camping where water is available and to date there has been very little impact on the vegetation. It is not necessary to develop campsites or restrict camping locations as it has not been an issue to date. No registration is necessary. Monitor but make preferred campsites only if the need arises.

If there were rangers or volunteers to monitor safe use of campfires then these should be allowed. Consider no campfires if/when there are no rangers or volunteers but if they can be available for patrol then campfires should be allowed - what kind of camping is not so much more rewarding when a campfire can be made. No cutting of trees should be allowed - want a fire pack the firewood in as all the areas where a campfire is possible are in reality very close to where your vehicle is parked.

As per first comment section, registration should not be required for small groups, only large or commercial ventures and no intrusion by parks staff/volunteers upon responsible campers. Camping is a traditional pursuit. This is a large park with a long history of various user groups, and is essentially "LEASED Crown Land ". Raised tent pads or small overhead shelters built in the plateau regions should alleviate any concerns or issues. Latrines at trailhead locations would be good, with user-maintained focus.

### F.13 KEY ISSUE #6: TRAIL CONDITIONS

**Issue:** There is public concern about erosion and loss of existing trail routes on private land.

**Key Policies:** Continue park improvements as needed in a manner that respects the wilderness and private property.

**Key Actions:**

- Develop and maintain a project list of potential trail improvements;
- Create an input system where users can identify issues and provide suggestions.

**Do you agree with these actions?**



RESPONSE SUMMARY		
Response	Count	Percent %
Strongly Agree	18	48.6%
Agree	17	45.9%
Neutral	2	5.4%
Disagree	0	0%
Strongly Disagree	0	0%

### COMMENTS

Another option is to consider purchasing right-of-way on major trail routes.

Include an environmental monitoring plan for recreational use.

Markers to indicate to stay on trail where it is difficult to determine, preserve sensitive area.

COMMENTS

Replace and maintain ropes on saddle Route and possibly add another rope across a lower rocky area.

Leave some of the climbing trails undeveloped such as Un-Judges and Lost Gully routes but work on upgrading high use trails such as Judges Trail, Rosseau Ridge and Saddle route. Work with the mountaineering clubs to determine which trails need work.

**F.14 KEY ISSUE #7: VOLUNTEER STEWARDSHIP**

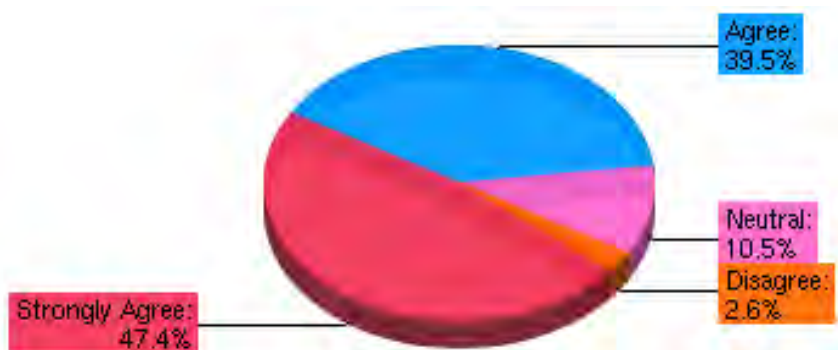
**Issue:** Continue volunteer-based trail improvement system.

**Key Policies:** Coordinate with partners, existing user groups and other organizations for continued park improvements and general park stewardship.

**Key Actions:**

- o Continue the RDN Park Warden Program at MAMRP;
- o Document general standards for trail maintenance;
- o Coordinate with Hupacasath First Nation, FMCBC, ACC and others to complete projects;
- o Maintain a record of trail work & completion dates.

**Do you agree with these actions?**



RESPONSE SUMMARY

Response	Count	Percent %
Strongly Agree	18	47.4%
Agree	15	39.5%
Neutral	4	10.5%

### RESPONSE SUMMARY

Response	Count	Percent %
Disagree	1	2.6%
Strongly Disagree	0	0%

### COMMENTS

An advisory committee would be helpful.

Extend this to the ACRD area. It's a free for all there now!

The various volunteers need to be on the same page, when it comes to a trail work standard.

Environmental impacts too.

An expansion of trail networks and trail cross-braiding is not desirable. Keep the park as simple as possible, the best "improvement" is to keep "wild" in "wilderness".

Making good use of volunteers for trails will be key in MAMRP, as I doubt RDN has sufficient budget to take on all the trail maintenance. By all means the existing informal volunteer work should be formalized and directed to some extent.

## F.15 KEY ISSUE #8: SIGNAGE & INFORMATION

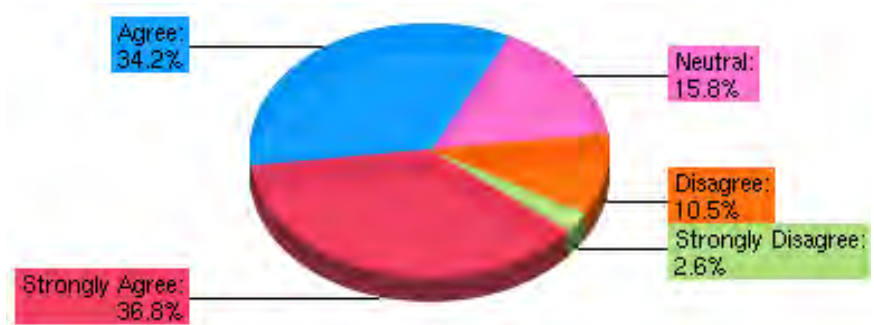
**Issue:** Navigation within the park is an issue.

**Key Policies:** Develop a comprehensive information strategy within the park as well as remotely (including website, brochures & publications).

**Key Actions:**

- Work with neighbours to post information at key trail locations, even where trails are on private forestry land;
- Provide consistent flagging along major trail routes;
- Develop flagging standards and colour system for route marking;
- Consider a system of monuments linked to GPS coordinates for main routes;
- Develop a plan to routinely check flagging/signage;
- Develop website and brochure information for MAMRP;
- Develop interpretive materials about park (coordinate with volunteer efforts);
- Coordinate with partners to broadly distribute park information.

*Do you agree with these actions?*



**RESPONSE SUMMARY**

Response	Count	Percent %
Strongly Agree	14	36.8%
Agree	13	34.2%
Neutral	6	15.8%
Disagree	4	10.5%
Strongly Disagree	1	2.6%

**COMMENTS**

No flagging tape!

Prohibit pets on the park too much of a risk of ecological damage and threat to wildlife.

Trail signage should be improved but remain unobtrusive.

No flagging of high use trails but PERMANENT trail markers. Flagged tape deteriorates and becomes litter on the ground. If there are permanent trail markers there is no need for people to re-flag routes where the flag has deteriorated.

Flagging with tape is considered as an eyesore and/or litter by many. Focus to park users is to acquire a simple but effective map system and come prepared for weather and darkness, allow TIME to explore the park, Not Race Thru it. Small, discreet NIGHT-REFLECTORS on trees on the outgoing exit directions is alright. [ i.e.: 1"X 1" Orange-SQUARES ]

Don't over-flag routes - it's a form of pollution. Leave only footprints - signage at the trailhead should be sufficient.

## COMMENTS

Education in mountain skills and personal experience enables users to be able to think for themselves with potentially greater safety and more personal responsibility. Thorough flagging and signage has the potential to enable an increasing number of folk without mountain skills to go where they would not otherwise have gone and get beyond their skill level. On the other side, it is a very worthy goal to have more people experiencing this park. I think the efforts to increase signage and route information should be focused on the popular routes.

Probably there is good reason to mark the Judge's Route as a descent route for winter travel. Likely the Saddle route should also be officially marked. Otherwise, informal markings (flagging tape) will likely suffice.

Great idea! Signage is also needed to guide people from HWY 4 to park and from the Englishman River side.

I like it better the way it is with natural trails without any markings aside from flagging tape. Adding a bunch of signs, maps, etc. takes away from the natural setting. It may also encourage people who are not experienced at being in the wilderness or less prepared to head into the park, which may result in more injuries and/or search and rescue calls.

### F.16 KEY ISSUE #9: CODE OF CONDUCT

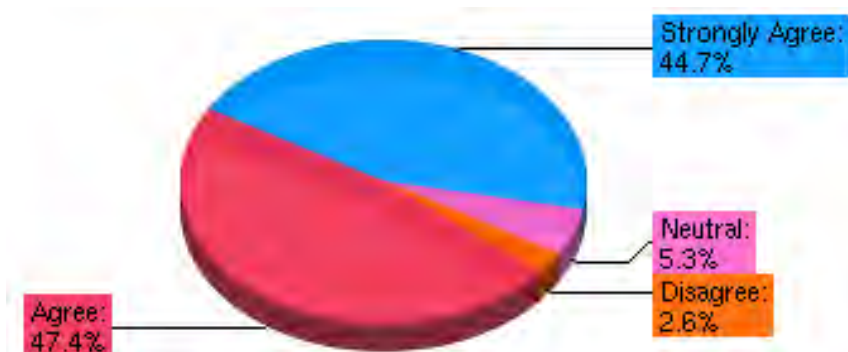
**Issue:** There are limited amenities available in the park if it is important to protect the wilderness setting.

**Key Policies:** The RDN will provide information to support and promote respectful use of the park.

**Key Actions:**

- Ensure that park information includes details about appropriate garbage & waste management;
- Encourage park users to report incidences of vandalism and theft;
- Provide code-of-conduct information about pets in the park.

**Do you agree with these actions?**





RESPONSE SUMMARY		
Response	Count	Percent %
Strongly Agree	17	44.7%
Agree	18	47.4%
Neutral	2	5.3%
Disagree	1	2.6%
Strongly Disagree	0	0%

*No Comments*

### **F.17 KEY ISSUE #10: ECOSYSTEM PROTECTION**

**Issue:** The MAMRP is highly valued for its natural ecosystems.

**Key Policies:** Work with partners to increase the knowledge base of natural ecosystem information about the park. Plan and manage the park to minimize negative impacts on identified ecological resources.

**Key Actions:**

- Consider further analysis to determine where Red-Listed species occur in park;
- Ensure rare/unusual plants not affected by trail improvements;
- Encourage research & study of the area for long-term planning;
- Maintain GIS mapping of rare/unusual flora & fauna.

**Do you agree with these actions?**



RESPONSE SUMMARY		
Response	Count	Percent %
Strongly Agree	18	48.6%
Agree	18	18.6%
Neutral	0	0%
Disagree	1	2.7%
Strongly Disagree	0	0%

**COMMENTS**

Also, add blue-listed species once the red-listed ones are documented.

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Keep GIS mapping confidential.

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The GIS mapping may be in partnership with the Arrowsmith Biosphere Reserve Foundation.

**F.18 COMMENTS ON OTHER POLICIES & ACTIONS**

**COMMENTS**

Enhance research and environmental stewardship activities. Trails should not be located in environmentally sensitive areas! Some areas should remain inaccessible to allow them to be undisturbed for plants and wildlife.

---

I feel that the RDN has a fiduciary duty to see that the illegal activities (off road vehicles and camp fires) are under control in the ACRD Ski Park. While the property is owned by the ACRD, it is a Regional Park within the borders of the RDN and while difficult to enforce, that is no reason to avoid the issue. The RDN should try to get right of way protection of the portions of the trails that are on private land, much like the Old Arrowsmith Trail.

### COMMENTS

Expansion of the park to include some of the intermediate and lower slopes of Arrowsmith would be fantastic if it ever came to pass. The RDN could consider allowing more intensive development of some of the private (eg Timberwest and Island Timberlands) forestry land in the RD (in suitable locations) in return for land donations in the Arrowsmith area.

Balanced Management Plan is currently not very balanced as it leaves out a huge chunk of the population. Motorized recreation. Emergency services - agreed Future Park expansion. Stay open to motorized recreation in the future.

### F.19 ADDITIONAL COMMENTS

### COMMENTS

Good presentation - thank you!

Develop park rangers/stewards, give them training and some form of ID & uniform, a form of reliable communication such as satellite phone for example to call police if a bunch of people refuse to obey park rules. Our Kludahk Outdoors Club (KOC), trail and cabins have been operating for years with volunteers doing everything even cutting up firewood etc. What seems to generally be wonderfully absent with the KOC system is almost no vandalism. We wonder why it seems that the Mt. Arrowsmith area has such high vandalism? This needs to stop or no one will go up there. We go far less than we used to because of this fact based on experience. With some form of park ranger system or volunteers patrolling the area people will return and use of this wonderful area will only increase.

Thank you to everyone who has prepared this draft. It represents an enormous effort that I very much appreciate.

Build a website with a GPS trail guide smart phone application (\$\$ for park) that not only can tell you about the park but also at any moment give you your location using GPS. With the information online it can be downloaded at the trail (included on signage) or before a vacation starts. Less search and rescue issues and source of revenue. Additional education and marketing tool.

## COMMENTS

Not as this time, except that there may be a need to inquire with parks department if important goals or principles are not met nor addressed, and if there is a higher authority to speak to other than the Regional District Staff if disagreements occurs or non-concurring deadlock happens? And to post this avenue of appeal publicly. Thank you for the hard work and effort into our parkland.

Re: motorized vehicle use within Park boundaries. If not already in place within RDN Park by-laws, develop a monetary fine system that is sufficiently stiff so as to deter violators.

It is important to attempt to contact all user groups big and small who use the mountain in any way. There are many small local hiking and naturalist groups other than the ACC, IMR, AVOC, and Club Tread who could have useful insight into future development of the mountain.

There is a whole community of senior ATV operators that do not have the ability to access view areas by foot and enjoy being able to putter along and look. We are as upset with the yahoos as anyone else and the bad reputation that is transferred to my means of seeing the land. Vancouver Island South is predominantly private, and locking people out of public lands on multi use trails cannot be accepted

The RDN's Park Use Regulations Bylaw No. 1399 (2004) regulates park use in RDN community and regional parks. The report puts MAMRP under this bylaw per "no use of ATVs". In the report it is also stated that ATvs are commonly ridden in the Mount Arrowsmith Park where the less steep environment is more suitable. Is Mt. Arrowsmith Park regulated under a different, or amended, bylaw?

Mount Arrowsmith is a great asset. Thank you for preparing this document and working towards a sustainable future for the area.

Your reference to one particular First Nation's Group (Hupacasath) may offend other First Nation members!

I am very happy that the upper Mt Arrowsmith massif has been made into a Regional Park. It is a very important part of South Island mountain recreation.

It just makes sense to have both the ACRD regional park and the RDN park managed seamlessly together. The financial resources of the RDN seem to be far greater than the ACRD. The ACRD spent \$2000 on regional parks last year while the RDN has spent about \$40000.00 and according to the draft plan is willing to spend another \$31,000.00.

## COMMENTS

Only that I would a real recognition program for those who have driven this project - a salute to their thick skins and tireless efforts.

Work to expand the park boundaries to include the obvious lake system, and more of the road corridor, so future access is ensured.

All the draft management policies and action smack of motherhood statements - it would be hard to disagree with. What will be difficult is the accomplishment of everything included in the draft. What are the timelines? What is the budget? Who is paying for the improvements?

Overall the plan looks good. The key focus must remain on conserving the ecosystem couple with low impact recreation.

We are pleased to see that the plan aims to "Encourage public use of MAMRP by providing opportunities to visit with an experienced guide" in section 5.7.3 "Volunteer Tourism". However the same is not stated in section 5.7.4 "Commercial Tourism". If it is a goal of the park to encourage public use with experienced guidance who better than professional guides to offer this guidance? Why would the plan treat these guides differently simply because they earn a living from responsibly introducing the public to wild places? An argument could in fact be made for professional guides being better trained and more accountable in their delivery of guided experiences than volunteer guides. Why the preferential wording for volunteers over professionals? Additionally professional mountain guides are running programs on Mount Arrowsmith that are of a technical nature beyond the scope of volunteer leaders. Given that much of the activity which takes place in the park is of this technical nature I think it important that the plan recognise the valuable contribution to public safety and education that is provided by professional guides. For more information on our training and expertise see the [Association of Canadian Mountain Guides web site](#).

We are also happy to see a legitimate permitting process being suggested for commercial operators and also welcome the idea of a streamlined permitting process that would include adjacent private land owners and the park in a single permit process. We are however concerned by the discretion that is given to the District Manager in bylaw 1399. To be fair to those applying for permits we would suggest more clearly outlined criteria for the granting of permits. Additionally we are very concerned by the fee schedule for permits found in bylaw 1399. This fee structure must have been developed for one time daily use of urban park facilities by larger events. It is

## COMMENTS

unrealistic to expect a small mountain school to pay \$100/day to use Mount Arrowsmith Park. Fees in line with those charged by BC Parks or those charged for commercial recreational use of crown land would be more realistic. For us the latter which is a per person per day fee (typically of about \$5) would be the best solution. We have such agreements with BC Parks, the Crown for Crown land and with two private land owners.

We concur with everything written in sections 5.4.3 Wilderness Camping and see this as being well thought out policy. We would like to add three points at this time: 1) that an effort be made to equip selected camp sites with impact reducing structures namely tenting pads and outhouses, 2) that the ridge campsite which sits on the broad ridge just to the Arrowsmith side of the Arrowsmith/Cokley Col is included as a designated wilderness camp site and 3) that commercial operators who will already be paying a user fee to operate in the park are not asked to pay camping fees in addition to the permit fees.

The above-named Draft Plan has been forwarded to me for comment on the vegetation section. I attach the copy of the pertinent part with some suggestions for changes and corrections. The portion on CDC-listed plant communities (yellow highlighting) appears out of date and I would recommend you get in touch with Carmen Cadrin at the BC Conservation Data Centre to update it. The blue insertions and corrections and the red notes are mine. They are self-explanatory. I have cooperated with Rick Avis on the plant species list and have been the botanical advisor to Kristina Swerhun on the Mt. Arrowsmith GLORIA project.

I hope the attached information is of use to you (see attachment).

Thank you for the opportunity to review the draft Plan. It's a very comprehensive document with a good balance of conservation and low impact recreation. I offer the following comments and suggestions below. I have also CC'ed my colleagues who may have additional ideas. Please don't hesitate to contact me if you have any questions or would like to discuss.

- It would be beneficial to include a map of the IBA somewhere, either in the main document or as an Appendix. We can supply a GIS data layer for this purpose. If you would like this please let me know.
- In Section 3.1 which speaks to neighbouring land uses, property owners etc, it would be good to mention other overlapping designations such as the IBA and the Mount Arrowsmith Biosphere Reserve.
- In the Natural Values section (pg 26), it's great to see

## COMMENTS

- there is a reference to the IBA here! It would also be useful to provide a list of bird species for which breeding evidence has been confirmed since this demonstrates the importance of the habitat for maintaining bird populations. This data has been collected through the BC Breeding Bird Atlas which is available through the Nature Counts website. We can provide assistance with this.
- Under Education & Research values (pg 33), there is a brief summary of a few ongoing projects while page 37 lists specific research projects, including ptarmigan work, in the discussion of Mount Arrowsmith Biosphere activities. It would be useful if these sections contained similar information. A short description of some of these other research projects would help strengthen the link with the Biosphere reserve as a partner.
  - Kathy Martin at UBC has done considerable research on Vancouver Island Ptarmigan. At Strathcona park, there is a volunteer monitoring program whereby visitors can record and submit ptarmigan observations using "Bird Cards" at special interpretive kiosks (see attached). I saw these kiosks a few years ago and I'm not certain if the program is still active. However this may a useful model to encourage and engage visitors to Mount Arrowsmith in conducting "Citizen Science" monitoring of plants, animals, birds etc. We would be interested in supporting this since we (BC Nature & Bird Studies Canada) are interested in any recent bird data for the IBA program.
  - Section 5.5.1 Ecosystem Monitoring & Protection is a good place to explore further linkages with the IBA program since we have an established Caretaker program in which a local volunteer acts as the contact person for conducting annual monitoring (birds & habitat) and other stewardship activities. Catherine Watson is the Caretaker for the Mt Arrowsmith IBA. I will email her and introduce you and suggest she contact you if she has some feedback or suggestions.
  - Under Section 5.6 Education & Research, there are likely to be many opportunities for educational signage focused on the ecological values of the area. We have worked with other groups and assisted with the development of signage at other IBAs. We'd be pleased to work with the RDN and local naturalists' groups as a partner to develop an educational/interpretive sign for this site that covers birds and the IBA program.
  - Feel free to forward my comments to the RDN. By the way, we are holding outreach sessions with local government this fall-winter with the aim of increasing awareness of the IBA program. We hope to meet with RDN soon which will

## COMMENTS

be a good chance to talk about Mt Arrowsmith more and some of these possible collaborative projects.

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After perusal of the Draft Management Plan and completion of your feedback survey I do a burning question for you.

MAMRP Draft Plan Question:

**The RDN's Park Use Regulations Bylaw No. 1399 (2004) regulates park use in RDN community and regional parks. The report puts MAMRP under this bylaw per "no use of ATVs". In the report it is also stated that ATVs are commonly ridden in the Mount Arrowsmith Park where the less steep environment is more suitable. Is Mt. Arrowsmith Park regulated under a different, or amended, bylaw?**

I attended your presentation in Parksville last June. Well done. Please do not take a black and white approach to "motorized recreation". Portions of the park with existing FSRs as well as the lower reaches are very suitable to motorized sport that will allow a greater part of the population to enjoy our great island wilderness. I will share this information with the British Columbia Off Road Motorcycle Association and the Quad Riders ATV Association of British Columbia.

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## APPENDIX G: SPECIES DOCUMENTATION

### G.1 Plants Documented in Mount Arrowsmith Massif Regional Park & Adjacent Areas (2005– 2009)

Note: The following table is compiled from a number of sources and has been provided based on numerous studies. It is not intended to be considered a comprehensive documentation of all plant species within the park.

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<b>Trees, Shrubs, Wildflowers, Groundcovers</b>									
<i>Abies amabilis</i>	Pacific silver fir	√	√					√	
<i>Abies lasiocarpa</i>	Subalpine fir	√	√					√	√
<i>Achillea millefolium</i>	Yarrow	√	√					√	√
<i>Actaea rubra</i>	Baneberry	√							
<i>Agoseris aurantica</i>	Orange agoseris	√	√					√	
<i>Agoseris glauca</i>	Short-beaked agoseris							√	
<i>Allotropa virgata</i>	Candystick	√							
<i>Allium cernuum</i>	Nodding onion	√	√						
<b><i>Allium crenulatum</i></b>	<b>Olympic onion</b>	√	√					√	√
<i>Alnus viridis ssp sinuata</i>	Sitka alder	√	√						
<i>Anaphalis margaritacea</i>	Pearly everlasting	√	√					√	
<i>Anemone multifida</i>	Cut-leaved anemone	√	√					√	
<i>Anemone parviflora</i>	Northern anemone	√	√					√	
<i>Antennaria media</i>	Dark pussytoes	√		√				√	
<i>Antennaria microphylla</i>	Rosy pussytoes	√	√					√	√

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Antennaria neglecta</i>	Field pussytoes			√					
<i>Antennaria racemosa</i>	Racmose pussytoes	√	√					√	√
<i>Antennaria umbrinella</i>	Umber pussytoes			√					√
<i>Aquilegia formosa</i>	Sitka columbine	√	√					√	
<i>Arabis drummondii</i>	Drummond's rockcress			√					
<i>Arabis sp.</i>	Rock cress	√	√				√	√	
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	√	√					√	√
<i>Arnica gracilis</i>	Tall mountain arnica	√	√ ?		√			√	√
<i>Arnica lanceolata</i>	Stream bank arnica	√	√					√	
<i>Arnica latifolia</i>	Mountain arnica	√	√					√	√
<i>Arnica ovata</i>	Diverse arnica	√	√					√	
<i>Arnica rydbergii</i>	Rydberg's arnica				√				√
<i>Aruncus dioicus</i>	Goat's-beard	√	√					√	
<i>Asarum caudatum</i>	Wild ginger	√		√					
<i>Bistorta vivipara</i>	Alpine Bistort							√	
<i>Callitriche sp</i>	Water-starwort species	√							
<i>Caltha leptosepala</i>	White mountain marsh-marigold	√	√					√	
<i>Calypso bulbosa</i>	Fairyslipper	√							
<i>Campanula rotundifolia</i>	Common harebell	√	√					√	√
<i>Campanula scouleri</i>	Scouler's harebell	√							
<i>Cardamine oligosperma</i>	Little western bitter-cress	√	√	√					
<i>Cassiope mertensiana</i>	White mountain heather	√	√					√	√

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Castilleja hispida</i>	Harsh paintbrush	√	√					√	
<i>Castilleja miniata</i>	Scarlet paintbrush	√	√					√	
<i>Cerastium arvense</i>	Field chickweed						√		
<i>Chamaecyparis nootkatensis</i>	Yellow cedar	√	√					√	√
<i>Chimphila menziesii</i>	Menzies' pipsissewa				√				
<i>Chimaphila umbellata</i>	Prince's pine	√	√					√	
<i>Cirsium edule</i>	Edible thistle	√	√					√	
<i>Clintonia uniflora</i>	Queen's cup	√							
<i>Corallorhiza mertensiana</i>	Western Coralroot	√							
<i>Cornus canadensis</i>	Bunchberry	√							
<i>Dicentra formosa</i>	Pacific bleeding heart	√	√					√	
<i>Dodecatheon pulchellum</i>	Few-flowered shootingstar	√	√					√	
<i>Draba lonchocarpa</i>	Lance-fruited draba				√				
<b><i>Draba lonchocarpa var vestita.</i></b>	<b>Lance-fruited draba</b>			?					
<i>Draba sp</i>		√							
<i>Elliota pyroflora</i>	Copperbush	√	√					√	
<i>Empetrum nigrum</i>	Crowberry	√							
<i>Epilobium anagallidifolium</i>	Alpine willowherb	√	√					√	
<i>Epilobium angustifolium</i>	Fireweed	√	√					√	
<i>Epilobium latifolium</i>	White-flowered willowherb	√						√	
<i>Epilobium latifolium</i>	River beauty	√	√						

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Erigeron compositus</i>	Cut-leaved daisy	√	√					√	√
<i>Erigeron peregrinus</i>	Subalpine daisy	√	√					√	√
<i>Eriophyllum lanatum</i>	Common woolly sunflower	√	√						
<b><i>Erysimum arenicola var torulosum</i></b>	<b>Sand-dwelling wallflower</b>	√	√		√				
<i>Erythronium grandiflorum</i>	Yellow glacier lily	√							
<b><i>Eucephalus paucicapitatus</i></b>	<b>Olympic mountain aster</b>							√	
<i>Galium triflorum</i>	Sweet-scented bedstraw					√			
<i>Gaultheria ovatifolia</i>	Western tea-berry	√							
<i>Gaultheria shallon</i>	Salal	√							
<i>Goodyera oblongifolia</i>	Rattle-snake plantain	√	√					√	√
<i>Hemitomes congestum</i>	Gnome plant	√	√					√	
<i>Heracleum maximum</i>	Cow-parsnip	√	√					√	
<i>Heuchera glabra</i>	Smooth alumroot	√	√					√	√
<i>Heuchera micrantha</i>	Small-flowered alumroot	√	√					√	
<i>Hieracium albiflorum</i>	White hawkweed	√	√					√	
<i>Hieracium gracile</i>	Slender hawkweed	√	√						√
<i>Holodiscus discolor</i>	Oceanspray				√				
<i>Juniperus communis</i>	Common juniper	√	√					√	
<i>Leptarrhena pyroliflora</i>	Leatherleaf saxifrage	√	√					√	

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Lewisia columbiana</i> <i>var. rupicola</i>	<b>Columbia lewisia var rupicola</b>	√	√					√	√
<i>Lewisia pygmaea</i>	Alpine lewisia			√			√	√	
<i>Lilium columbianum</i>	Tiger lily	√	√					√	
<i>Linnaea borealis</i>	Twin flower	√	√					√	
<i>Listera caurina</i>	Northwestern twayblade	√	√					√	
<i>Listera cordata</i>	Heart-leaved twayblade		√					√	
<i>Lomatium martindalei</i>	Martindale's lomatium	√	√					√	√
<i>Luetkea pectinata</i>	Partridge foot	√	√					√	√
<i>Luina hypoleuca</i>	Silverback luina	√	√					√	√
<i>Lupinus arcticus</i>	Arctic lupine	√	√					√	
<i>Kalmia microphylla</i> <i>ssp occidentalis</i>	Western bog-laurel	√							
<i>Mahonia nervosa</i>	Dull oregon-grape				√				
<i>Maianthemum racemose</i> <i>ssp amplexicaule</i>	False Solomon's-seal				√				
<i>Menziesia ferruginea</i>	False azalea	√							
<i>Mimulus lewisii</i>	Pink monkey-flower	√	√					√	
<i>Mimulus moschatus</i>	Musk-flower	√	√					√	
<i>Mimulus tilingii</i>	Mountain monkey-flower	√	√					√	
<i>Minuartia biflora</i>	Mountain sandwort						√	√	
<i>Minuartia</i> sp (aff. <i>rubella</i> )					√				
<i>Mitella breweri</i>	Brewer's mitrewort	√	√					√	

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Mitella pentandra</i>	Five-stamened mitrewort	√	√					√	
<i>Mitella trifida</i>	Three-toothed mitrewort	√							
<i>Moehringia macrophylla</i>	Big-leaved sandwort	√	√					√	
<i>Monotropa hypopitys</i>	Pinesap	√							
<i>Montia parvifolia</i>	Small-leaved montia	√	√					√	√
<i>Mycelis muralis</i>	Wall lettuce	√							
<i>Myosotis laxa</i>	Small-flowered forget-me-not			√					
<i>Nothochelone nemorosa</i>	Woodland penstemon	√				√			
<i>Orthilia secunda</i>	One-sided wintergreen	√	√					√	√
<i>Osmorhiza purpurea</i>	Purple sweet-cicely	√							
<i>Oxyria digyna</i>	Mountain sorrel	√	√					√	√
<i>Oxytropis campestris</i>	Field locoweed	√	√						
<i>Paxistima myrsinites</i>	Oregon boxwood	√	√						
<i>Parnassia fimbriata</i>	Grass of parnassus	√	√					√	
<i>Pedicularis racemosa</i>	Sickletop lousewort	√	√					√	√
<i>Penstemon davidsonii</i>	Davidson's penstemon	√	√					√	√
<i>Penstemon serrulatus</i>	Coast penstemon	√	√					√	
<i>Petasites frigidus</i>	Sweet coltsfoot	√	√					√	
<i>Phacelia leptosepala</i>	Narrow-sepaled phacelia	√	√						
<i>Phacelia sericea</i>	Silky phacelia	√	√						
<i>Phlox diffusa</i>	Spreading phlox	√	√					√	√

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Phyllodoce empetriformis</i>	Pink mountain-heather	√	√					√	√
<i>Phyllodoce glanduliflora</i>	Yellow mountain-heather	√	√		√				√
<i>Physocarpus capitatus</i>	Ninebark	√	√					√	
<i>Pinguicula vulgaris</i>	Common butterwort	√	√						
<i>Pinus contorta var contorta</i>	Shore pine	√							√
<i>Pinus monticola</i>	Western white pine								
<i>Platanthera dilatata</i>	Fragrant white rein orchid	√	√					√	
<i>Platanthera stricta</i>	Slender rein orchid	√	√					√	
<i>Piperia unalascensis</i>	Alaska rein orchid			√					
<i>Polygonum douglasii ssp. Nutalli</i>	Douglas' knotweed						√		
<i>Polygonum minimum</i>	Leafy dwarf knotweed	√		√				√	√
<i>Potentilla diversifolia var diversifolia</i>	Diverse-leaved cinquefoil	√	√						
<i>Potentilla glandulosa</i>	Sticky cinquefoil	√	√					√	
<i>Potentilla villosa</i>	Villous cinquefoil	√	√					√	√
<i>Prosartes hookeri var. oregana</i>	Hooker's fairybells	√							
<i>Prunella vulgaris</i>	Heal-all	√	√					√	
<i>Pseudotsuga menziesii</i>	Douglas-fir	√							
<i>Pyrola asarifolia</i>	Pink wintergreen	√	√					√	

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Pyrola picata</i>	White-veined wintergreen	√							
<i>Ranunculus eschscholtzii</i>	Mountain buttercup	√	√					√	
<i>Ranunculus flammula</i>	Lesser spearwort	√		√					
<i>Rhododendron albilflorum</i>	White-flowered rhododendron	√	√					√	
<i>Ribes lacustre</i>	Black gooseberry	√	√					√	
<i>Romanzoffia sitchensis</i>	Sitka mistmaiden	√	√					√	
<i>Rubus pedatus</i>	Creeping raspberry	√	√					√	√
<i>Rubus spectabilis</i>	Salmonberry	√							
<i>Sagina sp.</i>		√	√					√	
<i>Salix arctica</i>	Arctic willow	√	√					√	
<i>Sanguisorba canadensis</i>	Sitka burnet	√	√						
<i>Sanguisorba officinalis</i>	Great burnet						√		
<i>Saxifraga bronchialis</i>	Spotted saxifrage	√	√					√	√
<i>Saxifraga caespitosa</i>	Tufted saxifrage				√				
<i>Saxifraga ferruginea</i>	Alaska saxifrage	√	√					√	√
<i>Saxifraga mertensiana</i>	Merten's saxifrage	√	√					√	
<i>Saxifraga nelsonia ssp. cascadenis</i>	Heart-leaved saxifrage						√		√
<i>Saxifraga rufidula</i>	Rusty-haired saxifrage	√	√					√	√
<i>Saxifraga tolmiei</i>	Tolmie's saxifrage	√	√					√	√
<i>Sedum divergens</i>	Spreading stonecrop	√	√					√	√
<i>Sedum oreganum</i>	Oregon stonecrop	√							



Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Senecio pauciflorus</i>	Rayless alpine butterweed	√							
<i>Senecio triangularis</i>	Arrow-leaved groundsel					√			
<i>Sibbaldia procumbens</i>	Sibbaldia	√	√					√	√
<i>Silene acaulis</i>	Moss campion	√	√						√
<i>Silene parryi</i>	Parry's silene	√	√					√	√
<i>Solidago multiradiata</i>	Northern goldenrod	√	√					√	√
<i>Sorbus sitchensis</i>	Sitka mountain-ash	√	√					√	√
<i>Spergularia rubra</i>	Red sand spurry	√							
<i>Stellaria longipipes var monantha</i>	Long-stalked starwort		√						
<i>Stenanthium occidentale</i>	Mountain bells	√	√					√	√
<i>Streptopus amplexifolius</i>	Clasping twisted stalk				√			√	
<i>Streptopus lanceolatus</i>	Rosy twisted stalk				√				
<i>Taraxacum officinale</i>	Common dandelion						√		
<i>Tiarella trifoliata var. laciniata</i>	Cut-leaf foamflower	√	√					√	
<i>Tiarella trifoliata var. trifoliata</i>	Three-leaf foamflower	√	√					√	
<i>Triantha glutinosa</i>	Sticky false asphodel	√	√					√	
<i>Trollius albiflorus</i>	Globeflower	√							
<i>Tsuga heterophylla</i>	Western hemlock				√				√
<i>Tsuga mertensiana</i>	Mountain hemlock	√	√					√	√

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Vaccinium alaskaense</i>	Alaskan blueberry	√							
<i>Vaccinium caespitosum</i>	Dwarf bilberry	√	√					√	√
<i>Vaccinium deliciosum</i>	Cascade huckleberry	√	√					√	√
<i>Vaccinium membranaceum</i>	Black huckleberry	√	√					√	√
<i>Vaccinium ovalifolium</i>	Oval-leaved blueberry	√	√					√	√
<i>Vaccinium parviflorum</i>	Red huckleberry				√			√	√
<i>Vaccinium uliginosum</i>	Bog blueberry			√	√			√	√
<i>Valeriana sitchensis</i>	Sitka valerian	√	√					√	
<i>Veratrum viride</i>	Indian hellebore	√	√					√	
<i>Veronic beccabunga</i>	American speedwell	√							
<i>Veronica wormskjoldii</i>	Alpine speedwell	√	√					√	
<i>Viola adunca</i>	Early blue violet	√							
<i>Viola glabella</i>	Stream violet	√							
<i>Viola orbiculata</i>	Round-leaved yellow violet	√	√					√	√
<i>Viola sempervirens</i>	Evergreen violet	√							
<b>Grasses</b>									
<i>Agrostis gigantea</i>	Redtop			√					
<i>Agrostis scabra</i>	Rough bentgrass			√	√				√
<i>Danthonia intermedia</i>	Timber oatgrass	√	√					√	√
<i>Festuca brachyphylla</i>	Alpine fescue				√				√
<i>Festuca occidentalis</i>	Western fescue				√				
<i>Festuca saximontana</i>	Rocky mountain fescue				√				

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Festuca subblata</i>	Bearded fescue				√				
<i>Phleum alpinum</i>	Alpine timothy	√	√					√	
<i>Poa alpina</i>	Alpine bluegrass	√	√					√	
<i>Poa cusikii</i>	Cusick's bluegrass			√					√
<i>Poa secunda</i>	Nevada bluegrass			√				√	√
<i>Poa stenantha</i>	Narrow-flowered bluegrass	√	√					√	√
<i>Trisetum canescens</i>	Tall trisetum	√	√					√	
<i>Trisetum spicatum</i>	Spike trisetum	√	√					√	√
<i>Vahlodea atropurpurea</i>	Mountain hairgrass	√	√	√				√	√
<b>Sedges</b>									
<i>Carex aena</i>	Bronze sedge			√					
<i>Carex anthoxanthea</i>	Yellow-flowered sedge						√		
<i>Carex deweyana</i>	Dewey's sedge			√					
<i>Carex illota</i>	Sheep sedge			√					
<i>Carex lenticularis var limnophila</i>	Hind's sedge			√					
<i>Carex macloviana</i>	Falkland Island sedge	√	√					√	
<i>Carex mertensii</i>	Mertens' sedge	√	√					√	
<i>Carex microptera</i>	Small-winged sedge			√					
<i>Carex nigricans</i>	Black alpine sedge	√	√					√	
<i>Carex phaeocephala</i>	Dunhead sedge			√					
<i>Carex pyrenaica</i>	Pyrenean sedge	√	√					√	√
<i>Carex rossii</i>	Ross' sedge				√			√	√
<i>Carex scirpoidea</i>	Single-spiked sedge	√	√					√	
<i>Carex spectabilis</i>	Showy sedge	√	√					√	√

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Carex stylosa</i>	Long-styled sedge	√	√					√	
<i>Eleocharis palustris</i>	Common spike-rush			√					
<i>Eriophorum angustifolium</i>	Narrow-leaved cotton grass	√							
<i>Eriophorum chamissonis</i>	Chamisso's cotton-grass	√							
<i>Trichophorum caespitosum</i>	Tufted bulrush	√							
<b>Rushes</b>									
<i>Juncus drummondii</i>	Drummond's rush	√	√					√	
<i>Juncus ensifolius</i>	Dagger-leaf rush			√					
<i>Juncus mertensianus</i>	Merten's rush	√	√					√	
<i>Juncus parryi</i>	Parry's rush			√					√
<i>Luzula comosa</i>	Pacific wood-rush			√				√	
<i>Luzula multiflora</i>	Many-flowered wood-rush			√					
<i>Luzula parviflora</i>	Small-flowered wood-rush				√	√		√	
<i>Luzula spicata</i>	Spiked wood-rush			√				√	
<b>Ferns, clubmosses, horsetrails, quillworts</b>									
<i>Adiantum aleuticum</i>	Maidenhair	√	√						
<i>Asplenium viride</i>	Green spleenwort	√	√					√	
<i>Athyrium filix-femina</i>	Lady fern	√	√					√	
<i>Athyrium distentifolium</i>	Alpine Lady fern	√	√					√	
<i>Botrychium lanceolatum</i>	Triangle moonwort	√	√						
<i>Botrychium multifidum</i>	Leathery grape fern								

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Cryptogramma acrostichoides</i>	Parsley fern	√	√						√
<i>Cystopteris fragilis</i>	Fragile fern	√	√					√	
<i>Diphasiastrum sitchense</i>	Alaska Clubmoss	√	√						√
<i>Equisetum variegatum</i>	Northern scouring rush	√							
<i>Gymnocarpium dryopteris</i>	Oak fern	√							
<i>Gymnocarpium disjunctum</i>	Western oak fern	√							
<i>Huperzia chinensis</i>	Pacific fir-moss	√							
<i>Huperzia haleakalae</i>	Alpine fir-moss			√					
<i>Huperzia occidentalis</i>	Western fir-moss			√					
<i>Isoetes sp</i>	Quillwort	√							
<i>Lycopodium annotinum</i>	Stiff clubmoss		√					√	
<i>Lycopodium clavatum</i>	Running clubmoss	√		√					
<i>Polypodium amorphum</i>	Pacific polypody	√	√						
<i>Polypodium glycyrrhiza</i>	Licorice fern			√					
<i>Polystichum lonchitis</i>	Mountain holly fern	√							
<i>Selaginella densa ssp. scopalorum</i>	Compact selaginella	√							√
<i>Selaginella wallacei</i>	Wallace's selaginella	√	√						
<b>Plants recorded but not documented in above studies</b>									
<i>Androsace septentrionalis</i>	Northern fairy-candelabra								BC museum
<i>Antennaria alpina</i>	Alpine pussytoes								Fred Constable 2001

Scientific Name	Common Name	General	Roemer (2005)	RBCM coll	Roemer (2006)	Avis (2006)	Roemer/Avis (2007)	Roemer/Avis (2008)	Swerhun et. al (2009)
<i>Arnica mollis</i>	Hairy arnica	Fred Constable 2001							
<i>Callitiche sp</i>		R. Avis -							
<i>Caltha biflora</i>	Broad-leaved marsh-marigold	Fred Constable 2001							
<i>Fragaria virginiana</i>	Woodland strawberry	Fred Constable 2001							
<i>Hydrophyllum fendleri</i>	Fendler's waterleaf	Fred Constable 2001							
<i>Melampyrum linaeare</i>	Cow-wheat	Fred Constable 2001							
<i>Osmorhiza depauperata</i>	Blunt fruit sweet-cicely	Fred Constable 2001							
<i>Polystichum munitum</i>	Swordfern	Fred Constable 2001							
<i>Pyrola elliptica</i>	White wintergreen	Marta Donovan CDC 1997							
<i>Sambucus racemose spp pubens</i>	Red elderberry	Fred Constable 2001							
<i>Sanguisorba menziesii</i>	Menzies' burnet	Marta Donovan CDC 1997, Newcombe, CF., collector							
<i>Saxifraga occidentalis</i>	Western saxifrage	Fred Constable 2001							

**G.2 Documented Bird Species on and near Mt. Arrowsmith**

Common Name	Scientific Name	Lemmon & McCruer (1999)	Mooney (2008)
American Dipper	<i>Cinclus mexicanus</i>	√	√
American Pipit*	<i>Anthus rubescens</i>	√	
American Robin*	<i>Turdus migratorius</i>	√	√
Bald Eagle*	<i>Haliaeetus leucocephalus</i>	√	

Common Name	Scientific Name	Lemmon & McCruer (1999)	Mooney (2008)
<b>Band-tailed Pigeon</b>	<i>Columba fasciata</i>	√	√
Brown Creeper	<i>Certhia americana</i>	√	√
Chestnut-backed Chickadee	<i>Parus rufescens</i>	√	√
Common Goldeneye	<i>Bucephala islandica</i>	√	
Common Loon	<i>Gavia immer</i>	√	
Common Raven	<i>Corvus corax</i>		√
Dark-eyed Junco	<i>Junco hyemalis</i>	√	√
Golden-crowned Kinglet	<i>Regulus satrapa</i>	√	√
Golden Eagle*	<i>Aquila crysaetos</i>	√	
Gray-crowned Rosy Finch	<i>Leucosticte arctoa</i>		√
Gray Jay	<i>Perisoreus canadensis</i>	√	√
Hairy Woodpecker	<i>Picoides villosus</i>	√	√
Hammond's Flycatcher	<i>Empidonax hammondii</i>		√
Hermit Thrush	<i>Catharus guttatus</i>	√	√
Northern Flicker	<i>Colaptes auratus</i>		√
<b>Northern Pygmy-owl</b>	<i>Glaucidium gnoma</i>	√	√
Orange-crowned Warbler	<i>Vermivora celata</i>		√
Pileated Woodpecker	<i>Dryocopus pileatus</i>		√
Pine Siskin	<i>Carduelis pinus</i>		√
Red-breasted Nuthatch	<i>Sitta canadensis</i>	√	√
Red Crossbill	<i>Loxia curvirostra</i>	√	√
Rufous Hummingbird	<i>Selasphorus rufus</i>	√	
Savannah Sparrow	<i>Passerculus sandwichensis</i>		√
Song Sparrow	<i>Melospiza melodia</i>		√
Sooty Grouse	<i>Dendragapus obscurus</i>	√	√
Spotted Sandpiper	<i>Actitis macularia</i>	√	
Spotted Towhee	<i>Pipilo erythrophthalmus</i>		√

Common Name	Scientific Name	Lemmon & McCruer (1999)	Mooney (2008)
Steller's Jay	<i>Cyanocitta stelleri</i>		√
Three-toed Woodpecker	<i>Picoides tridactylus</i>	√	√
Townsend's Solitaire	<i>Myadestes townsendi</i>	√	
Townsend's Warbler	<i>Dendroica townsendi</i>		√
Turkey Vulture*	<i>Cathartes aura</i>	√	
Warbling Vireo	<i>Vireo gilvus</i>		√
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>		√
<b>White-tailed Ptarmigan</b>	<i>Lagopus leucurus saxatilis</i>	√	√
Winter Wren	<i>Troglodytes troglodytes</i>	√	√
Varied Thrush	<i>Xoreus naevius</i>	√	√
Yellow-rumped Warbler	<i>Dendroica coronate</i>		√



### G.3 Butterfly Species Documented near Mt. Arrowsmith by the Arrowsmith Naturalist Club

Common Name	Scientific Name	McBey Ck Headwaters	St. Mary's Lake
Spring Azure	<i>Celastrina landon</i>	√	
Purplish Copper	<i>Lycaena helloides</i>	√	
Brown Elfin	<i>Callophrys augustinus</i>	√	
Pacific Fritillary	<i>Boloria epithore</i>	√	
Hydaspe Fritillary	<i>Speyeria hydaspe</i>	√	√
Pacific Orangetip	<i>Anthocharis sara flora</i>		√
Western Sulphur	<i>Colias occidentalis</i>		√
Great Arctic	<i>Oeneis nevadensi gigas</i>		√
Clodius Parnassian	<i>Parnassius clodius</i>		√
Persius Duskywing	<i>Erynnis persius</i>		√

### G.4 Lichens Inventoried by Trevor Goward on Mt. Arrowsmith (Oct. 2006)

Scientific Name	Habitat Type
<i>Ceolocaulon</i> - coastal ??	Tree base
<i>Cetraria ericetorum</i>	Sheltered Duff / On trees
<i>Cetraria islandica</i> ssp. <i>crispiformis</i>	Tree base
<i>Cladina arbuscula</i>	Sheltered Duff
<i>Cladina mitis</i>	Sheltered Duff
<i>Cladina rangiferina</i>	Sheltered Duff
<i>Cladonia bacilliformis</i> ?	On trees
<i>Cladonia bellidiflora</i>	Sheltered Duff
<i>Cladonia carneola</i>	Sheltered ground
<i>Cladonia cervicornis</i>	Crevice
<i>Cladonia ecmocyna</i> ssp. <i>occidentalis</i>	Sheltered Duff / On trees
<i>Cladonia gracilis</i>	Sheltered Duff / Low on trees
<i>Cladonia phyllophora</i>	On trees
<i>Cladonia pyxidata</i>	Sheltered ground
<i>Cladonia singularis</i>	Sheltered Duff
<i>Cladonia uncialis</i>	Sheltered Duff

Scientific Name	Habitat Type
<i>Cornicularia normoerica</i>	Exposed
<i>Ephebe lanata</i>	Moist Swale / crevice
Ghoul's lantern	Moist Swale
<i>Hypogymnia imshaugii</i>	Trees above snow
<i>Hypogymnia inactive</i>	
<i>Lepraria cacunium ?</i>	Slightly sheltered
<i>Leprocaulon - white</i>	Moist Swale
<i>Melanelia hepatizon</i>	Crevice
<i>Ochrolechia - popcorn</i>	Trees above snow
<i>Pannaria pezizoides ??</i>	
<i>Parmelia saxatilis</i>	
<i>Parmeliopsis hyperopta</i>	Trees below snow
<i>Placodeate - white ?</i>	
<i>Placopsis gelida</i>	Exposed
<i>Platismatia glauca</i>	Exposed / crevice
<i>Polychidium muscicola</i>	Sheltered Duff
<i>Porpidia - orange</i>	Exposed
<i>Pseudephebe pubescens</i>	Exposed
<i>Pyrrhospora cinnabarina</i>	Trees above snow
<i>Rhizocarpon - green</i>	
<i>Rhizocarpon - pale, dispersed</i>	Exposed
<i>Rhizocarpon - gray</i>	Exposed
<i>Stereocaulon alpinum</i>	Exposed
<i>Stereocaulon pashale</i>	Exposed
<i>Stereocaulon vesuvianum</i>	
<i>Thamnolia vermicularis</i>	Exposed
<i>Tuckermannopsis chlorophylla</i>	Exposed
<i>Tuckermannopsis platyphylla</i>	Rock - sheltered
<i>Umbicularia hyperoptra</i>	
<i>Umbilicaria - rough above</i>	Exposed
<i>Umbilicaria - white wrinkled above</i>	Exposed / crevice
<i>Umbilicaria angulate</i>	Sheltered Duff
<i>Umbilicaria hyperborea</i>	Exposed
<i>Umbilicaria lamiae</i>	Exposed
<i>Umbilicaria polyphylla</i>	Trees above snow
<i>Umbilicaria torrefacta</i>	