

Report shows more science needed to manage water for agriculture

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A panel of experts has reported that water is becoming a critical issue for Canadian farmers and better water management needs to start now.

The comprehensive 284-page report, [Water and Agriculture in Canada: Towards Sustainable Management of Water Resources](#) is from the Council of Canadian Academies, an independent, nonprofit organization that prepares science-based studies to inform public policy.

The panel identified critical areas, such as risks to water supply, monitoring of water quality and quantity, land management, new farming technologies and governance of water resources.

It's shocking to think that Canada, a country with more water than almost any other country on the planet, has to worry about water supply. But it is that abundant supply that has enabled us to be wasteful and inefficient with our use of water in the past. That can't continue.

It's a simple fact that, as the population grows, so, too, does the demand for food. But expanding urban areas demand their own water and encroach on agricultural land. We can't keep trying to grow more food on less land.

At the same time, chemicals from agriculture itself, pharmaceuticals and other pollutants are degrading water quality across the country, while climate change is affecting the natural water supply that falls out of the sky and runs in rivers.

The panel points out the astounding fact that Canada has no national system in place to even take stock of how much total water the country has available to grow food. Water monitoring is a fragmented system, divided among provinces and municipalities with different standards for different regions.

Climate change is a huge new wrench in the gears of farming. Predictions for the Prairies, for example, involve both drought and floods, as extreme weather events become more common. Warmer summers mean more evaporation from the ground; warmer winters mean less snow and an earlier runoff so there is less water around by late summer.

To deal with the issue of water quantity and quality for agriculture, the panel makes a number of suggestions. At the core is BMP - Beneficial Management Practices. This applies to both the farmers and those responsible for water supply.

On the land, new technologies are making it easier for farmers to use fewer chemicals and make sure they stay in the ground and not run off into rivers. Aided by more efficient irrigation, crop rotations and other techniques, water consumption on the farm can be significantly reduced.

On the government side, better monitoring and stiffer regulations must strike a balance between the needs for agriculture and all the other demands on our water supply.

This whole-system approach is appropriate because water knows no boundaries. What the government does with this report is another issue, considering **the Experimental Lakes Area** in Ontario, the world's longest-running water quality monitoring program, was just shut down, and **climate monitoring stations in the North** are being closed.

But if positive action is taken to ensure water will always be available to those who put food on our plates, perhaps the expert panel could shift their focus to the oil and gas industry, which in some cases, uses more **water to pump fossil fuels out of the ground** than agriculture uses. And that water is contaminated for good.

Source: <http://www.cbc.ca/news/technology/quirks-quarks-blog/2013/03/report-shows-more-science-needed-to-manage-water-for-agriculture.html>