

Executive Summary for the Borland Wildland Urban Interface Fuel Management Prescription

Tree thinning distribution:

- TU's A & B: A **clumpy** thin from below method (TFB);
- TU C: An **even** distribution TFB method;
- TU D: A **clumpy** Single Tree Selection method following directives from Section 10 of the 'Amended – ORDER #U-5-001, U-5-002 and U-5-003'.

Non-thrifty, unhealthy or dead trees should be specifically targeted for removal. High value wildlife trees will be retained wherever practicable. Fd trees are preferred for retention over Sx and PI and all deciduous trees of any dbh class will be retained.

Retained Trees post-treatment:

TU's A & B:

- Total target density 575/625 sph (+/- 100 sph), respectively,
- TFB treatment > 12.5 cm dbh to < 45 cm dbh to reach a basal area of 22/23 m²/ha (> 12.5 cm dbh) or 250/275 sph, respectively and
- TFB stems < 12.5 cm dbh to a total density of 325 sph (+/- 50 sph), TFB < 12.5 cm dbh to a target density of 350 sph (+/- 50 sph).

TU C:

- Total density 375 sph (+/- 100 sph),
- TFB treatment > 12.5 cm dbh to < 35 cm dbh to reach a basal area of 23 m²/ha (> 12.5 cm dbh) or 275 sph, and
- TFB < 12.5 cm dbh to a target density of 100 sph (+/- 50 sph);

TU D:

- Total target density 600 sph (+/- 100 sph),
- TFB treatment > 12.5 cm dbh to < 55 cm dbh to reach a basal area of 29 m²/ha (> 12.5 cm dbh) or 350 sph, and
- TFB < 12.5 cm dbh to a target density of 250 sph +/- 50 sph.

Fuel loading post-treatment for all TU's:

Fine and medium (< 7.5 cm size): Not to exceed a total of 0.5 kg/m² (0.5 T/ha);

Coarse (> 7.5 cm size): Not to exceed 100 pieces/ha (1.0 T/ha), preference for pieces 20 cm or larger

Pruning (ladder fuels) post-treatment: Prune all retained conifer trees 3.5 m from ground

Approximate Crown Closure post-treatment:

TU A: 10%;

TU B: 20%;

TU C: 25%; and

TU D: 15%.

% Retained tree scarring post-treatment for all TU's: < 10% of stems/ha.

Potential Merchantable Log Utilization:

- TU A is approximately **14 m³/ha**,
- TU B is approximately **137 m³/ha**,
- TU C is approximately **188 m³/ha**, and
- TU D is approximately **169 m³/ha**.

Outstanding Works:

- 1) A response was received from the Williams Lake Indian Band Community regarding a provision for work at later phases of this prescription, including environmental, operational, and/or archaeological. A FLNRORD representative will be resolving this request.
- 2) A continuous area north and south of Borland Creek and an area surrounding Redeau Lake are located within an area of high archaeological potential. This information was shared with the Williams Lake Band and Murray Speed (FLNRORD); however, no response from the Williams Lake Band was received in regards to how to address this identified issue. Local knowledge of the affected First Nations indicates the possibility for archeological resources as well as traditional use sites (TUS) to exist in all TUs. Prior to implementation, the Contract Supervisor will consult with the Williams Lake Band on this topic and determine whether the Band wishes to proceed with an archaeological impact assessment (AIA) or other assessments before implementation.
- 3) UWR GAR Order exemptions must be obtained for TU's B, C and D prior to commencement of operations.
- 4) The appropriate cutting authority must be obtained prior to commencement of operations.
- 5) Prior to commencement of operations, the Contractor and Contract Supervisor and a FLNRORD representative will collectively decide the locations for temporary access trails. These temporary access trails will be mapped and flagged before treatment commences. During this phase of work, the group will also decide on appropriate trailside screening.
- 6) Wise Creek must be RMZ ribboned as indicated on the map (Appendix E) prior to commencement of operations.
- 7) In consultation with the Contract Supervisor and the FLNRORD representative, an RPBio will be chosen and employed to conduct breeding bird surveys if treatment activities occur during the breeding bird season (April 11 – Aug 23). The Contract Supervisor, FLNRORD representative and the RPBio will list the target bird species for nesting bird surveys and will collaborate together on no work zones when bird nests are found.
- 8) A public open house describing the FMP and implementation workplan should be hosted by the Contract Supervisor. In addition, at least two weeks prior to implementation, signs describing the treatment must be posted at affected trail heads, and all residents or property owners directly adjacent to the treatment units must be notified of the treatment. Notification will include a contact name and phone number.
- 9) Decision on whether or not to include a 1 ha 'control' area ribboned within one of the TU's.

Other notes:

Field Marking Convention: **Block boundary** – orange and black striped; **Block boundary corners** – double orange and black striped and single white ribbon with aluminum tag stating treatment area name, station number, and date; **Treatment-unit demarcation**—yellow ribbon, no writing; **Riparian Management Zone**- Blue Ribbon.

Executive Summary for the Borland Mule Deer Winter Range Fuel Management Prescription

Tree thinning Distribution:

- TU A: A **clumpy** TFB; and
- TU B: A **clumpy** distribution TFB with up to 20% of the area containing unthinned patches.

Non-thrifty or unhealthy trees should be specifically targeted for removal. Fd trees are preferred for retention over Sx and PI and all deciduous trees of any dbh class will be retained.

Retained Trees post-treatment:

TU A:

- Total density 800 sph (+/- 50 sph),
- TFB treatment > 12.5 cm dbh to < 22.5 cm dbh to reach a basal area of 24 m²/ha or 425 sph (+/- 50), and
- TFB < 12.5 cm dbh to a target density of 350 sph (+/- 50 sph).

TUB (applicable only to the 80% geographic area being thinned):

- Total density 550 sph (+/- 50 sph),
- TFB treatment > 12.5 cm dbh to < 27.5 cm dbh to reach a basal area of 19 m²/ha or 450 sph, and
- TFB stems < 12.5 cm dbh to a total density of 100 sph (+/- 50 sph)

Fuel loading post-treatment for all TU's:

Fine and medium (< 7.5 cm size): Not to exceed a total of 0.5 kg/m² (0.5 T/ha);

Coarse (> 7.5 cm size): Not to exceed 100 pieces/ha (1.0 T/ha), preference for pieces 20 cm or larger

Pruning (ladder fuels) post-treatment: Prune all retained conifer trees 3.5 m from ground

Approximate Crown Closure post-treatment:

TU A: 25%; and

TU B: 25%.

% Retained tree scarring post-treatment for all TU's: < 10% of stems/ha.

Potential Merchantable Log Utilization:

- TU A is approximately **12 m³/ha**, and
- TU B is approximately **30 m³/ha**.

Outstanding Works:

- 1) A response was received from the Williams Lake Indian Band Community regarding a provision for work at later phases of this prescription, including environmental, operational, and/or archaeological. A FLNRORD representative will be resolving this request.
- 2) A continuous area north and south of Borland Creek and an area surrounding Redeau Lake are located within an area of high archaeological potential. This information was shared with the Williams Lake Band and Murray Speed (FLNRORD); however, no response from the Williams Lake Band was received in regards to how to address this identified issue. Local knowledge of the affected First Nations indicates the possibility for archeological resources as well as traditional use sites (TUS) to exist in all TUs. Prior to implementation, the Contract Supervisor will consult with the Williams Lake Band on this topic and determine whether the Band wishes to proceed with an archaeological impact assessment (AIA) or other assessments before implementation.
- 3) The appropriate cutting authority must be obtained prior to commencement of operations.
- 4) Prior to commencement of operations, the Contractor and Contract Supervisor and a FLNRORD representative will collectively decide the locations for temporary access trails. These temporary access trails will be mapped and flagged before treatment commences. During this phase of work, the group will also decide on appropriate trailside screening.
- 5) TU-B allows for an area of unthinned patches up to 20% of the total net treatment area. If this the target 20% is infeasible during operations this target may be reduced in consultation with FLNRORD. The Contract Supervisor will collaborate with FLNRORD and the Contractor to achieve the 20% unthinned target. A sample area will be flagged pre-treatment and through this process a decision will be made as to the necessity of ribboning the entire treatment unit.
- 6) In consultation with the Contract Supervisor and the FLNRORD representative, an RPBio will be employed to conduct a breeding bird survey if treatment activities occur during the breeding bird season (April 11 – Aug 23). The Contract Supervisor, FLNRORD representative and the RPBio will list the target bird species for nesting bird surveys and will collaborate together on no work zones when bird nests are found.
- 7) A public open house describing the FMP and implementation workplan should be hosted by the Contract Supervisor. In addition, at least two weeks prior to implementation, signs describing the treatment must be posted at affected trail heads, and all residents or property owners directly adjacent to the treatment units must be notified of the treatment. Notification will include a contact name and phone number.
- 8) Decision on whether or not to include a 1 ha 'control' area ribboned within one of the TU's.

Other notes:

Field Marking Convention: **Block boundary** – orange and black striped; **Block boundary corners** – double orange and black striped and single white ribbon with aluminum tag stating treatment area name, station number, and date; **Treatment-unit demarcation**—yellow ribbon, no writing; **Riparian Management Zone**- Blue Ribbon.

Executive Summary for the Borland Primary Fuel Break Fuel Management Prescription

Tree thinning Distribution:

- TU A: An **even** TFB;
- TU B: An **even feathered** TFB,
- TU C: An **even** TFB, and
- TU D: A **clumpy** TFB.

Non-thrifty or unhealthy trees should be specifically targeted for removal. Fd trees are preferred for retention over Sx and PI and all deciduous trees of any dbh class will be retained.

Retained Trees post-treatment:

TU A:

- Total density 350 sph (+/- 50 sph),
- TFB treatment > 12.5 cm dbh to < 45.0 cm dbh to reach a basal area of 26 m²/ha or 250 sph (+/- 50 sph), and
- TFB < 12.5 cm dbh to a target density of < 100 sph.

TU B:

- Total density 400 sph (+/- 50 sph),
- TFB treatment > 12.5 cm dbh to < 27.5 cm dbh to reach a basal area of 24 m²/ha or 300 sph (+/- 50 sph), and
- TFB < 12.5 cm dbh to a target density of < 100 sph.

TU C:

- Total density 425 sph (+/- 50 sph),
- TFB treatment > 12.5 cm dbh to < 35.0 cm dbh to reach a basal area of 23 m²/ha or 325 sph (+/- 50 sph), and
- TFB < 12.5 cm dbh to a target density of < 100 sph.

TU D:

- Total density 1,000 sph (+/- 50 sph),
- TFB > 12.5 cm dbh treatment to < 22.5 cm dbh to reach a basal area of 20 m²/ha or 715 sph (+/-50 sph), and
- TFB < 12.5 cm dbh to a target density of < 300 sph.

Fuel loading post-treatment for all TU's:

Fine and medium (< 7.5 cm size): Not to exceed a total of 0.5 kg/m² (0.5 T/ha);

Coarse (> 12.5 cm size): Not to exceed 100 pieces/ha (1.0 T/ha), preference for pieces 20 cm or larger

Pruning (ladder fuels) post-treatment: Prune all retained conifer trees 3.5 m from ground

Approximate Crown Closure post-treatment:

TU A: 30%;

TU B: 20%;

TU C: 20%, and

TU D: 30%.

% Retained tree scarring post-treatment for all TU's: < 10% of stems/ha.

Potential Merchantable Log Utilization:

- TU A is approximately **138 m³/ha**,
- TU B is approximately **35 m³/ha**,
- TU C is approximately **83 m³/ha**, and
- TU D is approximately **24 m³/ha**.

Outstanding Works:

- 1) A response was received from the Williams Lake Indian Band Community regarding a provision for work at later phases of this prescription, including environmental, operational, and/or archaeological. A FLNRORD representative will be resolving this request.
- 2) UWR GAR Order exemptions must be obtained for TU's A, C and D prior to commencement of operations.
- 3) The appropriate cutting authority must be obtained prior to commencement of operations.
- 4) Prior to commencement of operations, the Contractor and Contract Supervisor and a FLNRORD representative will collectively decide the locations for temporary access trails. These temporary access trails will be mapped and flagged before treatment commences. During this phase of work, the group will also decide on appropriate trailside screening.
- 5) In consultation with the Contract Supervisor and the FLNRORD representative, an RPBio will be employed to conduct a breeding bird survey if treatment activities occur during the breeding bird season (April 11 – Aug 23). The Contract Supervisor, FLNRORD representative and the RPBio will list the target bird species for nesting bird surveys and will collaborate together on no work zones when bird nests are found.
- 6) A public open house describing the FMP and implementation workplan should be hosted by the Contract Supervisor. In addition, at least two weeks prior to implementation, signs describing the treatment must be posted at affected trail heads, and all residents or property owners directly adjacent to the treatment units must be notified of the treatment. Notification will include a contact name and phone number.
- 7) Decision on whether or not to include a 1 ha 'control' area ribboned within one of the TU's.

Other notes:

Field Marking Convention: **Block boundary** – orange and black striped; **Block boundary corners** – double orange and black striped and single white ribbon with aluminum tag stating treatment area name, station number, and date; **Treatment-unit demarcation**—yellow ribbon, no writing; **Riparian Management Zone**- Blue Ribbon.