?aqam

Department of Lands and Natural Resources

Request For Proposal

Wetland Tree Thinning
October 2025

Issue Date: September 19, 2025 **Closing Date:** October 10th, 2025

Closing Location: ?aqam, 7470 Mission Road, Cranbrook BC V1C 7E5

Telephone: (236) 361-8323 **Email:** pgravelle@aqam.net

INTRODUCTION

?aqam is a First Nations community whose government organization services 374 Band Members and other aboriginal peoples within the Ktunaxa Nation. Geographically, the community is located 8 km north of Cranbrook in the East Kootenay region of British Columbia.

?aqam's Lands and Natural Resource Department is seeking proposals to conduct tree falling, brush thinning, piling and pile burning for trees around five wetlands that are a part of ?aqam's Wetland Restoration Project. The anticipated work is planned for late fall/early winter months (Oct 2025 –December 2025) with the contractor ensuring all necessary safety equipment for winter operations is attained. The targeted completion date for the work is December 17th, 2025.

A service agreement will be issued to the successful bidder in compliance with the terms, specifications, and provisions in the submitted proposal, which must include the provision of skilled labor, transportation, supplies, and incidentals. Contractors will be responsible for all their own equipment and transportation.

BACKGROUND

In 2021, the ?aqam Lands Department began planning the Wetland (?akaqta?hat) Restoration Project. Community consultation was conducted to pick the wetlands to restore located throughout ?aqam lands. Archeological assessments, species at risk surveys, hydrological studies, and traditional ecological knowledge research has been conducted and has assisted in the wetland restoration project. We are now working on tree removal to help reduce tree encroachment and the amount of water being removed by the trees from the aquifers.

Work is planned to be conducted within the Kootenay IR 1 at Francis Lake, Airport Wetland, and Unnamed Wetland (shown in Appendix A). These areas will require tree falling and tree brushing activities along with piling of fallen debris for pile burning. Airport Wetland will require a danger tree assessment before any falling or thinning work commences. Tree falling activities should be completed first prior to brushing / bucking / limbing / piling / burning. A valid tree falling certificate will be required and we ask you submit a copy with your application. Please note that trees with DBH >15cm (diameter at breast height) require a falling certificate to fall.

Safety practices should be outlined by contractors (noting that some of these areas are in the 2023 Prescribed Burn area (Airport Wetland), the 2023 Wildfire area (Francis Lake), or older wildfire areas) such that all safety practices and standards with required PPE are met as per WorkSafe BC. Some safety practices that will be expected to be followed are outlined in Appendix B. The awarded contractor(s) will be responsible for all their own equipment and transportation. Contractors will be given paper or georeferenced PDF maps of block areas (shown in Appendix A/C-D). Weekly progress updates will be required to ensure operations proceed in a timely manner.

Due to the scale of the project and short time frame, ?aqam <u>may</u> decide to award to multiple contractors to ensure the time frame of the project is met. ?aqam will specify this when awarding the contract (intending to award on a wetland-by-wetland basis).

Below, each wetland has been outlined with some details of the site. The information provided will be in **SPH** (stems per hectare).

FRANCIS LAKE

At the time of the RFQ development, Francis Lake has two areas but as they are small areas, we will have them be bided on **together** for tree falling and tree brushing / bucking / limbing / piling and pile burning with a total area of roughly 1.1 hectares (2.8 acres). This area is shown in Appendix C. Below is further information on the areas along with the desired future stand conditions. All wildlife trees must be avoided (review of wildlife tree locations will be provided in the pre-work stage with the awarded contractor). The prescriptions will be finalized with the awarded contractor. The recommendations below are to help with contractor proposal and timelines. Please note that trees with DBH >15cm require a falling certificate.

Francis Lake - North

Timber Type: Fd6Py4 (60% Douglas Fir, 40% Yellow Pine)

Area: 0.7 hectares (1.7 acres)

Estimated Current Conditions (SPH)

- Layer 1 (15.1cm-22.5cm dbh) (leave all above 22.5 dbh)
 - \circ Fdi -400
 - o Py Leave All
- Layer 2 (7.5cm 15 cm dbh)
 - o Fdi 700
 - o Py Leave All
- Layer 3 (0 -7.5cm dbh, height is \ge 1.3m)
 - o Fdi 200
 - o Py Leave All
- Layer 4 (height is <1.3m)
 - o Fdi Leave All
 - o Py Leave All

Desired Outcome (SPH)

- Layer 1 (15.1cm-22.5cm dbh) (leave all above 22.5 dbh)
 - \circ Fdi -200
 - o Py Leave All
- Layer 2 (7.5cm 15 cm dbh)
 - o Fdi 100
 - o Py Leave All
- Layer 3 (0 -7.5cm dbh, height is \ge 1.3m)
 - o Fdi 0
 - o Py Leave All
- Layer 4 (height is <1.3m)
 - Fdi Leave All
 - o Py Leave All

Francis Lake - South

Timber Type: Alder / Birch / Pine Area: 0.4 hectares (1.1 acres)

Estimated Current Conditions (SPH)

- Layer 1 (15.1cm-22.5cm dbh) (leave all above 22.5 dbh)
 - o Py Leave All
- Layer 2 (7.5cm 15 cm dbh)
 - \circ Pv -200
- Layer 3 (0 -7.5cm dbh, height is \geq =1.3m)
 - \circ Pv -400
- Layer 4 (height is <1.3m)
 - o Py Leave All

Desired Outcome (SPH)

- Layer 1 (15.1cm-22.5cm dbh) (leave all above 22.5 dbh)
 - o Py Leave All
- Layer 2 (7.5cm 15 cm dbh)
 - \circ Pv -50
- Layer 3 (0 -7.5cm dbh, height is \ge =1.3m)
 - \circ Py -0
- Layer 4 (height is <1.3m)
 - o Py Leave All

Other:

• Birch $\sim 25\%$ removal

AIRPORT WETLAND

At the time of the RFQ development, Airport Wetland has one area to be bided on for tree falling and tree brushing / bucking / limbing / piling / burning and has a total area of roughly 4.2 hectares (10.5 acres). A DTA (Danger Tree Assessor) must conduct a preliminary Danger Tree Assessment for any potential hazard trees in the unit with an appropriate mitigation tactic before work commences (valid certificate required). This area is shown in Appendix D. Below is further information on the area along with the desired future stand conditions. All wildlife trees must be avoided (review of wildlife tree characterises will be provided in the pre-work stage with the awarded contractor). The prescriptions will be finalized with the awarded contractor. The recommendations below are to help with contractor proposal and timelines. Please note that trees with DBH >15cm require a falling certificate.

Airport Wetland

Timber Type: Fd5Pl3Py1Lw1 (50% Douglas Fir, 30% Lodgepole Pine, 10% Yellow Pine, 10% Western Larch) Area: 4.2 hectares (10.5 acres)

Estimated Current Conditions (SPH)

- Layer 1 (15.1cm-22.5cm dbh) (leave all above 22.5 dbh)
 - \circ Fdi -800
 - o P1 250
 - o Py Leave All
 - o Lw Leave All
- Layer 2 (7.5cm 15 cm dbh)
 - o Fdi 1000
 - o Pl 150
 - o Py Leave All
 - o Lw Leave All
- Layer 3 (0 -7.5cm dbh, height is \ge 1.3m)
 - \circ Fdi -500
 - o Pl Leave All
 - o Py Leave All
 - Lw Leave all
- Layer 4 (height is <1.3m)
 - o Fdi Leave All
 - o Pl Leave All
 - o Py Leave All
 - o Lw Leave All

Desired Outcome (SPH)

- Layer 1 (15.1cm-22.5cm dbh) (leave all above 22.5 dbh)
 - \circ Fdi -400
 - o Pl 150
 - o Py Leave All
 - o Lw Leave All
- Layer 2 (7.5cm 15 cm dbh)
 - \circ Fdi -300
 - o P1 50
 - Py Leave All
 - o Lw Leave All
- Layer 3 (0 -7.5cm dbh, height is \ge 1.3m)
 - \circ Fdi -0
 - o Pl Leave All
 - o Py Leave All
 - Lw Leave All
- Layer 4 (height is <1.3m)
 - o Fdi Leave All
 - o Pl Leave All
 - o Py Leave All
 - o Lw Leave All

PILE BURNING

Tree thinning activities completed in early 2025 at Long Lake, Stink Lake, and Unnamed Wetland (as shown in Appendix A), have resulted in a number of slash piles that now require disposal. The objective of this work is to reduce ground fuel and support ongoing habitat and ecosystem restoration efforts. The scope of work includes the safe ignition and burning of all piles, ensuring compliance with regulations, and best practices for smoke management and worker safety.

The amount of pile burning varies by location as outlined below:

• Long Lake: ~71 small piles (two piles are currently located within an AOA polygon and will need to be relocated prior to burning)

• Stink Lake: ~17 piles

• Unnamed Wetland: ~12 piles

All burning must be conducted within the fall/winter burning window, under appropriate venting and weather conditions to minimize smoke impacts. Contractors are expected to supply all necessary equipment and personnel to complete the work efficiently and safely.

All piling and burning activities must follow the Slash Pile Guidelines provided in Appendix E. These guidelines apply to all locations and are intended to ensure consistent construction, placement, and disposal of piles in a way that minimizes environmental impacts and supports long-term ecosystem restoration.

REGULATORY APPROVALS

- The Contractor is responsible for complying with all Federal, Provincial, and Municipal legal regulatory requirements and all applicable environmental legislation.
- The Contractor shall comply with the province of British Columbia's requirements for spill prevention and response.

INSURANCE

- The Contractor shall carry Comprehensive General Liability Insurance in the amount of a minimum of \$2M for each and every occurrence and Workers Compensation Insurance in accordance with the requirements of the British Columbia *Workers Compensation Act*
- If awarded the contract, each of these will need to be submitted to the ?aqam Lands Department before work begins.

SCHEDULE

- ?aqam will award the contract(s) resulting from this Request For Proposal (RFP) to the responsible Contractor(s) whose offer conforming to the RFQ will be most advantageous to ?aqam, based on price competitiveness, qualifications, and previous work with ?aqam or other Ktunaxa First Nations.
- The successful contractor(s) will be contacted by the ?aqam Lands Department shortly after January 28th and a service agreement will be created. Once this is signed and all necessary documents are received by the Lands Department, a start date will be set. The contractor must be done all works no later than December 17th, 2025.

• If you are interested in having a tour of the area, please reach out to the Lands Manager, Payton Gravelle by 12pm MT on October 10th.

REQUIRMENTS

- Equipment for work needed must be supplied by the contractor. This includes: transportation, specified equipment with trained personnel for operators and mechanics, proper PPE, safe supply of fuel source (and secondary containment source), and an emergency spill kit.
- Proof of proper insurance (outlined above under insurance section).
- For falling activities (which are trees with a DBH >15cm) a valid falling certificate must be submitted.
- Under WorkSafeBC, a Danger Tree Assessor (DTA) must be onsite at all times and thus a DTA certificate must be submitted with your bid.

HOW TO APPLY

Complete a proposal with the details outlined below, and either email or submit a hard copy to Payton Gravelle, Land Manager, pgravelle@aqam.net, by 1:00pm Mountain Time on October 10th, 2025. Be sure to include any relevant certificates and insurance documents.

The contract(s) to be awarded from this RFQ will be made to the prospective contractor(s) whose offer conforms most to this RFQ, being most advantageous to ?aqam, price and other factors considered. The following factors will be used to score each offer received, forming the basis for awarding this contract, please provide the following details in your proposal:

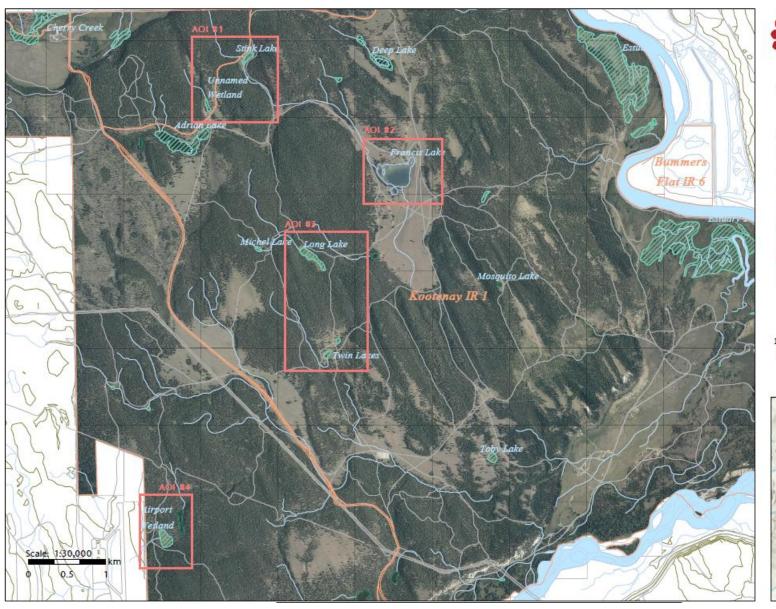
- Experience with tree falling and tree brushing / bucking / limbing / piling and pile burning.
- Demonstrated equipment and qualifications for activities (e.g. Certificates).
- Competitive \$/hectare rate for all personnel working on the project and equipment costs, with estimated timeline.
- Preference will be given to Contractors who are ?aqamnik, Ktunaxa, or of other First Nations descent (We encourage identifying this in your application).

Inclusion of insurance and qualification certificates to complete the scope of work is required for bids. Please include a copy of your WorkSafeBC (or equivalent) and details regarding your Certificate of Liability Insurance (COI) with your bid along with any other relevant certificates.

*****Incomplete bids will not be accepted******

AQAM RESERVES THE RIGHT TO REFUSE ANY OR ALL BIDS. THE LOWEST BID WILL NOT NECESSARILY BE ACCEPTED AS THE SUCCESSFUL BIDDER.

Appendix A: Wetland Locations





Kootenay IR 1 ?akaq̃‡a?ha‡ (Wetland) Restoration Phase II - Design

Legend

7aqam Reserve Lands

Roads

Contours, 20n

Creeks

Rivers

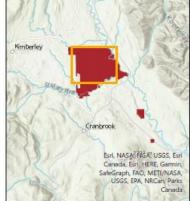
Wetlands by Type

Wetland

Kettle Lake

Receiving Site

Map updated October 15, 2021 by Sonja Seher, Lands & Resources Project Coordinator. Data provided by ?aqam, the Province of BC and



Appendix B: Safety Standards To Be Followed

(Company Logo) Company Name

Juvenile Spacing Thinning and Mechanical Brushing

SAFE WORK PROCEDURE

PERSONAL PROTECTIVE EQUIPMENT

- Hard hat of contrasting colour
- Hearing Protection
- □ Leg protection (bucking pants)
- Eye and face protection (visor)
- Hand protection (cut resistant gloves)
- High visibility apparel
- Safety footwear (caulked boots)
- Appropriate clothing for the weather conditions including rain jacket and pants; insulating layers; extra gloves and head coverings for cold and/or wet weather.
- Whistle and /or portable radio
- Personal first aid kit including a large pressure bandage for any large cuts and EpiPen if allergic to bee stings.

HEALTH CONSIDERATIONS

Thinning or juvenile spacing and mechanical brushing is very physical work with my hazards associated with a forested environment including:

- Mosquitoes have repellent available and cover
- Bees and Wasps If any identified, inform the rest of the crew.
- Ticks Check frequently and on a regular basis for ticks on clothing and keep pant and shirt cuffs and sleeves tucked-in. Workers should check each other also.
- Wildlife (e.g., bears, cougars, moose...) –
 Check the work area for any wildlife before
 and during operations that could have come
 onto the site.

To maintain good health before and during work:

- Get a good night's sleep.
- Be mentally and physically prepared to begin work, including stretching and warming up before and during work.
- Eat health, nutritious meals and refrain from using drugs and alcohol.
- Prepare nutritious meals and snacks; and bring lots of water and electrolytes replacements for the workday.
- Bring personal care products including medical prescriptions and medications; sunscreen; and lotions.

 Take frequent small breaks for water and nutrition; and to stretch.

PRE-WORK PROCEDURES

Prior to conducting a pre-work meeting with the crew, the supervisor or foreman should complete a pre-work meeting with the client and review the prescription or site plan, ensure that they understand the site plan requirements; and then visit the worksite and complete a documented inspection and hazard assessment, mapping any hazards that have not been detailed or found in the site plans.

PRE-WORK MEETING WITH CREW

- Conduct a pre-work meeting with crew to review and discuss hazards (and methods to control them); site plan (e.g., cutting prescription) and maps, and emergency response procedures.
- Review on maps, allocated work areas or strips for each crew member
- Discuss who are the designated first aid attendants and the location of first aid supplies, ETV and stretcher if appliable.
- A review of emergency response plan procedures including muster point; emergency communications and signals (e.g., whistle, radio and horns); fires response; first aid procedures and evacuation procedures.
- Establish communication and check-in procedures and intervals; and don't work alone.
- Re-fuel in a designated, safe area (clearings); carry personal first extinguisher and no smoking.
- Fire protection reporting and response procedures and location of fire equipment and tools.

Hazards to be aware of could include:

- Danger trees and overhead hazards
- Steep ground, rocky terrain, gullies, holes and debris
- Weather conditions including snow and ice; high winds; rain; flog and poor visibility conditions; heat and high fire hazard conditions.
- Insects and wildlife as previously mentioned.

(Company Logo) Company Name

Juvenile Spacing Thinning and Mechanical Brushing

SAFE WORK PROCEDURE

SPACING AND THINNING TECHNIQUE

The following general rules should be followed for spacing and thinning operations:

- Each crew member is assigned a work area or strip that is flagged out.
- The worker should work uphill in a zig-zag pattern covering the whole strip, looking ahead for hazards and stem distribution.
- Stay aware of your position in the work area and the position of the adjacent workers.
- Keep stump heights low and less than 30 cm; and cut below the lowest live branch.
- All cuts should be parallel to the ground to avoid sharp points that can injure other workers and wildlife.
- All stems cut cleanly with no hinges.
- Accidentally damaged trees must be cut.
- · Cut trees should not lean on crop trees.
- All conifers, other than crop trees taller than one metre must be cut.
- Cut small stems and then large ones, leaving crop trees of good form and vigour.
- Larger stems should be fallen with a small undercut.
- Generally, all woody vegetation competing with crop trees should be cut back at least one metre.
- Reduce spacing by 50 percent around natural openings, old skid trails and roads.

CHAINSAW USE

- Use a smaller, appropriate sized chainsaw with medium sized bar, that reduce the amount of bending over to cut stems.
- Check that the chainsaw is running well and that the muffler is adequate.
- Carry a personal first extinguisher and personal first aid kit.
- The chainsaw sharp, tension set, saw properly maintained; and extra sharp chains are available.
- Have available tools available for maintaining the saw including chain sharpening tool (file guides); files; screwdriver; and grease gun.

- Check that chain brake is functioning properly.
- Check that there is sufficient mixed gas and chain oil for the work day.
- Refuel after the engine has cooled down.
- Chain brake engaged to control fast idle start
- Maintain good balance and a secure footing when operating; and keep chainsaw below waist height.

BRUSH SAW USE

As per the items listed under chainsaw use and including:

- Avoid using brush saws on steep slopes and use only a ground level to moderately sloping terrain.
- Ensure that the saw properly maintained.
- Cut on the left side of the blade so that machine pulls away from operator.
- Saw blade sharp and extra saw blades are available.
- Ensure that the cutting head is adjusted properly and tight.
- The guard is intact.
- Harness properly fit and adjusted to prevent back strain.
- Shut off engine before putting cutter down and before cleaning out clogged or stuck cutter

Appendix C: Francis Lake Tree Thinning Polygons





Kootenay IR 1 ?akaqŧa?haŧ (Wetland) Restoration Francis Lake Tree Thinning

Legend

- Marked Tree Thinning Areas
- ?aqam Reserve Lands
- Roads
- Creeks

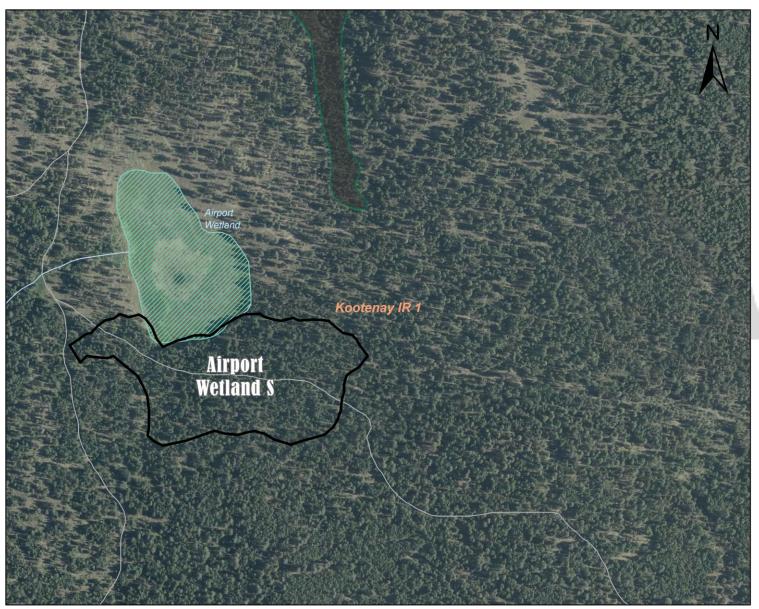
Wetlands by Type

- Wetland
- Kettle Lake
- Describing Of
- Receiving Site

Map updated December 13th, 2024 by Skylar Nikkel, Land Manager. Data provided by ?aqam, the Province of BC and Canfor.



Appendix D: Airport Wetland Tree Thinning Polygon





Kootenay IR 1 ?akaqŧa?haŧ (Wetland) Restoration Airport Wetland Tree Thinning

Legend

- Marked Tree Thinning Areas
- 2 ?aqam Reserve Lands
- --- Roads
 - Creeks

Wetlands by Type

- Wetland
 - Kettle Lake
- Receiving Site

Map updated December 13th, 2024 by Skylar Nikkel, Land Manager. Data provided by ?aqam, the Province of BC and Canfor.



Appendix E: Slash Pile Specifications

General

- A maximum of 9 piles per hectare may be constructed.
- If additional piles are required, contact the Project Manager before proceeding.
- Piling is required where slash covers more than 50% of ground cover within a 10×10 m plot.
- All slash piles and firewood piles must be GPS'd, labelled, and submitted to the Lands Department upon completion.

Pile Construction

- Maximum size: 2 m high × 3 m diameter.
- Build piles with a core of fine material at the base and a shell of larger material on the outside.
- Space piles approximately 30 m apart, where conditions allow.

Placement Guidelines

- Piles must remain within the treatment area, unless otherwise noted as approved pile areas on maps.
- Do not pile within mapped "No Pile Zones."
- Maintain a minimum of 10 m from the water's edge.
- Where possible, place piles in newly brushed areas, preferably on brushed thickets.
- Keep piles at least 7 m from fence lines and wildlife trails.
- Do not place piles on or directly adjacent to existing roads (leave at least 1–2 m buffer).
- Place piles as far as possible from the base and crown of leave trees and avoid heavy slash accumulation directly beside piles.
- Avoid piling on slopes greater than 30%, where feasible.
- Do not construct or burn piles within mapped archaeological zones.

Other Materials

- Any Layer 1 Fir trees cut for firewood must be piled separately and away from slash piles.
- Downed woody debris meeting cut specifications should be piled accordingly.