Policy P-10



Commission Act

CRITERIA FOR AGRICULTURAL CAPABILITY ASSESSMENTS

Amended February 2024 October 2017

This policy is intended to provide information for professional agrologists submitting agricultural capability assessment reports (a "Report") as part of a soil or fill use, exclusion, subdivision, non-farm use application, or as required through a compliance and enforcement action to ensure that they: 1) are providing sufficient information and evidence to support their assessment; 2) are qualified to complete this work; and 3) perform their work on the Reports in accordance with the Code of Ethics of the British Columbia Institute of Agrologists (the "Code of Ethics"). The submission of a Report as part of an application is optional; however, one is recommended if low agricultural capability is the primary reason for the application.

CRITERIA FOR FIELD WORK AND REPORTING:

A detailed soil survey must be completed in order to support the agricultural capability assessment and to confirm or revise existing published capability mapping. The soil survey must be conducted at a Survey Intensity Level 1 (in accordance with the Soil Inventory Methods of BC) at a density of one detailed test pit for every one to five hectares. The surveyor must use their discretion in the field to determine how many test pits are required to accurately assess the site. Detailed test pits must include the following information:

- Horizon designations
- Horizon depths
- Colour (Munsell Colour Chart)
- Texture
- Structure
- Consistence
- Coarse fragment content by percent volume for gravel, cobbles, and stones
- Presence and depth of mottles (size, abundance, colour)
- Drainage class
- Rooting depth/root restricting layer

Other information that must be collected as necessary includes:

- laboratory data to revise fertility ratings and salinity;
- clinometer readings for slope gradients; and,
- revisions to soil moisture deficits that are supported by local climate data and evapotranspiration rates corrected for site specific texture and coarse fragment content.

Test pits must be excavated into the C horizon or to auger refusal. The surveyor must include a soil profile photograph with each test pit (including a tape measure for scale) as well as a landscape photo of the test pit area.

The Report must include a map indicating the location of the test pits and any new capability delineations not previously mapped (polygons). If the site has multiple agricultural capability ratings, the Report must also include a table of the unimproved and improved agricultural capability ratings and area in hectares of each polygon. The Report must provide a discussion of crop suitability as well as non-soil bound agricultural suitability (e.g., greenhouses, poultry barns). Soil survey information and photos for each detailed test pit must be appended to the Report.

If any agricultural limitations are not considered improvable due to site specific considerations, the Report must provide evidence to support this claim. For example, if access to irrigation water is an issue that may limit agricultural capability of a property, the agrologist must calculate the agricultural water demand for a suitable crop compared to available water from various water sources. The Commission considers surface water licences, groundwater, dugouts, and purchasing water from water licence holders as viable options. If these are not considered viable, the agrologist must provide sufficient evidence as to why it is not.

Other information provided in the Report beyond these requirements is considered supplemental to the agricultural capability assessment. Examples of additional information include economic feasibility studies, planning considerations, access to markets, etc.

QUALIFICATIONS:

Agrologists who are submitting Reports to the Commission must be members in good standing with the British Columbia Institute of Agrologists (BCIA) as a Professional Agrologist. Depending on the type of Report submitted, registration with the BCIA in the following areas of practice is required:

- Agricultural Capability Assessments:
 - Land Evaluation, Classification, Mapping, Conservation, and Management
- Agricultural Capability Assessment/Reclamation Plan:
 - Land Evaluation, Classification, Mapping, Conservation, and Management; or,
 - o Land Restoration, Reclamation and Remediation.

It is expected that Professional Agrologists who have self-declared in at least one of these areas of practice have completed upper-level course work in soil survey /soil genesis and have the demonstrated experience and knowledge of soil survey, soil mapping and agricultural capability classification according to the established methodology (see Methods below).

Agrologists who are submitting Reports to the Commission must provide a bio of their qualifications. Reports will be reviewed by the Commission Staff for consistency with these requirements. Any Reports that are deficient in information may be sent back to the author for revision or may not be given the same weight as compliant Reports by the Commission. Applications will be put on hold if Report revisions are requested by the Commission.

CODE OF ETHICS:

It is extremely important that Reports not only comply with the requirements set out above but also that Reports must comply with the *Professional Governance Act*, the Agrologist Regulation, and the Code of Ethics under the BCIA Agrologists Bylaws.

For example, the following sections of the Code of Ethics governing members of the BC Institute of Agrologists (BCIA) are relevant and important in work that Agrologists may perform in matters before the Commission:

BCIA Code of Ethics – Bylaws Schedule A

"All BCIA Registrants must exercise integrity, competence, and objectivity in their professional conduct at all times and must:

- 1. Hold paramount the safety, health and welfare of the public, including the protection of the environment and the promotion of health and safety in the workplace;
- 2. Practice only in those areas of practice where their training, education, experience and ability make the registrant professionally competent;
- 3. Have regard for the common law, relevant federal and provincial legislation and regulations, BCIA Bylaws, sound scientific principles, recognized standards of practice and policies relevant to the practice of Agrology;
- 4. Maintain competence in relevant specializations, including but not limited to active participation in continuing education and technical upgrading to ensure knowledge of advances in regulated practice and relevant science;
- 5. Provide accurate information in respect of qualifications and experience;
- 6. Provide professional opinions that distinguish between facts, assumptions and opinions;
- 7. Avoid situations and circumstances in which there is a real or perceived conflict of interest and ensure conflicts of interest, including perceived conflicts of interest, are properly disclosed and necessary measures are taken so a conflict of interest does not bias decisions or recommendations;"

The Commission is a "tribunal" under the Administrative Tribunals Act.

BCIA members should be aware that, all else being equal, Reports that, in the opinion of the Commission, are not compliant with the Code of Ethics of BCIA will not be given the same weight as Reports that are compliant with the Code of Ethics. This may adversely affect the application for which the Report has been prepared.

TERMS:

Agricultural capability assessment – means an assessment conducted as per the Land Capability Classification for Agriculture in BC (Kink, 1983) to determine, confirm, or reassess the agricultural capability classification rating of agricultural land.

METHODS:

<u>Agricultural Capability</u>

- Kenk, E. 1983. Land Capability Classification for Agriculture in BC. MOE Manual 1. Ministry of Environment. Victoria.
- RAB. 1972. Climatic Capability for Agriculture in BC. Resource Analysis Branch Technical Paper 1. Province of BC. Victoria.

Soil Classification and Survey

- Agriculture Canada Expert Committee on Soil Survey. 1987b. Soil Survey Handbook-Volume 1. Land Resource Research Centre, Contribution No. 85-30. Technical Bulletin 1987-9E. Agriculture Canada, Ottawa.
- Agriculture and Agri-Food Canada, Soil Classification Working Group. 1998. The Canadian System of Soil Classification. Agriculture Canada. Research Branch. Ottawa.
- Luttmerding, H.A., D.A. Demarchi, E.C. Lea, D.V. Meidinger and T. Vold (eds.). 1990. Describing Ecosystems in the Field - 2nd. Edition. MOE Manual 11, Ministry of Environment and Ministry of Forests. Victoria, B.C. 213pp.
- Mapping Systems Working Group. 1981. A Soil Mapping System for Canada: Revised. Land Resource Research Institute, Contribution No. 142. Agriculture Canada, Ottawa. 94 pp.

Resources Inventory Committee. 1995 Soil Inventory Methods for British Columbia.

RELATED POLICIES:

ALC POLICY P-11: Expert Opinions in Agricultural Land Commission Matters