ATCO - Northwood

Ready to work with the Alberta Government to establish Water Quality Standards For the North Saskatchewan River.

Looking at a start up of 1986-87 if their is significant improvement in economics by 1983,

It would be their intention to identify any delitereous chemicals during the E.I.A. Stage and work with the Gou't to set standards for those chemicals.

If they find there are chemicals which can not be feasibly controlled or eliminated in the effluents than the entire plant would be put in jeporady.

Continued high interest rates would delay plant construction.

There will be opportunities for quota expansion. The size of the expansion will depend on the annual allowable cut Figure agreed upon in the FMA.

The entire project would be viable without the 3rd paper machine but the return is better with the the 3rd machine.

Utilization - 5" stump 3" top. They will fully utilize birch and aspen.

They expect the IMP's to address other uses and resources such as wildlife but these will be addressed in the E.I.A. as well.

The Feature distinguishing this kraft Pulp Mill from the conventional kraft Mill is the Bleaching. This process wises a prebleaching stage with oxygen and much less chlorine.

The size of the complex as far as BOD loading would be equivalent to a city of 458,000.

The range of phenolic compounds is dependent on the processing used. Chlorinated phenolics - 5 ppb is their expected loading. The water quality objectives are 5 ppb. They would be using the full assimilative capacity for phenolics if there is no degradation.

There are processes that they have identified that could Further reduce the phenolics which they are investigating. They are also investigating rapid infiltration methods and their preliminary investigation shows that it may be feasible in the Pocky area.

They will be including an investigation of tertiary methods of treating the effluent in the E.I.A.

They have concentrated their site selection within 15 km of Rocky. They are proposing a 100 hectaire holding pond.

They want to keep their capital costs for water treatment below \$100 million.

The long term effects of the nonconventional pollutants on human health are not known.

IF the timber inventory is overestimated (which they don't think it has) they would make up the required supply with purchased wood.

They believe that the regeneration age could be reduced from 80 years to 65 years with intensine management. 8-10,000 her. per year would be cut, less than 1% of the whole area

Larry Kennedy*

A lot of things that have been recommended by · past hearings have not been implemented.

There are many questions to be answered before we go ahead with development of the Brazeau Area.

The ImP's are not completed, the public should have a chance to see these first.

The public should know what the watershed & wildlife people are saying about these proposals.

Not against progress but progress should be well planned The forests are not going to disappear if they are not hurvested.

Theresa Strawberry, O'Chiese Band

They have hopes and fears.

They want jobs.

They Fear fooding and the affects on forests.

They want to be satisfied that the environment will be protected.

Robert Whitecht, Sunchild Band

They want assurance that the Govit will not use this timber development to limit their hunting rights.

An independent assessment of the impact of the development on the environment is needed. They want to participate in this assessment.

They want to be involved in the planning of the development. They want jobs. Their culture demands specialized training programs

PRESENTATION TO THE HEARINGS ON THE BRAZEAU TIMBER DEVELOPMENT AREA

BY
MARTHA KOSTUCH
August 26, 1982

INTRODUCTION

First, I would like to congratulate the Foresty Division and particularly Fred Sutherland for their past management of the Rocky-Clearwater Forest. They have managed the forest for the benefit of all of the resources, not just timber. If overharvesting of timber had been allowed in the past, we could not now be giving consideration to these proposals.

Is it desirable to have a pulp and paper mill in the Rocky area? Is there a big enough and steady enough market for paper to justify expanding Rocky and all of the services required? Will we in the future be facing problems that Grande Prairie and other timber based communities are now facing such as massive unemployment?

Is there enough timber in the Brazeau Area to permit continuation of existing operators, to allow for continuation and expansion of other uses of the forest, and to have an economically viable pulp and paper mill?

If, after answering these and other similar questions, it is determined that yes, there should be a pulp and paper mill located in the Rocky area, the next question is - which proposal should be accepted?

Would it be better to have a wholly Canadian owned development that includes a sawmill in addition to a kraft pulp mill and paper mill and that would be large enough to have a training center and to employ an environmental designer?

Or would it be better to have a smaller development partially owned by the West Germans that would only harvest the

- 2 -

O'Chiese Block and would not include either a sawmill nor a kraft pulp mill?

Although I raise these questions, I certainly do not intend to try to answer them all in my brief. I do hope however, that you will get the answers to these questions before deciding whether or not a pulp and paper development is desirable for the Brazeau Area and, if so, which one.

In this brief, I will present my general concerns regarding the harvesting and processing of timber in this area.

More detailed concerns are contained in the brief which I presented, on behalf of the Rocky Mountain House Fish and Game Association (Appendix A) to the E.C.A. Hearings on The Environmental Effects of Forestry Operations in Alberta. I also plan to participate in the preparation and review of the Environmental Impact Assessment which I expect will be required if a project is accepted.

LAND USE

The majority of the Brazeau Timber Development Area is zoned Multiple Use under <u>A Policy For Resource Management of the Eastern Slopes</u>. According to this policy "the primary goal of this zone is to allow the utilization of the full range of available resources within a multiple use context without adversely affecting watershed or environmental conditions in the long term." It goes on to say "the Government has identified integrated land use planning as the means of implementing the resource management policies for the Eastern Slopes."

The integrated management plans must be completed before a timber management agreement is signed. It will not be sufficient

to complete the plans prior to the start of harvesting. An analogy to this would be signing a grazing lease for 1,500 cattle before knowing which land is available for grazing. If the planning is not completed first, there will be considerable pressure put on the planning team to make sure that sufficient grazing areas are available for 1,500 head of cattle.

We were told the plans would be completed to the policy stage before the public hearings. Only the Brazeau-Pembina IMP has been completed to this stage even though considerable pressure has been placed on the Planning Teams.

The Integrated Management Plans will identify areas that must not be harvested to protect environmentally sensitive areas, important wildlife habitat, etc. If properly completed, the IMP's should alleviate many concerns regarding timber harvesting and land use.

ACCESS

Areas traditionally open to vehicle access should remain open and areas traditionally closed to vehicle access should remain closed unless determined otherwise during integrated management planning.

AVAILABILITY OF TIMBER

There appears to be considerable controversy over the accuracy of the Government's inventory. You must make very sure that there is sufficient timber before you even consider approving either of the major proposals. If a proposal is approved and there is not

- 4 -

adequate timber available, than either the company will have to run at less than full capacity resulting in loss of jobs, leave areas will have to be cut too early, or reserve areas will have to be harvested.

Areas cut primarily because the timber is overmature or diseased should not be considered as part of the twenty-five (25) per cent of each block reserved for protection of environmentally sensitive areas wildlife and watershed management.

FISH AND WILDLIFE

Many types of wildlife can benefit from good timber harvesting. Critical habitat should not be disturbed or should be subject to modified cutting techniques. Regrowth areas should reach a minimum height, not age, before leave areas are harvested. Clear cut areas should not be so wide that they discourage crossing.

Some species of wildlife require mature and overmature stands of timber. Special care should be taken to provide for those species. A diversity of vegetation is required to maintain a diversity of wildlife. A monoculture forest would not be desirable.

Fish populations could be decreased if water quality is affected by either poor harvesting techniques or by effluents from the pulp and paper mills. I will discuss this further under environmental concerns.

If a major proposal is approved then fishing pressures will increase as a result of an increased population of people in the Rocky area and because of increased access. Thus, the Government should increase the intensity of its fish management programs including

- 5 -

increased stocking and additional manpower.

ENVIRONMENTAL CONCERNS

WATER QUALITY

According to the Eastern Slopes Policy "the highest priority is placed on watershed management to ensure a reliable supply of clean water for aquatic and downstream users."

Proper harvesting techniques should be used to prevent erosion, reduce changes in water temperature, etc.

Tertiary treatment of mill effluents should be required.

Any effluent discharged into a river should be at least as clean as the water already in the river.

Methods to utilize the effluent such as land application and raising of aquatic plants or animals in the lagoon should be thoroughly investigated.

AIR QUALITY

Air pollution must be minimized. The best available technology should be used to control air emissions. No development should be approved that will emit noxious odours.

AESTHETICS

The Brazeau Area is important to the quality of life for many Albertans and especially to local residents. The beauty of the area must not be sacrificed. Proper designing of clear cuts and roads is essential.

E.C.A. RECOMMENDATIONS

Special attention should be paid to the recommendations

- 6 -

from the Environment Council of Alberta Report on the Environmental Effects of Forestry Operations in Alberta and in particular the following recommendations which have been modified for the specific area and proposals under consideration.

- Where aesthetics are of prime importance, cut blocks should have sizes, shapes, and edges that provide a pleasing blend of landscapes and simulate natural openings. A professional landscape architect should be retained to provide guidance for such designs.
- 12. Leave blocks should not normally be harvested until the dominant regeneration on adjacent cut blocks provides protection for the watershed and escape cover for large animals and leaves an aesthetically pleasing landscape after the second cut.
 - 16. Roads should not be over-engineered for their probable long-term uses. It is not necessary, for example, to build super highways through forest and recreation areas.
 - 17. Detailed maps of topography, landforms, and surface geology should be prepared to aid in road location. The maps should identify areas of sensitive terrain which should be avoided or require special treatment to avoid environmental damage.
 - 18. Only those road locations that do not degrade ungulate habitats (particularly winter feeding

- grounds or breeding grounds), fish habitats, or areas of prime recreational importance should be approved.
- 20. On all permanent roads, bridges should be constructed whenever feasible over all streams.
 Whenever culverts must be used, more attention should be given to their size, installation, and maintenance.
- 55. Increased utilization of hardwoods, whether as part of the supply for pulp mills or in the production of hardwood products, should be encouraged.
- 56. Any new pulp mills in Alberta should have timber limits that are less than needed to operate at full capacity; 85 to 90 per cent is suggested as a target. Intensive management, purchased waste wood, and waste paper should provide the additional requirements.
- 57. Any new pulp mill should be designed to provide zero pollution to the river on which it is situated. Closed-system mills with no water effluent are now economically feasible. They must be encouraged in Alberta.
 - 60. When a major sawmill or pulp mill is located near, but not within, an organized municipality, the option should be allowed that a percentage of the mill's assessment, equivalent to the percentage of the mill employees resident in the

- community, be transferred to the municipality's assessment roll.
- 70. Hardwoods should not be discriminated against in regenerating and preparing sites after logging. They provide important food and cover for a variety of wildlife species and can protect sensitive sites from erosion.
 - 117. Research should be initiated on the introduction of nitrogen-fixing herbaceous plants on selected cut-over areas and the effect this would have on the establishment and subsequent growth of forest regeneration, and on forage available to wildlife.
 - 136. Part of the training program of equipment operators should be devoted to the identification of environmentally damaging procedures and the development of environmentally sensitive operational methods.

SOCIAL AND ENVIRONMENTAL IMPACT ASSESSMENT

If one of the proposals which includes a pulp and paper mill is accepted, a Social and Environmental Impact Assessment should be required. The public should be involved in the preparation and review of this assessment. The project should only be given final approval if the social and environmental impacts are not too great and if the impacts can be properly mitigated.

No one was informed prior to today that this having would also address detailed environmental impacts...9 related to timber horsesting.

I would like to know who decided than an I would like to know who decided than an EIA covering Forestry operations would not be required and how firm that decision is.

I was not opposed to any of the proposals, only concerned that if the timber 9 - is available and a proposal is accepted that the environment be protected. However, if a full EIA is not going to be required, than I have no option but to CONCLUSION oppose the ATCO-Northwood and Makin proposals.

In this brief, I have presented my concerns regarding land use, access, availability of timber, fish and wildlife, and the environment. I urge you to take great care in your consideration of these and other issues. A well planned, properly scaled development could actually benefit some of the other forest resources in addition to having economic benefits. However, if a poorly planned or scaled development is approved, our forest heritage will be sold for short-term economic gains.

SUMMARY OF RECOMMENDATIONS

- 1. The integrated management plans should be completed before a timber management agreement is signed.
- Areas traditionally open to vehicle access should remain open and areas traditionally closed to vehicle access should remain closed unless determined otherwise during integrated management planning.
- 3. Results of timber inventories must be closely scrutinized to see if they are accurate.
- 4. Areas cut primarily because the timber is overmature or diseased should not be considered as part of the 25 per cent of each block reserved for protection of environmentally sensitive areas, wildlife and watershed management.
- 5. Harvesting techniques should be used which will benefit wildlife.
- 6. The Government should increase the intensity of its fish management programs including increased stocking and additional manpower if a major timber development is approved for the Brazeau Area.
- 7. Tertiary treatment of mill effluents should be required. Methods to utilize the effluent should be investigated.
- 8. The best available technology should be used to control air emissions.
- 9. Special attention should be paid to the recommendations from the Environmental Council of Alberta Report on the Environmental Effects of Forestry Operations in Alberta.
- 10. If one of the proposals which includes a pulp and paper mill is accepted, a Social and Environmental Impact Assessment should be required. The public should be involved in the preparation and review of this assessment.

TOWARDS 2000

Brief by Martha Kostuch

March 30, 1992

Introduction

Economy is the science of managing our resources. The economy includes more than those things that have a commercial value attached to them. The economy inludes everything we place a value on.

Fresh air, clean water, plentiful wildlife, the existence of wilderness, peace of mind, good health, education, ample leisure time, meaningful, fulfilling work, the elimination of poverty and violence, a rich culture, dignity for all people and freedom are what we should be managing our economy for.

"The strength of our local economy is tied to the richness and diversity of what we can do for ourselves and our neighbors, not what we export or import." (Thomas Michael Power, The Economic Pursuit of Quality)

"We must therefore now run our economy with a leaner mix of capital, energy and material and a richer mix of labor and human resources." (Hazel Henderson, Creating Alternative Futures)

"The redistribution of wealth is more important than the raising of output." "The cause of poverty was, in Gandhi's view, the covetousness of the rich and the exploitation of the needy by the greedy." (Raghavan Iyer, The Moral and Political Thought of Mahatma Gandhi)

"The use of money is all the advantage there is in having money." Benjamin Franklin

"He who knows he has enough is rich." Tao Te Ching

"To be content with what one has is to be rich." Tao Te Ching

"Earth provides enough to satisfy every man's need, but not enough for every man's greed." Gandhi

"The more simply you live, the more secure is your future." Charles Wagnor

"It is when I possess least that I have the fewest worries." St. Teresa of Avila

"It is quite possible to arrange things so as to produce a good deal fewer gadgets and instead to enjoy more leisure. And, although blasphemous to utter, it is also possible to train fewer scientists and engineers without our perishing from the face of the earth. Nor do we need to capture world markets in the hope of being able to lower costs; or to lower costs in the hope of capturing world markets. We can, while acting as rational beings, deliberately choose to reduce our foreign trade and in some lines, therefore, to produce smaller quantities at a somewhat higher cost... We can decide even to reduce the strains of competition and opt for an easier and more leisurely life. Such choices as these, and many others also, can be translated into perfectly practical alternatives whenever public opinion is ready to consider them." E.J. Mishan

"If there is any hope of saving the rights of the person and the planet in the years ahead, we are going to have to find our way back to a comparable sense of mutual aid, a comparable capacity to live self_reliantly within more local and domestic economies, a comparable appreciation of the wealth that lies in modest means and simplicity of needs." Theodore Raszak

Recommendations

- The Roundtable on the Economy and the Environment should play the lead role in developing the economic plan for the future of Alberta.
- Alberta should enact Freedom of Information Legislation. A healthy economy requires that Albertans be well informed. A Freedom of Information Act would guarentee residents of Alberta access to the information they require to be fully involved in Alberta's future.
- Full employment should be a goal of Alberta's economic strategy.
- Labour intensive industries and businesses should be encouraged.
- The Government of Alberta should provide no more financial support for mega projects or for nonrenewable resource development.
- Ecotourism should be encouraged. Tourism facilities should not destroy the very resources people come to see.
- The Government of Alberta should support and encourage energy conservation and the development of renewable energy, the energy of the future.
- The Alberta Government should stop subsidizing irrigation expansion. Irrigation has contributed to over production of certain agricultural crops and has resulted in unfair competition with dryland farmers. Consideration should be given to switching more of existing irrigation production to specialty crops.
- Marginal agricultural land should be converted to wildlife habitat or to tree farms.
- Sustainable, non-chemical agriculture should be encouraged.

- The forest products industry has not been a major success story in Alberta. The Alberta Government subsidize d big, primarily foreign companies to come in and exploit Alberta's forests. The people of Alberta were not consulted before Alberta opened up its forests for sale. Small, stable, timber operations were ignored in favour of big, unstable, polluting developments. Forestry Management Agreements were, and still are, negotiated in secret. Forests are more than just trees waiting to be cut down for timber and pulp. Alberta's forests must be managed differently in the future.
- Every community in Alberta should be encouraged to develop a conservation strategy or an environmentally sustainable development strategy.
- Corporations should be required to pay a larger share of the taxes in Alberta and in Canada.
- More government funds should be spent on supporting public transportation systems and less on road construction and upgrading.

Conclusion

Management of the economy impacts more than just businesses. The economy impacts people and the environment. Alberta's economy should be managed to benefit all of society and the environment.

Free Trade and The Environment

The Government ignored its own Report of the National Task Force on Environment and Economy which called on Canada to ensure that all international discussions and negotiations dealing with development and trade evaluate the environmental impacts. This has not been done for the Free Trade Agreement.

The Agreement gaurentees the U.S. access to our resources.

This will mean increased exploitation of our non-renewable resources including oil, gas and coal with all of the resulting environmental impacts. (Land use impacts; Loss of wildlife habitat; loss of wildlife habitat; we have to abandon our goal of national energy self-sufficiency we have to abandon our goal of national energy self-sufficiency. [In fact, the U.S. has more guarentee of access to provinces of Canada.]

Our resources of than other facts of Canada.]

Two can't even establish a minimum price for our energy.] energy

The Agreement guarentees the U.S. access to our resources, The Agreement guarentees the U.S. access to our resources, This will result in increased pressure to build This will result in increased pressure to build and Fired generating plants, hydroelectric dams coal Fired generating plants in Canada with tell and nuclear power plants in Canada with tell and nuclear power plants in Canada with tell of the resultant environ mental impacts and export of the resultant environ mental impacts and export the electricity to the U.S. (More transmission lines the electricity to the U.S. (More transmission lines

The agreement includes water

Because of increased competition between business in the U.S. and Canada, there will be more pressures on both the Canadian and U.S. Governments to lower environmental standards to make their businesses more competitive

Brief

to the

ALBERTA WATER RESOURCES COMMISSION

presented by

Martha Kostuch

December 11 or 12, 1984

INTRODUCTION

Water is one of our most precious resources. There is much more to a lake than just the water in it. Lakes, rivers and swamps are not just natural plumbing systems, but viable and essential ecosystems.

The aesthetic, aquatic and recreational values of our rivers are often overlooked. Our water is far more than just a resource to be managed for the maximization of jobs (see Alberta's White Paper).

Water is a living system. All life, not just people, depends upon the availability of quality water. Rivers played a major role in Canada's development and will always be an important part of Canada's heritage.

PUBLIC HEARINGS ON WATER MANAGEMENT

I do not believe that the Alberta Water Resources Commission is the appropriate body to conduct public hearings on water management in Alberta. The pro-interbasin transfer, pro-dam stand of the Chairman is well Known.

At a meeting with the Renewable Resources Study Group (PAC) on May 23, 1980, Mr. Kroeger stated, "everybody Knows what the north half of the province is-just trees and water. Above Edmonton, there is too much water and we don't Know what to do with it."

Mr. Kroeger has also made it quite clear that he believes water must be contained to be managed.

The Water Advisory Committee, the precursor to the Alberta Water Resources Commission, made the following recommendations to the Minister of the Environment in August, 1981:

- 1. A survey should be made on the crop lands now occupied in Northern Alberta, to determine the area of the land which can be made productive by drainage, so that an estimate can be made of the potential addition to the production of food which will result if the lands are drained. On the non-crop land in Northern Alberta a survey should be made to determine the area and the location of the lands that are fit to become crop lands. This survey should be made so as to provide more crop land for settlement as the demand arises.
- 2. The North eastern portion of the South Saskatchewan River Basin should be examined in a manner adequate to enable the Government to maximize its production potential and prepare an inventory of lands that could be potentially irrigated.
- 3. That the Government should cause a survey to be made of the lands shown on the Pedologist's Report in the South SasKatchewan Basin, as irrigable and probably irrigable. This survey should be made in a manner which will enable the Pedologist to prepare an inventory after on-site inspection of the lands which they can certify are irrigable. This survey should be sufficiently funded and manned to have this Report complete in two years.
- 4. That negotiations be opened promptly with the Federal and the British Columbia Governments concerning the diversion of water from the Peace River in the amounts and at the times necessary to the transfer of the content of the times necessary to the times necessary the times necessary to the times necessary the times necessary to the times necessary to the times necessary the time

done promptly in view of the consideration that is now being given to building further dams on the Peace River. It is recommended

the interbasin transfer of water from Northern Alberta to the South SasKatchewan River Basin.

Public input is required on the overall issues and policies relating to water management. The Environment Council of Alberta is the appropriate body to hold these hearings.

It is the Environment Council's legislated responsibility to conduct a continuing review of policies and programs of the Government and government agencies on matters pertaining to environment conservation.

The Environment Council is also required to investigate any matter pertaining to environment conservation upon the request of the Minister.

CONTROLLING WATER DEMAND

According to the Water Management Principles for Alberta, the philosophy of water management is based on better use of available water resources, augmentation of available water supplies, where necessary, and reduction of consumption.

Although this is the stated philosophy of the government of Alberta, the major emphasis has been on augmentation of available water supplies and not on improving the use of available water resources nor on reducing consumption.

Minimizing the amount of water used, relocation of requirements, recycling water, charging for water, metering, conservation, and improving efficiency of delivery systems are all methods of controlling demand.

WATER PRICING

One method of controlling demand which is consistent with the user pay philosophy of this government is water pricing. On July 7, 1972, the Hon. W.J. Yurko, Minister of the Environment made the following comments to the Canadian Water Resources Association Conference:

"There is an increasing realization that water is no longer a free commodity and water management costs will increase substantially in the future."

"My department is actively investigating the applicability of water use fees on a provincial basis...as well as other means of financing water management undertakings. We are examining charges for water use for industrial use, commercial use, oil well injection, irrigation and hydroelectric use."

"We hope to make a recommendation to cabinet on such a proposal in the first few months."

It is now twelve years later and we are still waiting!
Charging for water would not only help pay the costs of water
management. It would also encourage users to practice
conservation and to improve the efficiency of their systems.

CANADIAN HERITAGE RIVERS SYSTEM

According to Fred Bradley, the Minister of the Environment, Alberta does not want to join the Canadian Heritage Rivers Program because the province believes in multiple use of the rivers. However, it is impossible to use all parts of all rrivers for all uses. A river that is dammed for hydroelectric purposes may not be suitable for irrigation. A river dammed for irrigation might reduce the fisheries potential. A river that is dammed for any

reason reduces the natural and historical values of the river.

The current preferential use policy of the government may eventually result in the loss of all the wild rivers in Alberta. The historical, natural, recreational and aesthetic values of these rivers are irreplaceable.

ZONING OF RIVERS

All rivers should meet minimum water quality objectives. Minimum flow requirements should also be established for all major rivers in Alberta. The arguement against making the province wide water quality objectives enforceable by instituting surface water quality standards, is that some sections of some rivers in the province might naturally exceed the levels established.

One way around this problem and the problem of multiple use of the rivers might be to establish a system of river zoning. Surface water quality standards could be established that would apply to all rivers in Alberta.

In addition, river zones could be established where the water quality objectives would exceed the standards which apply to the whole province. The priority of use for river zones would also differ. Certain sections of some rivers might be designated for multiple use. Other sections might be designated for more sensitive uses such as natural rivers, heritage rivers or recreational rivers.

THE OLDMAN DAM

On October 16, 1980, at a meeting with the Public Advisory Committee on the Environment, Mr. Cookson, Minister of the Environment, indicated that an environmental impact assessment would be conducted on the Oldman Dam and that the assessment would include public participation.

The Water Resource Management Principles also indicate that Environmental Impact Assessments are required for major water management projects.

Yet the government refuses to do an environmental impact assessment. I think that the government is afraid to do a proper environmental impact assessment. They are afraid that the assessment will show that the environmental impacts are too large and that the dam should not be built.

WATER RESOURCES MANAGEMENT

We have a government department trying to do a balancing act. Alberta Environment is responsible for building dams. They are also responsible for protecting the environment.

The Department of the Environment should not be responsible for constructing dams. The Department of the Environment should be free to assess the environmental impacts of a dam and promote the protection and enhancement of the environment.

Water is a natural resource. Management of water should be integrated with management of other natural resources.

EASTERN SLOPES POLICY

The following comments are from a speech given in 1973 on the "Impact of Technology on the Eastern Slopes" by the Hon. Bill Yurko, Minister of the Environment.

"We are concerned about clean, pure water for all Canadians.

Water is a precious heritage upon which all life depends. It is, therefore, imperative for all of us that our waters not be polluted at their source.

The Rocky Mountains are the source of Alberta's abundant water supply. From there, pure streams and rivers flow to the prairie lands. Even the irrigated farms, the ranches and the towns and cities which now have replaced the virgin prairie are dependent on these waters for their existence. The fish and wildlife of our mountain and foothills areas depend for their existence on the pure waters that flow therein.

It is also true that the east slope of the Rocky Mountains is a vital watershed which not only provides the source of our rivers and streams, but provides also a vital weather modifying effect necessary in preventing the prairies from becoming a desert. This vast forested area protects our prairies from becoming an arid wasteland.

We join forces with other Canadians who Know that industrial development in the mountain and foothills area of our province can have no other affect but to add to the pollution of our rivers at their source and disturb the watershed on the East Slopes of the Rocky Mountains. It is our belief shared by other Canadians, that the profits from industrial development in these areas can never repay the loss incurred, nor heal the wounds on nature that would result."

The management emphasis in the original Policy for Resource Management of the Eastern Slopes, released in 1977, was on watershed management so that a reliable supply of clean water would be ensured for aquatic habitat and downstream users. The emphasis in the revised policy is on maintaining or increasing the volume of water yield. Protection of water quality for downstream users is not even mentioned in the objectives.

ASSIMILATIVE CAPACITY

The concept of assismilative capacity implys that rivers constitute a part of the treatment system. It accepts that for an unKnown distance downstream from the source, the water quality will be impaired.

Water is a crown resource. It is incumbant upon the Government, as the resource steward, to ensure that there is appropriate protection of the water resources and that it is passed on to downstream users at least as good as it was received.

UTILIZATION OF SEWAGE EFFLUENT

Our rivers should not be used for the disposal of sewage effluent. Sewage is a valuable resoource which should be utilized. Land irrigation is one method which should be given serious consideration in Southern Alberta.

SOUTH SASKATCHEWAN RIVER BASIN DEVELOPMENT

Finally, I come to the development scenarios contained in the South SasKatchewan River Basin Planning Program.

1984 would seem to be an appropriate year for the release of these scenarios which appear to be based on a concept of reverse economics. The goal seems to be to lose as much money as possible.

The cost of additional reservoir storage and of the

rehabilitation and expansion of existing headworks and irrigation district works required for Scenario 1A, the Base Case which includes measures already announced by the government is 1 billion 464 million dollars. This is public money which will be spent. 15,560 more jobs would be created than if the area was dryland farmed. That's a cost of \$94,000 per job created.

How can the government justify spending 1.4 billion dollars from public funds when there aree other methods of supplying the water for irrigation which are more economical and less environmentally damaging?

The 1.4 billion dollars is just for the Base Scenario. Scenario 4C, maximum irrigation expansion/irrigation allocation/maximum additional storage, would cost the tax payers of this province over 5 billion dollars.

In addition to the questionable economics of the scenarios, I have some specific comments to make about the study.

How will the irrigation of the additional land affect dryland farmers who currently have problems marketing their products at a fair price?

If there is such a tremendous demand for agricultural products, why are there so many farm foreclosures? Using only the 1.4 billion dollars already committed for irrigation expansion and improvements, 14,000 farmers in Alberta could be given \$100,000 each to reduce their debt load.

I support the decision of the Prairie Provinces Water Board to establish water quality standards for the South Saskatchewan and Red Deer rivers at the Alberta/Saskatchewan boundary (p.41) I certainly hope that the public have an opportunity to have input into the standards established and that the standards will be enforceable.

According to the report on the South Saskatchewan River Basin, "There are three basic ways in which water supply and demand for irrrigation can be balanced: by increasing the supply available for use, by using the available supply more efficiently, or by reducing the demand. Only the first of these, increasing the available supply through reservoir storage, is evaluated as a management option." (p. 53) This is a major deficiency and certainly doesn't take into consideration the stated philosophy of water management in Alberta.

No evaluation was done of the effect on the demand for water or on the efficiency of water use that would result if users were charged for water on a per unit basis. (p. 54)

Also, no economic evaluation was done for recreational water uses. (p. 58)

These major deficiencies must be addressed before any decision is made about the long term management of the South SasKatchewan River Basin.

RECOMMENDATIONS:

- The Environment Council of Alberta should conduct public hearings on water management in Alberta.
- The Provincial Government should do more to control water demand.
- 3. Water use fees should be implemented.
- 4. The Alberta Government should join the Canadian Heritage Rivers System.

- 5. Consideration should be given to zoning rivers in Alberta.
 The public should be asked for their input on the concept of zoning and what zones, if any, should be established.
- 6. The Government should call for a full environmental assessment of the Oldman Dam. The public should be involved in the assessment.
- The Water Resources Management Division should be transferred from the Department of the Environment to the Department of Energy and Natural Resources.
- 8. The original (1977) Policy for Resource Management of the Eastern Slopes should be reinstated.
- Assimilative capacity should not be regarded as a natural resource which is legitimate to use.
- 10. The Provincial Government should give moral and financial encouragement to municipalities to utilize their sewage effluent.

CONCLUSION

In conclusion, there are many general water management issues which need to be addressed including

- a review of the Water Management Principles for Alberta;
- a review of the priorities for water use;
- the need for zoning rivers;
- methods for controlling water demand;
- the need for water pricing;
- the agency or department which should be responsible for water management;
- water quality issues including sewage utilization and assimilative capacity,
- the need for surface water quality standards; and
- interbasin transfer.

The Environment Council of Alberta and not the Water Resources Commission is the appropriate body to consider these issues.

The Government should take immediate steps to rescind the Revised (1984) Policy for Resource Management of the Eastern Slopes and reinstate the original (1977) policy.

The South Saskatchewan River Basin Study by Alberta Environment has a number of major deficiencies and does not provide an adaquate basis for the long term management of the South Saskatchewan River Basin.

ISEP - 2 1986

INTERVIEW WITH MARTHA KOSTUCH "ALBERTA TODAY", CBC RADIO, EDMONTON 12:22 P.M. (6 minutes and 55 seconds) 27 August, 1986

N O T E: This interview was done by telephone and in parts is rather difficult to understand.

ANNOUNCER:

On Alberta Today we want you to know that, despite a 3.5 million dollar health study in the Pincher Creek area, fears still exist about the hazards of sour gas. Last week a Public Advisory Committee failed Nor endorse recommendations compiled from that study. TRUE Environmentalists question the claim that health problems are "all in their heads". Martha Kostuch is a veterinarian in Rocky Mountain House. She is also Chairman of the Public Advisory Board. She told Garnett that she could not talk as a Board Member but privately feels the study is lacking.

GARNETT: (no surname mentioned)

There are still many people in that Pincher Creek area that aren't convinced that the Health Study done really addresses their concerns. Are you convinced the study is a good one?

MARTHA:

I'm convinced more and more that the study has some major flaws, although the work that was done appears to have been done well. It appears as if they missed some of the main problems that people have been complaining about.

GARNETT:

What kind of flaws, what kind of complaints?

MARTHA:

Well one major fault, or problem, is that they didn't look at the kind of problems that people have been complaining about over the last 25 years. The emphasis was put on essentially a dead body count, that is mortality and seriously disabling conditions and also at looking at acute symptoms that occurred two weeks prior to testing that the people have always been complaining about problems which occurred during the time that they were exposed. They haven't been talking about uhm dying from the gas so they essentially didn't examine the problems that the people have been complaining about.

GARNETT:

Some people are suggesting that ground level monitoring was not done and that's where people live. How could you possibly do a comprehensive study and not do that kind of monitoring?

Page 2 CBC INTERVIEW WITH MARTHA KOSTUCH 27 AUGUST, 1986

MARTHA:

Well that's certainly another major problem that no exposure monitoring was done, even though it was recommended by the experts at the Human Health Workshop. So, as a result of the lack of exposure monitoring, we don't know if the people who were tested were even being exposed during the time they were tested or in fact whether the people in the control area, the Raymond/Stirling area, were not being exposed to pollutants during the time they were tested, so its a major deficiency of the study.

GARNETT:

What do you suggest should be done?

MARTHA:

Well, I'm not sure what should be done at this time. We need some experts to come forward and question some of the aspects of the study. That certainly must be done. I have had a number of phone calls and many letters that have put forward many recommendations, ranging from a one day forum where people, public and media and others would have an opportunity to confront Spitzer with their concerns and questions, to a judicial inquiry or an ERCB inquiry. Those are just a few of the recommendations that have been put forward by various groups and individuals.

GARNETT:

What kind of response has there been to those kind of recommendations?

MARTHA:

The response so far has been very negative. Ugh it appears as if most government or industry people appear to be very satisfied with the findings of the study, the fact that this essentially gets industry and the government off the hook.

GARNETT:

So I suppose one of the concerns that everyone should have is that if the report is accepted, whatever its conclusions are, then that will be the Government guidelines for future considerations when regulating natural gas plants where ever they may be built in the province. Wouldn't you agree?

Page 3
CBC INTERVIEW WITH MARTHA KOSTUCH
27 August, 1986

MARTHA:

Yes I would. In fact the Legislature has already debated the motion to adopt the report and if the report is adopted, recommends no further research be done on human health or on the effects of acid forming emissions, sour gas emissions. Also, Ian Smyth the Executive Director of the Canadian Petroleum Association, has already indicated that they believe that this has saved industry \$2.4 billion because they no longer would be pressured into putting on any additional controls so it would have major implications if this report was adopted.

GARNETT:

Are we still hearing people complaining about burning and watering eyes, itchy skin, throat irritation, pain and fatigue and they being told its "all in their heads"? Have you talked to any of these people?

MARTHA:

Yes I have. Some of them are very angry, some of them are upset, ugh many of them want nothing more to do with any studies, they have lost their trust completely. Those complaining of problems do not believe that the problems are going to go away just because Spitzer has indicated that its due to anxiety or its in their head.

GARNETT:

Some people have suggested that a study like this is simply giving the client what he wants, what he wants to hear. Would you think that that might be one of the dangers?

MARTHA:

Well, since I was involved in monitoring this study, ugh, I didn't feel that way but now I'm concerned that that may be the case.
.....? Previous studies have always indicated that there is a problem and this study has essentially vindicated the industry, and government feels that it has vindicated them, uhm, they feel that they've gotten what they wanted. Maybe its because the client has gotten what he wanted.

GARNETT:

And that being the oil industry and government?

Page 4
CBC INTERVIEW WITH MARTHA KOSTUCH
27 August, 1986

MARTHA:

Yes, and we certainly paid well for it but when you consider the price of 3.7 million and industry figures they saved ugh 2.4 billion, then it was pretty cheap. Also, the industry didn't pay any part of this study. The entire study was paid by governments and then that makes it even cheaper.

GARNETT:

What's going to happen next do you think?

MARTHA:

Well, one or more people are reviewing the study. I've certainly asked many experts to review it and get their comments back to me. Other members of the public are also reviewing it and giving me their comments so that they can get on with trying to determine what is causing the peoples' problems.

GARNETT:

Well is Martha Kostuch, one of the most outspoken environmentalists in the province, feeling mad or frustrated at this point?

MARTHA:

Well, ugh yes. I'm feeling angry, I'm feeling hurt that I was involved because I feel partially responsible ugh for the results that have come out.

GARNETT:

Do you feel like you've been used?

MARTHA:

More and more I'm feeling like I've been used. Yes.

GARNETT:

Martha, thank you.

MARTHA:

You're welcome.

ANNOUNCER:

Martha Kostuch is an environmentalist at Rocky Mountain House.

PARLBY CREEK BUFFALO LAKE

WATER MANAGEMENT PROJECT REVIEW BOARD

Presentation by Martha Kostuch

May 22, 1991

Terms of Reference

The Terms of Reference for this review board does not include consideration of the need for the project or the alternatives to the project. Nor do the Terms of Reference include a review of the overall economics of the project.

There are serious information deficiencies which make a thorough review of the environmental impacts of this project impossible at this time.

The environmental impact assessment is incomplete because it does not include detailed plans to mitigate the impacts of the project, to monitor the predicted impacts or to respond to unpredicted negative impacts.

The Department of the Environment is in a conflict of interest position.

Federal Government Involvement

It is clear from the Environmental Impact Assessment Document that this project will have impacts on at least two areas of federal decision making responsibility, navigable waters and fisheries, and on at least two other areas of federal responsibility, migratory birds and endangered species.

This proposal must therefore be subjected to the Federal Environmental Assessment Review Process and approvals must be obtained under the Navigable Waters Protection Act and the Federal Fisheries Act.

Need for the Project

The need for the project has not been established.

The benefits for recreational activities and for cottage owners are questionable.

The project makes no economic sense.

The project may negatively impact other communities in central Alberta.

Inter-basin Transfer

The real reason for this project is to serve as part of the government's plan for inter_basin transfer of water.

The Saskatchewan Nelson Basin Study details plans to divert water from the Red Deer River to Buffalo Lake, to dam the lake at Tail Creek and eventually to divert water from the Battle River into Buffalo Lake.

Environmental Effects

It is difficult to assess the impacts of the project on rare plants, fisheries and wildlife because of the missing information.

The mitigation program for fisheries for the first four phases of channelization of Parlby Creek have failed. The proposed operating plan would exclude spawning in dry years when pumping would not be done.

The project would have negative impacts on the endangered Piping Plover.

Recommendations:

The Government of Alberta should drop its proposal to divert water from the Red Deer River to Buffalo Lake.

If the government does not drop the proposal theen the following should occur:

- 1. The Department of the Environment should withdraw as project proponent.
- 2. The people within the Department of the Environment who proposed this project should be fired or at least transferred to another department.
- 3. The Terms of Reference for the Review Board should be expanded to include the need for the project, the alternatives to the project and the overall socio-economic impacts of the project.
- 4. This review should be put on hold until the missing information has been supplied. In addition, the proponent should supply their detailed plans to mitigate the impacts, their plans to monitor the impacts and their contingency plan to respond to unpredicted impacts.
- 5. This review should be put on hold until the Government of Alberta has successfully mitigated the impacts of the first four phases of the Parlby Creek Channelizaion.
- 6. In order to avoid unnecessary duplication, the Government of Alberta should consider co-operating with the Federal Government in a joint review of the proposal.

1-6-2000 Dave Lovitt, Cult, returned my call. I asked him the Status of the Brazeay pipeline. He said they are about ready to start construction. I told him I said I would Oppose it unless I had a satisfactory gro commitment rei degrand fathering t They should have told the EUB that,
I said unless I get a satisfactory commitment soon, I will ask the EUB to withdraw their approval, He agreed to neet with me tomorrow morning.

I also said I want to meet with someone to discuss the learnings from their cumulating assessment. He will talk to someone