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Policy in practice

AGRICULTURAL NUTRIENT MANAGEMENT REGULATIONS IN CANADA

Country: [Canada](#)

Tags: [Eutrophication](#) | [Nitrogen](#) | [Regulation](#) | [Subnational](#) | [Water quality](#)

Theme: [Pollution](#)



Zero hunger



Clean water and sanitation



Life below water

Policy in practice

Regulatory policy instruments to reduce diffuse pollution from agriculture typically restrict the use of polluting inputs such as fertilisers, manure and pesticides, and require farm management practices that reduce pollutants reaching water bodies. This is for two reasons: i) there is good evidence to show that “good” or “best” management practices can reduce the losses of diffuse contaminants, and ii) up until recently, there was limited ability to adequately calculate farm scale losses of diffuse source contaminants with computer models.

In response to ongoing problems with eutrophication and algal blooms, Canadian provinces have mandated nutrient management plans at the farm level through regulatory changes for some time. For example, buffer strips around surface water and groundwater sources have become a common requirement to limit nutrient leaching. Federal programmes to reduce diffuse nutrient pollution – Environmental Farm Plans and the Environmental Stewardship Incentive - are designed and implemented at provincial level, which enables policy to be adapted to local circumstances and facilitates the transfer of knowledge.

Under municipal by-laws, the location of manure storage, as well as setback distances from neighbouring properties or streams, may be regulated. Examples of regulatory measures to reduce diffuse pollution from agriculture at the provincial level include:

- o Ontario: The Nutrient Management Act (2002) sets out regulatory requirements for certain nutrient management practices and requires farmers to document these practices to reduce risk of water contamination by agricultural sources. The practices regulated include the management of manure (e.g. storage and application), application of non-agricultural materials (e.g. sewage bio-solids and vegetable processing wastes) and the treatment of manure and other materials in on-farm anaerobic digesters.
- o Manitoba: The Livestock Manure Mortalities Management Regulation (1998) prescribes various requirements for the use, management and storage of livestock manure to reduce water pollution from livestock. Permits are required for the construction, modification or expansion of manure storage facilities and specific constraints, such as maximum livestock population, fencing restrictions, restrictions to drainage and water work, apply on crown land.

- Quebec: The Agricultural Operations Regulation (2002) seeks to address the problem of diffuse pollution caused by agricultural activity, by achieving an effective balance of phosphorous in the soil to maintain soil fertility and limit losses from excessive use of manure. It includes norms for livestock buildings and manure management, and restrictions on land use to limit water pollution. Other regulations deal with the use of fertilisers and pesticides in agriculture.

Source report

[OECD \(2017\), Diffuse Pollution, Degraded Waters: Emerging Policy Solutions, OECD Studies on Water, OECD Publishing, Paris](#)

Key policy message

Regulatory policy instruments that restrict the use of polluting inputs can help to reduce diffuse sources of pollution.

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