

# A Soil Conservation Charter for British Columbia

Revised July 2006

by  
the Soil and Water Conservation Society – BC Chapter

## **Preamble:**

*The Province of British Columbia,*

*Having regard to the need for soil conservation in the different ecologic regions of British Columbia;*

*Considering that soil is a complex and dynamic material, characterized by a diverse flora and fauna by mineral and organic elements, and affected by the circulation of air and water;*

*Considering that soils influence vegetation and the water cycle and thus are at the origin of the main food resource for humans and animals;*

*Having regard to the increasing deterioration of the soil in many parts of the Province and especially that used for agriculture and forestry which each year suffers the damaging effects of pollution, erosion, and sometimes ill-chosen techniques;*

*Recognizing that ecological principles are not always taken into consideration in the context of regional land-use planning decisions;*

*Believing that those responsible for land management should bear in mind not only the immediate needs of modern society but also the part played by the soil, water, and vegetation in the scientific, aesthetic and cultural interests of humans,*

*Adopts and proclaims the principles of a Soil Conservation Charter for British Columbia as set out below:*

1. **Soil is one of humanity's most precious assets.** It allows plants, animals, and humans to live on the earth's surface. Soil is a living and dynamic medium which supports plant and animal life. It is vital to human's existence for the production of food, as a source of raw materials, and as a foundation for a quality environment. It is a fundamental part of the ecosystem and, together with vegetation and climate, helps to regulate the circulation and affects the quality of water and air.
2. **Soil is a limited resource that is easily destroyed.** Soil is a thin layer covering part of the earth's surface. Its use is limited by climate and topography. Soil forms slowly by physical, chemical, and biological processes but can be quickly destroyed by careless action. Its productive capacity can be improved by careful management over years or decades, but once diminished or destroyed, reconstitution of the soil can take centuries.
3. **Society uses land for agriculture as well as for industrial, residential, commercial, and other purposes.** A regional planning policy must be conceived in terms of the properties of the soil and the needs of today's and tomorrow's society. Soil may be put to many uses and it is generally exploited according to short-term economic

and social necessity. The use made of soil must depend on its properties, its fertility and the socio-economic services, which it is capable of providing for the world of today and tomorrow. These properties thus govern the suitability of the land for farming, forestry and other uses. Destruction of the soil, in particular for purely economic reasons based on considerations on short-term yield, must be avoided. Marginal lands raise special problems and special opportunities for soil conservation because, properly managed, they have great potential as nature reserves, forests, protection zones against soil erosion and avalanches, reservoirs and regulators of water systems and recreation zones.

4. **Farmers and foresters must apply methods that preserve the quality of the soil.** Machinery and modern techniques permit considerable increases in yields, but if used indiscriminately, they may disrupt the natural balance of the soil, altering its physical, chemical, and biological characteristics. The destruction of organic matter in the soil by inappropriate methods of cultivation and the misuse of heavy machinery are important factors in the impairment of soil structure and hence the yield of crops. The soil structure of grasslands may be similarly damaged by intensive livestock production. Methods of tillage and harvesting should conserve and improve the properties of the soil. The introduction of new techniques on a wide scale should be undertaken only after its possible disadvantages have been evaluated.
5. **Soil must be protected from erosion.** Soil is exposed to the weather; it is eroded by water, wind, snow, and ice. Careless human activity speeds up the process of erosion by damaging the soil's structure and its normal resistance to erosive action. In all situations, suitable physical and biological

9. **An inventory of soil resources is indispensable.** For effective land planning and management and to permit the establishment of a genuine policy of conservation and improvement, the properties of the different types of soil, their capabilities and distribution must be known. Each region requires an inventory of its soil resources. Soil maps, supplemented as appropriate by other maps on land-use, geology, climate, vegetation, hydrology, soil capability, and the like are necessary for this purpose. The production of such maps by agencies working together is a basic necessity for this purpose. These maps should be prepared to permit comparison at federal and international levels.
10. **Further research and interdisciplinary collaboration are required to ensure the wise use and conservation of the soil.** Research on soil and its use must be supported to the full. The perfecting of conservation techniques in agriculture and forestry, the elaboration of standards for the application of chemical fertilizers, the development of substitutes for toxic pesticides, and methods of suppressing pollution all depend on research. Because of the complexity of the problems involved, such research should form part of the work of multidisciplinary centres. International exchange of information and co-ordination must also be encouraged.
11. **Soil conservation must be taught at all levels and be kept to an ever-increasing extent in the public eye.** Soil conservation principles must be fully included as an element of environmental education. Techniques of soil conservation must be taught in engineering, agricultural, and forestry schools and to children and adults in all communities. Increasing publicity, adapted to local and national requirements, must aim at conserving the quality of the soil.
12. **Governments and those in authority must purposefully plan and administer soil resources.** Soil is an essential but limited resource. Therefore, its use must be planned rationally, which means that the competent authorities must not only consider immediate needs but also ensure long-term conservation of the soil while increasing or at least maintaining its productive capacity.

A comprehensive provincial policy of soil conservation is therefore needed along with an administrative structure necessarily provincially centralized, and properly coordinated at the regional level. Appropriate legislation is also required to allow the planned allocation of land for different uses in regional and provincial development, to control techniques of land-use which might cause deterioration or pollution of the environment, to protect soil against natural and human hazards and, where necessary, to restore it. Agencies that accept the principles set above should undertake to devote the necessary funds to their implementation and promote a genuine soil conservation ethic.

Adapted from the European Soil Charter  
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