Amendments for Ecology

To address concerns expressed by Sarah Flynn:

- Reworded assessment matters to specifically address the function and integrity of plants and habitats
- Reworded assessment matters to specifically refer to herb fields, boulder fields, scree and spring flushes (which can be defined waiting for Judith to provide)
- Integrated protection of the wetland shown as a non-complying activity
- Recognise features such as wetlands and the red tussock gully in the proposed management plans.

25.2 Controlled Activities

Earthworks

- 25.2.1 Earthworks (except for earthworks affecting a wetland) located entirely within the boundary of the Ski Area Sub-Zone and limited to the following purposes shall be a controlled activity.:
 - 25.2.1.1. Establishing ski trails, terrain parks, tows, lifts and gondolas
 - 25.2.1.2 Establishing trails for recreational activities such as mountain bike, luge and walking trails
 - 25.2.1.3 The construction of buildings and structures in the Porters and Crystal Basin Ski Areas.
 - 25.2.1.4 Forming access tracks to and within the Porters and Crystal Basin Ski Areas
 - 25.2.1.5 The construction of snow-making reservoirs
 - 24.2.1.4 The construction of buildings in the Village Base Area
 - 24.2.1.5 Forming roads in the Village Base Area, provided that they comply with the Standards for Roads in Rule 25.6.6.1.
 - 24.2.1.6 The construction of infrastructure for stormwater, wastewater disposal and water supply
 - 24.2.1.7 The construction of utilities
 - 24.2.1.8 Ground preparation for planting of indigenous vegetation on areas greater than 5m².
- 25.2.2 Under Rule 25.2.1, the Council shall reserve its control over the following matters:
 - 25.2.2.1 Any potential effects on ground and scree stability.

- 25.2.2.2 The location, depth and length of cuts and the extent and location of fill or castings.
- 25.2.2.3 The effectiveness of erosion and sediment control measures and the degree to which these conform with any Erosion and Sediment Control Plan that may have been approved by the Canterbury Regional Council for the establishment of infrastructure.
- 25.2.2.4 The setback from the Porter Stream and Crystal Stream.
- 25.2.2.5 Avoidance or setback from any ephemeral streams or naturally occurring seepages or wetlands.
- 25.2.2.6 Terrestrial and aquatic ecological values within the area of disturbance and potential to minimise or avoid disturbance to areas or habitats of higher valuethat will affect the function and integrity of plants and habitat. In particular, vegetation in herb fields, boulder fields, scree and flushes should be avoided in the first instance. If unable to be avoided then measures should be taken to minimise or mitigate the extent or nature of disturbance and their effectiveness assessed to maintain the function and integrity of plants and habitats.
- 25.2.2.7 The effect on landscape values and visibility from state highway 73.
- 25.2.2.8 The proposed measures for minimising ground disturbance.
- 25.2.2.9 Measures for the control of dust emissions.
- 25.2.2.10 Protocols to minimise the transfer of weed and pest species on machinery.
- 25.2.2.11 Measures proposed for re-contouring and re-vegetation of the land, including the timing for re-vegetation.
- 25.2.2.12 Protocols for Accidental Discovery of archaeological sites.
- 25.2.2.13 Conditions requiring the preparation and implementation of a Ski Area Environmental Management Plan (SAEMP) that addresses the following matters for construction and operation of the Ski Area:
 - -Principles and monitoring regime for management of stormwater, erosion and sediment control related to Ski Area operations and maintenance;
 - -Principles for management of construction activities and restoration of earthworks
 - -Pest and weed management
 - -Management of habitats and species, including Keas and riparian margins
 - -Management of the Red Tussock Gully as shown on the Porters Ski Area Outline Development Plan.
 - Enhancement of Crystal Stream
 - -Protection of wetlands
 - -Storage and removal of solid wastes

-Storage, management and use of hazardous wastes

(Note that this provision duplicates the requirement for a SAEMP required by Rule 25.12.2.11 at the time of subdivision application. If a SAEMP has already been prepared and approved as a condition of subdivision this provision is not applicable).

25.11 Non-Complying Activities

Buildings

25.11.1 Any building which does not comply with Rules 25.3.1.1 to 25.3.1.9 shall be a non-complying activity.

Activities - General and Scale

25.11.2 Any activity which does not comply with Rules 25.4.1 to 25.4.3 and 25.5.1 and 25.5.2 shall be a non-complying activity.

Tree Planting and Landscape Treatment

25.11.3 Any activity which does not comply with Rule 25.8.1 shall be a non-complying activity.

Removal of Indigenous Vegetation

25.11.4 The removal of any indigenous vegetation exceeding an area of 5m² and not approved as part of a controlled activity in accordance with Rule 25.2.1 shall be a non-complying activity.

Earthworks Affecting Wetlands

25.11.5 Any earthworks affecting a wetland shall be a non-complying activity.

25.12 Subdivision

Standards for Controlled Activities

- 25.12.2 Under Rule 25.12.1 the Council shall reserve its control over the following matters:
 - 25.12.2.1 Those matters contained in Rule 10.1.2.
 - 25.12.2.2 Any effects on ecological and landscape values that may arise from the proposed layout and density of allotments.

Any effects on ecological values that may arise from the proposed layout and density of allotments. This shall include effects on the function and integrity of plants and habitat. In particular, vegetation in herb fields, boulder fields, scree and flushes should be avoided in the first instance. If unable to be avoided then measures should be taken to minimise or mitigate the extent or nature of adverse effects.

- 25.12.2.3 The boundaries of the proposed allotments in relation to natural or physical features.
- 25.12.2.4 The use of conditions to require all earthworks to be subject to an Accidental Discovery Protocol, requiring contractors to be trained in the recognition of archaeological sites and artefacts.
- 25.12.2.5 The use of conditions to require a construction management plan which shall set out the proposed methods and protocols for construction including:
 - (a) timing of works;
 - (b) cleaning of machinery prior to access to the Ski Area Sub-zone to avoid the spread of weed and pest species;
 - (c) protection of waterways and wetlandsareas of ecological sensitivity;
 - (c)(d) protection or avoidance of areas of ecological sensitivity, including herb fields, boulder fields, scree and spring flushes.
 - (d)(e) minimisation of ground disturbance;
 - (e)(f) management of dust emissions;
 - (f)(g) management and storage of hazardous substances, including an emergency response protocol for accidental spillages;
 - (g)(h) traffic management for all construction related vehicles. This shall include control of access from the state highway and management of traffic, including parking within the construction site to avoid wider ground and vegetation disturbance.
 - (h)(i) ____25.12.2.11The use of conditions to require the development and implementation of an Environmental Management Plan that achieves the following (this rule duplicates Rule 25.2.2.13 which applies to those circumstances where development proceeds without the need for a subdivision consent):
 - (i)(j)-Principles and monitoring regime for management of stormwater, erosion and sediment control related to Ski Area operations and maintenance:
 - -Principles for management of construction activities and restoration of earthworks

 - (<u>H)(m)</u> -Management of habitats and species, including Keas and riparian margins
 - (m)(n) Management of the Red Tussock Gully as shown on the Porters Ski Area Outline Development Plan
 - (o) Enhancement of Crystal Stream
 - (n)(p) Protection of any wetland
 - (e)(q) -Storage and removal of solid wastes

25.13 Reasons for Rules

Earthworks

Rule 25.2.1 provides for earthworks as a controlled activity. The Ski Area Sub-Zone is intended to enable the efficient use of the Ski Area's physical and natural resources and to provide for activities which can be reasonably anticipated within a Ski Area without the need for on-going resource consent processes. Earthworks are a necessary component of the development and maintenance of a Ski Area. In establishing the Ski Area Sub-Zone the effects of Ski Area related earthworks have already been assessed and Council's considerations are therefore limited to the detail of how the earthworks are to be managed. The matters over which Council has reserved its control are therefore focused on how the earthworks are to be managed and adverse effects on the environment avoided or minimised. These considerations include the maintenance of soil and ground cover, the effects on non-vegetated scree slopes, the sensitivity of in-stream values and significance of vegetation.

Rule 25.11.5 provides for earthworks within a wetland as a non-complying activity. This is intended to discourage earthworks in relation to these features however it is acknowledged that essential elements of a Ski Area may still require some works to be undertaken. Extra management and care will be required to minimise or mitigate the effects of any works or innovations in design integrated into the final proposal where possible to maintain the function of the wetland.