

# 2023-2024

First Nations' Emergency Services Society and Indigenous Services Canada

On-Reserve Operational Fuel Treatment

**Program and Application Guide** 

# **Table of Contents**

NTRODUCTION2
Timber Permit Considerations3
ELIGIBLE APPLICANTS3
Program Specific requirements3
PROJECT TIMELINES FOR COMPLETION4
ELIGIBLE COSTS AND ACTIVITIES4
NELIGIBLE COSTS AND ACTIVITIES 6
APPLICATION REQUIREMENTS AND PROCESS 6
Required Application Contents7
SUBMISSION OF APPLICATIONS7
Review of Applications8
GENERAL EVALUATION CRITERIA8
APPLICANT RESPONSIBILITIES8
GRANT MANAGEMENT9
TRANSPARENCY 10
FINAL REPORT REQUIREMENTS & PROCESS 10

Required Final Report Contents10
PAYMENTS
Progress & Advance Payments11
Deductions to Grant Amounts Payable11
Other Grant Contributions12
Changes to Approved Projects12
Final Payments12
ADDITIONAL RESOURCES
APPENDIX 1 – SPATIAL DATA REQUIREMENTS
(FINAL REPORT)
Operational Fuel Treatment Prescriptions and/or
Treatment Final Reportingi
Submission Standardsi
GNSS Collectioni
Projection Standardsi
Datumi
Naming Conventionsi
Operational Fuel Treatments (OFT)ii
Prescribed Fuel Treatmentsii
Proposed Fuel Treatments (CWRP)ii
Attribute Tables for Operational Fuel Treatmentsiv
Operational and Prescribed Treatment Regimev
Data Quality and Submissionsvi
APPENDIX 2 – MAP REQUIREMENTS (FINAL
REPORT)VII
On-Reserve Operational Fuel Treatment Program vii

#### INTRODUCTION

The First Nations' Emergency Services Society (FNESS) - Indigenous Services Canada (ISC) ON-RESERVE OPERATIONAL FUEL TREATMENT PROGRAM is a funding stream to help protect communities through fuel treatment prescription development and operational treatment projects to mitigate wildfire hazard. Grant administration is provided by FNESS with provision of funding by ISC. Reserve lands are eligible for funding. The program includes both Band and Certificate of Possession lands.

The objective of the program is to fund treatments which protect residential and critical infrastructure. Applications should address hazards closest to structures and progress outwards over time.

See the list of eligible activities for FNESS-ISC ON-RESERVE OPERATIONAL FUEL TREATMENT PROGRAM herein.

You must consult with a FNESS Mitigation Specialist to co-develop your path to safeguarding your community prior to submission of an application.

The <u>FNESS-ISC ON-RESERVE OPERATIONAL FUEL TREATMENT PROGRAM</u> is principally designed for communities wishing to treat forest fuels posing a wildfire risk to a community.

The program is designed to fund operational fuel management projects in areas with moderate to extreme WUI wildfire threat risk and less than 1km from a reserve structure cluster with 6 or more habitation and/or critical infrastructure units/km<sup>2</sup>.

The maximum project dollar amount is \$150,000 per project.

2023-2024 FNESS-ISC On-Reserve Operational Fuel Treatment - Program & Application Guide (October 5, 2023)

The program funds fuel management treatments and/or fuel management prescriptions on lands identified as hazardous in a current Community Wildfire Protection Plan or Community Wildfire Resiliency Plan.

Applicants have up to 2 years from the time of application approval to complete projects. No further applications for an OFT project will be entertained until the current project has a final report approved.

Maintenance treatments on previously treated areas will be considered but must be discussed with Mitigation Specialist prior to application submission to ensure the proposal meets project objectives.

#### **Timber Permit Considerations**

- 1. Applicants proposing commercial removal of trees must have an approved ISC Timber Permit prior to commencement of the activities.
- 2. The requirement to obtain a timber permit does not apply to Nations listed under schedule 2 of the First Nations Land Management Act unless the lands where the project is proposed were excluded from the Land Code.

#### **ELIGIBLE APPLICANTS**

All First Nation Bands and Treaty First Nations in BC are eligible to apply. All Reserve lands are eligible for funding.

## **Program Specific requirements**

### Operational Fuel Treatment Project(s) must be located On-Reserve and:

- Target forest fuels
- Be identified as an area of Moderate to Extreme Wildfire Behavior Threat Class on the 2021 Update: Provincial Strategic Threat Analysis (PSTA) Province of British Columbia (gov.bc.ca) and verified by a field assessment of wildfire threat using Wildfire Threat Assessment Worksheet Fuel Assessment (Site Level) (June 2020). A minimum of one plot per treatment unit must be provided at time of application unless waived by Mitigation Specialist.
- Areas of threat class lower than 'moderate' will be considered where such treatments link or anchor previous treatments.
- Satisfies a structure density requirement of at least six (6) habitation and/or critical infrastructure units per square kilometer and is contained within a one (1) kilometer radius of those structures.
- Targets areas which have surface fuel loads which would exceed the Critical Surface Intensity and thus potentially lead to crown fire initiation. Surface fuel loading calculations and substantiation through use of the Critical Surface Intensity Worksheet (2023) is required at project application stage unless discussed and waived by the Mitigation Specialist.
- Proposed projects must be compliant with all applicable legislation and regulations: federal (e.g., Fisheries Act, Species at Risk Act); provincial (e.g., Forest and Range Practices Act, Open Burning Smoke Control Act, and Wildfire Act); and local authority (e.g., burning bylaws or other bylaws or plans).

**Fuel Management Prescription Projects** can be undertaken as separate, stand-alone projects which facilitate future funding applications, or they may be incorporated into a comprehensive operational fuel treatment application that combines prescription preparation and treatment.

All fuel management prescriptions prepared under this program must satisfy the requirements above and:

- Must be completed on the BC Wildfire Service Fuel Management Prescription template shown at Tools for fuel management
- Every fuel management prescription project must contain wildfire threat plots and fuel loading assessment consistent with <u>Data Collection Standards for FNESS ISC</u>
   Operational Fuel Treatment Projects methodology.
- Be consistent with BC Wildfire Service Wildfire Threat Assessment methodology available at Tools for fuel management
- Be developed and signed/sealed by a Registered Professional Forester and other associated professionals where needed (e.g., Professional Biologist or Engineer) and operating within their scope of practice.
- Must be reviewed and supported by a FNESS Mitigation Specialist prior to initiation of the fuel management treatment.
- All fuel management prescriptions will spatially determine gross and net treatment areas as per **Definitions** section.

#### PROJECT TIMELINES FOR COMPLETION

All projects must be completed within two years from the date of application approval.

#### **ELIGIBLE COSTS AND ACTIVITIES**

Eligible costs are direct costs that are identified in the approved application, properly and reasonably incurred, and paid by the applicant to carry out eligible activities. Eligible costs can only be incurred from the date of application approval until the final report is submitted. Costs for wildfire threat plots / fuel loading analysis to satisfy application requirements may be eligible for subsequently approved projects.

Activities may include treatments such as thinning, pruning, and removal of woody debris and needles (i.e., surface fuel) from the forest floor. As outlined in the 2023 BCWS Fuel Management Prescription Guidance, treatments focus on reducing the potential for sustained ignition and crown fire initiation by reducing surface fuel loading to achieve potential surface fire intensity levels below 2,000 kilowatts per metre and/or below the Critical Surface Intensity in relation to Crown Base Height (CBH).

#### Comprehensive list of eligible activities

- Staff and contractor costs are directly related to projects.
- Access/egress route right-of-way widening.
- Timber permit application and documentation required by ISC.
- Fuel management prescription development or amendment.
- Danger tree assessments.
- Tree felling, including hand and mechanical.
- Pre- and Post-treatment surface fuel load analysis consistent with Tools for fuel management
- Pre- and Post-treatment wildfire threat assessments consistent with
   Tools for fuel management
- Thinning, including hand and mechanical.
- Pile burning.
- Pruning.
- Piling, including hand and mechanical.
- Debris management, including chipping, mastication, and grinding.
- Debris removal, including chip removal, hog fuel removal and slash removal.
- Custom venting forecast.
- Traffic and pedestrian control during active operations.
- Preparation of pre- and post-treatment photos, maps, spatial data, and metadata (see Appendix 1 for Spatial Data Requirements and Appendix 2 for Map Requirements).
- Maximum project allowance per net hectare as follows:
  - To develop fuel management prescriptions consistent with the BC 2023 Fuel Management Prescription Guidance document, cost allowance is up to \$450 per hectare. This is based on an average prescribed area size of approximately 20 hectares and consideration that smaller units may be higher cost and larger units may be lower cost.
  - New fuel management treatment on Reserve land. Based on baseline fuel management (i.e., Manual thinning, pruning, hand piling and burning) costs:
    - ► Coastal Fire Centre: up to \$13,500 per hectare.
    - ▶ Prince George Fire Centre: up to \$11,500 per hectare.
    - ► Cariboo, Kamloops, Northwest, and Southeast Fire Centres: up to \$7,500 per hectare.
  - Undertake fuel management maintenance activities (previously treated areas) on

#### Reserve land:

- ▶ Up to \$3,750 per hectare.
- Off-site debris disposal (trucking, tipping fees, etc.) from new fuel management or maintenance activities.
  - ▶ Up to \$1,600 per hectare.
- Administrative overhead to maximum of 5% of total project value.

### **INELIGIBLE COSTS AND ACTIVITIES**

Any activity that is not outlined above or is not directly connected to activities approved in the application by FNESS is not eligible for grant funding. This includes:

- Emergency plans or related activities.
- Community Wildfire Protection Plan or Community Wildfire Resiliency Plan preparation.
- Local fire department training.
- Purchase of machinery and equipment.
- Activities on land outside the 1 km treatment threshold or land that is scheduled for development.
- Activities for purposes other than fuel treatment (e.g., building of recreational trails without fuel management objectives).
- Staff training costs, including safety and first-aid training.
- Work undertaken by the Ministry of Forests, BCWS or other government bodies.
- Purchase of tools (e.g., hand saws, loppers) or structural protection equipment (e.g., hoses, sprinklers).
- Work undertaken to fulfill hazard abatement obligations under the <u>Wildfire Act</u>
- Removal of non-flammable trash or debris.

**Note:** If the funding you are looking for is not eligible through the On-Reserve Operational Fuel Treatment program, please contact FNESS Mitigation at mitigation@fness.bc.ca

# **APPLICATION REQUIREMENTS AND PROCESS**

#### **Operational Fuel Treatment:**

**Application Form** 

# **Required Application Contents**

- Completed application form signed by authorized Band signatory.
- First Nation Band Council Resolution, indicating:
  - A) support for the application,
  - B) willingness to provide overall grant management, and
  - C) identifying a designated Band representative with signing authority for the project if awarded.
- Operational fuel treatment project proposals must include Wildfire Threat Assessment Worksheet(s) – Fuel Assessment (Site Level) (June 2020) and plot photos, representative of the treatment area plus:
  - ► If you are applying for an area identified as a Priority Treatment Area in your latest CWPP/CWRP you may submit the plot information submitted with that plan.
  - ▶ Relevant excerpts from your CWPP/CWRP supporting the proposed treatment area.
  - Applications will set objective for reduction of threat rating through proposed treatments. i.e., The proposed treatment will reduce wildfire threat from 'moderate' pre-treatment to 'low' post-treatment.
- Confirmation that proposed treatment areas have Critical Surface Intensity that exceeds Crown Base Height and thus potentially lead to crown fire initiation. Surface fuel loading calculations and substantiation through use of the Critical Surface Intensity Worksheet (2023) available at Tools for fuel management is required at project application stage unless discussed and waived by the Mitigation Specialist.
- Copy of applicable fuel management prescription if such exists.

2023-2024 FNESS-ISC On-Reserve Operational Fuel Treatment - Program & Application Guide (October 5, 2023)

- Maps that clearly identify the proposed area(s) that are the subject of the application.
  - ▶ Provide Ortho or satellite-image based mapping which shows infrastructure and vegetation cover is required.
  - ▶ Must show previous fuel treatment areas in the vicinity of the proposed treatment.

### SUBMISSION OF APPLICATIONS

Applications should be submitted electronically to <a href="Fuels@fness.bc.ca">Fuels@fness.bc.ca</a> as Microsoft Word or Portable Document Format (PDF) files.

Applications will be received throughout the program year.

Applications which satisfy our evaluation criteria will be funded on a first-come, first-served basis until funding is exhausted.

All applications **must** be developed in consultation with FNESS' Mitigation Specialist assigned to your application. You will be asked to lead a site visit which will help us codevelop a supportable application.

# **Review of Applications**

FNESS will perform a review of applications to ensure the required application elements have been submitted to ensure the basic eligibility criteria have been met. All eligible applications will be reviewed by a FNESS Mitigation Specialist.

#### **GENERAL EVALUATION CRITERIA**

Eligible projects which satisfy program requirements will be subjected to an evaluation which will assess:

- Mapping quality and usefulness
- Complements other initiatives or program activities and contributes to strategic community defense.
- Project addresses problematic fuel types.
- Community performance history on projects of this nature.
- Proposed treatment cost. Cost effectiveness will be a major determinant in the application review process. Historical treatment and prescription costs in similar conditions will be considered in the evaluation.
- Proximity to structures and community infrastructure.
- Wildfire Threat Rating for the proposed treatment area and proposed threat reduction objective to be achieved through treatment.
- The estimated number of hectares to be treated and proposed project cost per hectare.
- Degree to which the proposed fuel treatment is anchored, accessible/defensible and designed according to expected fire spread and intensity.

#### **APPLICANT RESPONSIBILITIES**

Engagement with FNESS' Mitigation Specialist regarding development of the project submission.

A Post-Grant Approval meeting must be held with your assigned Mitigation Specialist immediately upon approval of your project.

All applicants that propose the commercial extraction of trees under these programs are required by federal legislation to obtain ISC Timber Permitting prior to commencement of work, unless registered under Land Management Act.

Successful applicants are responsible for completion of the project <u>as approved</u> and for meeting reporting requirements. Any applicants that change the management objectives and/or scope of a project must consult with the Mitigation Specialist prior to any work being done and may be required to submit an amended application for review and subsequent approval.

Bands are responsible for proper fiscal management, including maintaining acceptable accounting records for the project. FNESS and/or ISC (Canada) reserve the right to audit these records. Communities will be required to provide supporting financial documents upon request by FNESS-ISC (e.g., invoices/timesheets).

Fuel management prescriptions developed under the *On-Reserve Operational Fuel Treatment Program* must be prepared using the current Fuel Management Prescription Template located at Tools for fuel management

Operational fuel treatment projects can only proceed under an approved fuel management prescription. Plans or prescriptions prepared under these programs <u>must</u> be submitted for review and supported by the Mitigation Specialist prior to implementation in the field.

Submission of Final Reporting on the appropriate Final Report Template applicable to your funding.

#### **GRANT MANAGEMENT**

#### **Notice of Funding Decision**

All applicants will receive written notice of funding decisions within 60 calendar days of submission which will include the terms and conditions of any grant that is awarded.

#### **Revisions Required**

Please note that in cases where revisions are required to an application, or an application has been approved-in-principle only, the applicant has 30 days from the date of the written notice to complete the revision. Revisions that are not completed within 30 days may be denied.

Significant changes to either the scope or intent of an approved project may require re-submission and approval of a new application.



### **Post-Grant Approval Meeting**

All approved applicants must meet with the Mitigation Specialist to discuss the approved project prior to commencing work. At this meeting, dates for bi-annual reporting will be established, project goals and obligations will be discussed.

#### **Project Term**

All approved On-Reserve Operational Fuel Treatment Program projects are to be completed within two years of approval.

#### **TRANSPARENCY**

To ensure transparency and accountability in the expenditure of public funds, all other financial contributions which cover 'eligible costs' of a project must be declared and, depending on the total value, may decrease the value of the grant awarded under the ISC program. Grant deductions will be made for any project that generates revenue (e.g., sale of forest products) generated from ISC funded projects.

Clients who are in receipt of CRI funding for activities similar to On-Reserve Operational Fuel Treatment Program projects must disclose the nature and geographic focus of their CRI project(s) to ensure no funding overlap between CRI & ISC programs occurs.

### FINAL REPORT REQUIREMENTS & PROCESS

# **Required Final Report Contents**

Final reports must include the following:

- Completed Final Report Form, including signatures by the authorized Band signatory and a Registered Professional Forester that certifies all works completed are consistent with the objectives of the fuel management prescription for the project.
- Post-treatment Wildfire Threat Assessment Worksheets with threat plot photos from same location as pre-treatment assessments.
- Post-treatment fuel loading assessment.
- Georeferenced PDF maps. See Appendix 2 Map Requirements

2023-2024 FNESS-ISC On-Reserve Operational Fuel Treatment - Program & Application Guide (October 5, 2023)

- Spatial data, metadata and methodology relating to the project. See Appendix 1 Spatial Data Requirements (Operational Fuel Treatment Prescriptions and/or Treatment Final Reporting)
- For prescription development projects, a FNESS reviewed prescription (new or amended) that is signed and sealed by a Registered Forest Professional with all ancillary assessments (e.g., terrain stability, archaeology).

Services aux Autochtones Canada Applicants are required to submit one electronic copy of the complete final report with all attachments and supporting documents listed therein to the address below:

#### **Submission of Final Reports**

Mitigation Department, First Nations' Emergency Services Society.

Email: Fuels@fness.bc.ca

#### **Review of Final Reports**

FNESS will perform a review of all final reports to ensure the required report elements (identified above) have been submitted.

#### **PAYMENTS**

Payments under the *On-Reserve Operational Fuel Treatment Program* will be based on net area treated. No payment will be made for No Work Zones or other area net-downs (i.e., existing roads, building sites, utility rights-of-way) within the project area.

Amount payable will be the product of Net Area (hectares) treated multiplied by the per hectare rate specified in the approval letter.

# **Progress & Advance Payments**

Advance payments of 25% of the project total will be considered and discussed / confirmed at the time of the PGA meeting.

Progress payments will be considered to a maximum of 75% of the approved grant amount which includes any advance payments that were previously approved and upon field verification of works completed. A map showing the treatment area completed must be submitted to the Mitigation Specialist for field verification if a progress payment is requested.

# **Deductions to Grant Amounts Payable**

2023-2024 FNESS-ISC On-Reserve Operational Fuel Treatment - Program & Application Guide (October 5, 2023)

#### **Revenue Generation**

Revenues resulting from an approved *On-Reserve Operational Fuel Treatment Program* project shall be deducted from the eligible grant amount.

Services aux Autochtones Canada

#### **Other Grant Contributions**

Where other grant programs fund 'eligible costs' under the ISC/FNESS program, described in Section 6, those grant amounts will be deducted from the eligible grant amount payable.

Documentation must be available to demonstrate how actual costs from other grant contributions are accounted for. For example, labour costs must include information on the number of hours worked, the hourly rate, and the eligible activity that was undertaken (e.g., 50 hours at \$18/hour for chipping).

Under no circumstances will the ISC/FNESS grant result in payment of more than 100% of the eligible project cost (or net project cost in cases where revenue is generated).

#### For example:

Eligible project cost of \$75,000.

Other Grant Contributions (for 'eligible costs' under this program) of \$25,000.

Net Project Revenue of \$15,000.

Maximum payable under FNESS-ISC Grant = \$35,000.

## **Changes to Approved Projects**

Approved grants are specific to the project as identified in the application, and grant funds are not transferable to other projects. Approval from FNESS will be required for any significant variation from the approved project. To propose changes to an approved project, approved applicants are required to submit:

- Description of the new or revised activities and area (if applicable).
- Description of new or revised expenditures.
- Written rationale for changes to activities and/or expenditures.

2023-2024 FNESS-ISC On-Reserve Operational Fuel Treatment - Program & Application Guide (October 5, 2023)

- Please note that the applicant may be required to submit an updated, signed application form.
- Changes to boundaries or activities may require amendment(s) to the approved timber permit issued by ISC. ISC can advise on the necessity for amendments.

# **Final Payments**

Final grant payment will not be approved until all administrative, technical, and spatial data requirements have been met.

Payment requests must originate from the Band. Contractors and Consultants cannot submit requests on the Band's behalf.

#### ADDITIONAL RESOURCES

The 2020 Wildland Urban Interface Wildfire Threat Assessment guides and worksheets are available at:

2020 Wildfire Threat Assessment Guide & Worksheets

2023-2024 FNESS-ISC On-Reserve Operational Fuel Treatment - Program & Application Guide (October 5, 2023)

FireSmart BC provides resources for home and private landowners, industry, and governments to lessen the effects of wildfire. For more information and to learn about the FireSmart program in BC, visit https://firesmartbc.ca/; https://firesmartcanada.ca/

The Forest Professionals British Columbia web page provides multiple documents regarding the roles and responsibilities of forest professional that may be helpful when selecting a consultant or contractor to work with <a href="https://www.fpbc.ca/">https://www.fpbc.ca/</a>

#### **DEFINITIONS**

**GNSS:** Global Navigation Satellite System. The satellite network used for navigation in Canada.

**Gross Area**: The total of all areas contained within the treatment boundary.

**Net Area:** The total of all treated area within the treatment boundary. All non-treated areas such as roads, home sites, Wildlife Tree or other No-Work Zones are to be deducted from the Gross area and the resultant Net Area will be the basis of payment for the purposes of these programs.

Linear features such as roads and non-forested right of ways greater than 4m in width are to be netted out of the gross area.

**First Nations owned critical infrastructure**: Assets owned by First Nation or Treaty First Nation that are either:

- Identified as Critical in a FireSmart BC Critical Infrastructure Assessment Guide available here: <a href="https://firesmartbc.ca/resource/firesmart-critical-infrastructure-guide/">https://firesmartbc.ca/resource/firesmart-critical-infrastructure-assessment/</a> and/or
- recognized as essential to the health, safety, security or economic wellbeing of the community and the effective functioning of government (such as fire halls, emergency operations centers, radio repeaters, etc.)

**Vegetation management**: The general goal of vegetation management is to reduce the potential wildfire intensity and ember exposure to people, infrastructure, structures, and other values through manipulation of both the natural and cultivated vegetation that is within or adjacent to a community.

Vegetation management can be accomplished through two different activities:

- Residential scale FireSmart landscaping: The removal, reduction, or conversion of flammable plants (such as landscaping for residential properties, parks and open spaces) in order to create more fire-resistant areas in <a href="https://firesmartbc.ca/wp-content/uploads/2019/08/Home-Ignition-Zone-Poster-BC.pdf">https://firesmartbc.ca/wp-content/uploads/2019/08/Home-Ignition-Zone-Poster-BC.pdf</a>. Refer to the <a href="https://firesmartbc.ca/wp-content/uploads/2021/04/FireSmartBC\_LandscapingGuide\_Web\_v2.pdf">https://firesmartbc.ca/wp-content/uploads/2021/04/FireSmartBC\_LandscapingGuide\_Web\_v2.pdf</a>.
- Operational Fuel Treatments: The manipulation or reduction of living or dead forest and grassland fuels to reduce the rate of spread and head fire intensity and enhance likelihood of successful suppression. For the purposes of these programs is generally situated outside of FireSmart™ Extended Zone and no further than 1 km from an on-reserve structure cluster.

**Wildfire risk:** A notional product of the Likelihood of a fire occurring, the likely behavior of such a fire and the potential impacts on lives and property.

**Wildfire threat**: The ability of a wildfire to ignite, spread, and consume organic material (trees, shrubs, and other organic materials) in the forest. The major components used to define wildfire threat are fuel, weather, and topography which break down further to:

- Fuel: loading, size and shape, arrangement (horizontal and vertical), compactness, chemical properties, and fuel moisture
- Weather: temperature, relative humidity, wind speed, and direction and rainfall
- Topography: slope (increase/ decrease rate of spread), and aspect (fuel dryness)

Wildland Urban Interface (WUI): As defined in the <a href="https://firesmartbc.ca/wp-content/uploads/2019/09/FireSmart Booklet web-Updated.pdf">https://firesmartbc.ca/wp-content/uploads/2019/09/FireSmart Booklet web-Updated.pdf</a> the wildland urban interface (WUI) is any area where combustible forest fuel is found adjacent to homes, farm structures or other outbuildings. This may occur at the interface, where development and forest fuel (vegetation) meet at a well-defined boundary, or in the intermix, where development and forest fuel intermingle with no clearly defined boundary.

**WUI Risk Class (RC):** The level of risk ("risk class") reflects the analysis of weighted PSTA threat components within the individual WUI Risk Class polygons. Five risk class ratings were applied to the WUI polygons, with "1" being a higher relative risk and "5" being the lowest relative risk.

**Structure Density** requirement: Operational Fuel Treatment applications will only be considered for treatments located within 1 kilometre of a structure cluster which satisfies the density requirement of at least 6 habitation / critical infrastructure units/square kilometre.

### APPENDIX 1 – SPATIAL DATA REQUIREMENTS (FINAL REPORT)

### **Operational Fuel Treatment Prescriptions and/or Treatment Final Reporting**

To ensure consistency in reporting it is important to note that all area submissions of work completed are to reflect <u>net area only</u>. The template for this year's submissions is automated to include area reporting and project identification; keep this in mind when using the template.

#### **Submission Standards**

The expectation for submissions into the *ISC-FNESS On-Reserve Operational Fuel Treatment Program* is to use the ESRI File Geodatabase standard (.gdb). This standard was selected due to the many ways the file geodatabase supports and enforces data integrity. If there is a desire to submit data in other formats outside of the File Geodatabase standard, contact Nathan Wisla (<a href="mailto:nwisla@fness.bc.ca">nwisla@fness.bc.ca</a>) to accommodate the request. Otherwise, the standard geodatabase template will be provided. <a href="mailto:KML">KML</a> and KMZ submissions will not be accepted as the primary submission for fuel treatment activities.

#### **GNSS Collection**

To ensure data consistency at the collection level, all GNSS devices must be set to the data collection conventions that follow:

 All GNSS data must be savable and convertible for inclusion in a geo-referenced PDF submission.

### **Projection Standards**

- NAD 1983 BC Environment Albers (EPSG:3005).
- UTM projections and the generic "PCS Albers" coordinate system will not be accepted.

#### **Datum**

NAD83, based on the GRS80 ellipsoid.

#### **Naming Conventions**

All submitted geodatabases should easily identify the project, community, and year the project was first applied for. All submitted documents should follow the naming convention:

### **Operational Fuel Treatments (OFT)**

All submitted GNSS tracks shall be separated into exactly 3 different polygon features and prefixed with whether the submission was an operation or a prescription:

- 1. **OP\_PROJECT\_BOUNDARY** outlines the entire boundary of work. This feature reflects the **gross** area.
- 2. **OP\_TREATMENT\_UNIT** outlines the areas that can be worked, modifying the treatment unit names as needed. This feature should reflect the <u>net area</u>. The areas, if subdivided, need to be specified with a polygon identifier that *identifies regions within the work area's treatment unit* (polygon A, polygon B, etc.).
- OP\_NO\_WORK\_ZONE outlines the areas that cannot be worked or were not worked. This
  feature should reflect the <u>area omitted from the gross area</u>

#### **Prescribed Fuel Treatments**

All submitted GNSS tracks shall be separated into 3 features:

- 1. **PRESC\_PROJECT\_BOUNDARY** outlines the entire boundary of work. This feature reflects the **gross area**.
- PRESC\_TREATMENT\_UNIT outlines the areas that have been prescribed. This feature should reflect the <u>net area</u>.
- 3. **THREAT PLOTS** points delineating the threat plots as outlined in the prescription.

# **Proposed Fuel Treatments (CWRP)**

All submitted GNSS tracks shall provide the same information as is required in the <u>2024 CRI Application</u> <u>Guide</u> (Page 48).

- 1. AOI CWRP area of interest
- 2. **FCFS\_WUI** FireSmart 1km WUI
- 3. **PROPOSED TREATMENT** outlining the gross area of proposed treatments.

Within the geodatabase, all information that belongs to the project's collected <u>GNSS tracks</u><sup>1</sup> will be put in a *feature dataset* outlining whether the submission is a prescription or an operation. Supplementary data such not highlighted explicitly above that are submitted with the project can be stored outside of those feature datasets in the same geodatabase.

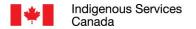
**PRESCRIPTION** – for all prescription GNSS tracks.

**OPERATION** – for all operational treatment GNSS tracks.

**CWRP** – for all proposed GNSS tracks.

To clarify this shift, the geodatabase template that will be provided upon request can be used as a reference.

<sup>&</sup>lt;sup>1</sup> The reason **only** the GNSS tracks are submitted to feature datasets are to easily find polygons that outline work completed or proposed. Feature datasets will also throw errors if the feature is in the wrong projection, making sure the data is submitted correctly the first time.



### **Attribute Tables for Operational Fuel Treatments**

Since the operational treatments are being reported differently this year, provided in the table below are the new attributes that will need to be used in reporting **only for operational fuel treatments**. Prescriptions and proposals will be reported as they were in previous intakes. Please refer to the <u>CRI 2024 Application Guide</u> starting on page 48 for required attributes for everything apart from operational treatments. All GNSS tracks will contain supporting information for the project in its attribute table. Information that needs to be tracked is as follows:

Table 1: Matrix of applicable fields for each GNSS track.

Attribute Name	Attribute Descriptor	Boundary	WorkZone	NoWorkZone
PROJECTID	Project ID	✓	✓	✓
LOCALGOV	First Nation that applied	<b>√</b>	<b>√</b>	✓
TUID	Treatment Unit ID	✓	✓	✓
POLYGON	Working polygon (Polygon A, Polygon B, etc.)	×	✓	×
WORK_UNIT	Treatment unit and working polygon combined	×	<b>√</b>	×
STARTED	Date the treatments began	×	<b>√</b>	×
COMPLETED	Date the treatments were completed	×	<b>√</b>	×
DATA_COLLECTION_METHOD	How the data was collected	<b>√</b>	<b>√</b>	×
DATA_COLLECTION_DATE	When the data was collected	<b>√</b>	<b>√</b>	×
YEAR	The year the treatment was applied for	✓	✓	<b>√</b>
AREA_HA	The area of the	✓	✓	✓

	polygon in hectares			
REASON	The reason this polygon was omitted from work	×	×	✓

### **Operational and Prescribed Treatment Regime**

Starting with the 2023 program intake, stand treatment and debris management activities are **no longer required as separate GNSS tracks.** A separate table of activities is now required. When recorded this way, treatment types and treatment methods (hand/mechanical) can be recorded individually in each treatment unit. This table is intended to supplement and reference work unit polygons identified in the OP\_TREATMENT\_UNIT and PRESC\_TREATMENT\_UNIT feature classes.

The table must be saved in the geodatabase under the name:

### <OP/PRESC>\_TREATMENT\_REGIME

Table 2: Example input into the summary of treatments. Note that this is **not** an exhaustive list of fundable treatment types. For the exhaustive list, please see Appendix 2 – Map Requirements (Final Report).

WORK UNIT <sup>2</sup>	METHOD	TREATMENT
1A	Hand	JS
1A	Mechanical	TR
1B	Hand	TF
2A	Mechanical	DM
3A	Hand	JS

<sup>&</sup>lt;sup>2</sup> Work units are the treatment polygons identified in the working polygons, which may be more specific than the treatment unit. Example: if the treatment unit is "3", and the polygon is "A", then the Work Unit is "3A" If the polygon is the same as the work unit, then there is no need for a polygon identifier.

# **Data Quality and Submissions**

Project submissions not following proper naming conventions will not be accepted. Submissions that omit attributes or a treatment table properly identifying completed or proposed work will also not be accepted.

Completed project files are to be emailed to the FNESS Mitigation Department Fuels@fness.bc.ca

# **APPENDIX 2 – MAP REQUIREMENTS (FINAL REPORT)**

### **On-Reserve Operational Fuel Treatment Program**

Gross and net area treated must be clearly depicted on maps. Net treatment area excludes roads, no work zones, wildlife tree patches, utility right of ways, etc.

The map should also include reference data such as roads, railways, transmission lines, pipelines, water bodies and rivers/creeks. PDF maps should be compressed to reduce unnecessary large file sizes.

The maps must contain:

- Descriptive title
- Scale (as text or scale bar)
- UTM Graticules on the margins
- North arrow
- Legend
- Consultant names
- First Nation band number
- Date

Applicants are required to submit a large format georeferenced PDF map that clearly represents the treatment area(s) at a suitable scale.

The mandatory maps and minimum content of each are:

**1. Overview Map** General overview map of the project boundary in relation to communities and other major features and base data.

Table 3: List of all fundable treatment activities.

Activity	Code
Tree Felling	TF
Juvenile Spacing	JS
Pruning	PR
Spot Pile Burning	SB
Piling	PI
Surface Fuel Collection	SFC
Tree Planting	PL
Debris Management (chipping, etc.)	DM
Debris Removal	DR
Tree Removal (sawlogs, firewood, etc.)	TR
Site Rehabilitation	SR

#### 2. Treatment Unit Map with Tabular Area Summary

- Show project boundary and treatment units.
- Wildfire threat class plot locations color coded by derived threat class.
- Map must include a tabular area summary, by activity, using the stand treatment activity codes provided in the figure.