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Special Areas Water Supply Project Unrealistic and Irresponsible

By Dorothy Dickson

While I understand that the agricultural sector is having difficulties and needs to change to remain viable, I think other options must be explored to provide more long-term security than is provided by the plan for the Special Areas Water Supply Project (SAWSP). I oppose SAWSP as I do not think it is realistic in its expectations, environmentally sustainable, or financially responsible.

Options should be sought that would reduce the need for manipulation of water supply, such as returning pastures to native species that evolved to survive drought, temperature fluctuations, etc.; not planting crops that are dependent on irrigation; and consolidating small towns into fewer more viable communities that might specifically attract small industry that is not dependent on water.

I'm afraid that the time may have come to accept the fact that many people, young and old, wish to live in (or within driving distance of) centres large enough to provide amenities and job opportunities for the lifestyle they want and that population decline in rural areas is inevitable.

I think flexibility and adaptability will be the watchwords for all of us in the future, but SAWSP is based solely on the possibility (not certainty) of an increased water supply enabling the continuation and some expansion of past practices.

In trying to assess the need for and value of this particular plan, there are too many unknown factors in the calculations, especially regarding future commodity markets, input costs – including energy – and, most of all, the unpredictability caused by climate change.

Indeed the whole plan is based on "assumptions," "estimates," "predictions based on historical data" (which probably no longer apply), and motherhood statements about "enhancing" the environment and "mitigating" the damage the project will cause.

Even the Special Areas Board Chair said that the aim of this plan is to handle immediate problems and agreed it would tie up water needed years down the road. Society cannot afford to be so short-sightedly selfish with an element as essential to life as water.

Economic Analysis Based on Guesstimates

The economic analysis is based on a series of assumptions and too many optimistic outcome scenarios! The plan does not state how many farmers/ranchers are expected to benefit, and the possible job increases it suggests are small compared to the estimated costs. The "guesstimate" for long-term jobs created is only about 200 – certainly nowhere near enough to "keep the young people at home," as one resident of a small town hopefully stated.

Even the short-term jobs for construction of the project would be mostly for labour and not create a "more stable population." But then, attracting industry and more people would only increase the demand on the water supply and no little town is likely to grow enough to afford proper treatment and sewage disposal plants, let alone the hospitals, doctors, schools, and other facilities that industry expects for its workers.

Other reservoirs (Glenifer, Abraham, Oldman) where the attraction of water-based recreation has been touted as a social and financial plus have not lived up to hopes because of often dangerous conditions.

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It seems that the proponents are assuming that grain and cattle prices will go up, but market economics would dictate that the more of a commodity that is available, the lower the market price, while the cost of farm inputs, especially gasoline and fuel-based chemicals, will certainly rise. Taxpayers are already having to subsidize farmers because of droughts, floods, market constraints, etc. What will it cost us if the water supply to farms and other businesses fails?

If any irrigation is allowed (and trying to grow crops in an area not naturally suited to them is obviously a gamble), it must not be with the type of equipment allowed in the south, where an appalling amount of water is wasted. As noted in the Socio-Economic Assessment, farmers would have to make a major investment in this gamble to be able to take advantage of the project, and their income would be totally reliant on there being enough water to make it work every year.

I'm afraid that many of the benefits listed are not just "unquantified" but also unreal. There is no list of "unquantified costs" such as increased use of fossil fuels and chemicals and the associated health and environmental costs. How will the continuing research and monitoring of uncertainties listed in the water quality study be done and paid for when government field staff are already overworked and the government has not been willing to provide funding for promises of monitoring, enforcement, etc. required in other regions?

Salinization is another worry and we apparently have no way of dealing with it, other than prevention. Much as I would like to see the continuation of small family farms and a rural lifestyle, I must sadly admit that they are becoming increasingly endangered and I think it will take much more innovative thinking than projects like this to save them.

Impacts on Other Users

Other users, including the aquatic ecosystem, will certainly be affected by this proposal and I suspect that the plan's assumptions regarding upstream development, population growth, and water needs are inadequate; it does not state on what rates of growth the needs of areas with prior allocations for the next 50 years are based or when they were calculated.

Red Deer's population increased by over 32 percent in the last decade and seems to be accelerating. Some smaller towns in the Red Deer River watershed that are strategically placed near major transportation routes and in reach of larger centres for commuters (e.g., Innisfail) are also growing rapidly. Upstream industries and new developments such as coal bed methane extraction are also increasing and need water for their operations.

If you get several drought years in a row (which seems to be an increasing pattern), I doubt if you could have enough water stored – after all the senior (i.e., prior to 1977) and current junior allocations and the in-stream flow needs (IFN) were satisfied – to meet all the new uses that are proposed in the plan. This would only create a worse situation for those who had come to depend on the project.

We should learn from, rather than repeat, mistakes made in the south of the province, especially in regard to environmental damage and the waste of water from irrigation methods. It should also be noted that during the recent floods, water that had to be released from overflowing dams, including the Dickson Dam, only exacerbated the downstream situation.

I was somewhat appalled at the Open House when a rancher at one information booth insisted to his audience that the main reason other Canadians come to Alberta is not the energy industry jobs but the abundance of water, and that there was more than enough for everyone to have all they wanted and

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anyone who said otherwise was just fearmongering because we would never run out. He added that talk of global warming and climate change affecting the supply was just nonsense.

Needs of the River

In the other rivers that contribute to the South Saskatchewan basin, demand for irrigation and other allocations is already sometimes in deficit, and in-stream flow objectives are not always met. It is therefore likely that demands on the Red Deer River, which currently usually has adequate flow for IFN and allocation needs, may be called on to pass on more of its flow to help meet apportionment needs.

So far, the Red Deer has not been required to contribute more than 50 percent of its natural flow – which is the minimum amount needed for IFN. This is noted in the draft SSRB Water Management Plan which states, "[A]s the utilization of the existing licences in these [Bow and Oldman] basins increases, there will be an increasing requirement for contributions from the Red Deer River [to meet apportionment requirements]."

So it is absolutely essential that the IFN of the Red Deer River are met while we still have the capacity to do so, before we risk over-allocation for other uses. We must also avoid setting the percentage for IFN too low, as it is now apparent was done in other watersheds, which did not allow enough leeway for drier years. The IFN of other rivers and riparian ecosystems of the basin are already not being protected at a high enough level to ensure their environmental health.

If the Red Deer River has to pass on more than 50 percent of its flow even in drier years, the extra would have to come from allocations in order to keep enough for IFN. If our contribution was fixed at a maximum of 50 percent, it could cause considerable hardship for users in the more southerly basins. It seems it would be both unwise and unfair even to consider the SAWSP before the management plans for the whole South Saskatchewan Basin are completed.

When estimating flow in the river, historical data probably will no longer apply, as weather patterns are changing more rapidly and unpredictably than would be expected under "natural" conditions. Unfortunately, the "Water for Life" program only starts at the base of the foothills and does not protect the upstream supply from the mountains, on which the flow in all the rivers in the South Saskatchewan River basin largely depend and which appears to be decreasing.

The flow is also likely to be adversely affected by the increased industrial activity and mechanized recreation being allowed in the lower ranges. It should be noted that, even with reduced snowfall and therefore less run-off from the mountains, the melting of glaciers may, for a short time, boost the flow somewhat in some watersheds, but not in the Red Deer River, which is not glacier fed.

Furthermore, transferring water from one river basin to another is a scientifically stupid thing to do because the chemical and living composition of two rivers or streams is never identical and the consequences of mixing them is not predictable. The Province should not set a precedent by allowing this – the law preventing it is there for a purpose.

The desire of humans to "even out" the flow of rivers for their convenience is not compatible with the way river ecosystems work because both the life in the river and the riparian habitat have evolved with spring surges and lesser flows later in the year.

The South Saskatchewan Basin study clearly states this: "[T]he pattern of flows (frequency, magnitude and duration) is more important to ecosystem health than total annual volumes."

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As has been all too clearly shown on other rivers, water withdrawals for use and/or storage, which make flows lower than natural in the spring and summer, place great stress on the aquatic and riparian ecosystems. Fish habitat, riparian vegetation, channel maintenance processes, and water quality are all affected.

The water quality study done for this project obviously had some reservations about the continuing quality of the water in the Red Deer River if the project goes forward and, because of uncertainties of the outcome, recommends the need for continual monitoring and even a contingency plan.

More cultivation, irrigation, chemical pollution, sewage, etc. would all also affect water quality and habitat. With the quality of the water now reasonably good, no risk should be taken that might reduce it. The Red Deer is now one of the healthiest rivers in central and southern Alberta – keep it that way.

Finding Sustainable Solutions

This project seems to be based on the question "How can we manipulate the environment to make farming more economically possible?" It would be better to ask "How can we change our farming methods to make them better suited to the current environment and flexible enough to cope with future changes in climate and the economy?" SAWSP does not take account of these changes so is not a sustainable, long-term solution – and agriculture, of all industries, is a long-term proposition.

The idea of "enhancing" nature is arrogant. Much of the time we don't even understand how it works, and mitigation has been described as about as useful as "putting lipstick on a corpse." If you want to continue farming in this somewhat inhospitable region, work with what has worked in nature for millennia, rather than trying to fight and manipulate it.

Prairie grasslands are the most altered ecosystems in Canada with the highest number of endangered species. NONE of what is left should be altered for any sort of development, including farming. It is the responsibility of Albertans to preserve these precious ecosystems.

Alter the farming methods to take advantage of the inherent properties of the native species and, wherever possible, restore some of what has already been lost. Environmentally and economically native grassland is the most sustainable groundcover for the region.

Unfortunately, I think that government actions over the past decade in closing rural hospitals, not ensuring home care and child care delivery, and so on speak louder than the motherhood words of their Rural Development Strategy.

This article is based on the author's comments for the public consultation conducted by Equus Consulting Group May-July 2005. The final report is available at www.specialareas.ab.ca but does not reflect the depth of the author's comments, which are often not even mentioned.

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