Invasive Plants Management Process
Standard Operating Procedure (DRAFT)
Updated: April 01, 2018 to change Cengea to LRM

PURPOSE
To define the various steps that are required to occur at different operational stages and identify the individuals who are responsible to undertake these steps to effectively manage for invasive plants (IP).

SCOPE
This Standard Operating Procedure (SOP) covers all aspects of forestry planning and block/road development, the signing and sealing of the applicable Site Plan, and implementation. It includes relevant business area staff, licensees, and contractors working for BCTS.

Important Information Sites
Invasive Alien Plant Program (IAPP): This website will be utilized to identify known occurrences of invasive plants: http://www.for.gov.bc.ca/HRA/Plants/application.htm.

Report-A-Weed Tool: Utilize this site to report new occurrences of invasive plants: http://www.for.gov.bc.ca/HRA/Plants/raw.htm

Note: this SOP is linked to the IP Process Design Map.

PROCEDURE	RESPONSIBILITY
Stage 1: Block Planning IP Management	
• Ensure blocks have passed initial economic viability test; i.e. ensure it meets *PP Done* test.	*Planning Forester* *Practices Forester*
• Confirm location of potential cut block and associated road networks	*Practices Forester*
• Check IAPP website to determine if any IP have been mapped within area of proposed activity. Record any findings of relevant IP.	*Practices Forester*

• Determine management options for each IP discovered in IAPP application:
   o Discuss with Planning Officer/Forester, Area Forester/Woodlands Supervisor and/or Woodlands Manager to see if there are any previous commitments related to species management;
 • If no management recommendations available consult with Qualified Professional
   o Discuss Qualified Professional's recommendations with Area Forester/Woodlands Supervisor and Woodlands Manager
	Practices Forester
	 Multiphase/TFL Forester
	 Planning Forester
	 Qualified Professional

• Review BA IP listing to determine potential IP species in area of proposed activity.
   o Make list of potential IP species that could be encountered
   o If uncertain about potential of IP in area of proposed activity have the area field reviewed by a Qualified Professional.
	Practices Forester
	 Multiphase/TFL Forester
	 Qualified Professional

• Update and/or review IP tracking form and attach to IP Block/Road Activity in Land Resource Manager (LRM) with other relevant documents and comments.	*Practices Forester* *Multiphase/TFL Forester*

PROCEDURE	RESPONSIBILITY
• Determine if block planning should proceed based upon management recommendations	*Practices Forester* *Multiphase/TFL Forester* *Planning Officer*

• During field review collect basic coarse ecological information necessary to assist with use of IAPP database
     o BEC, subzone, variant
     o Primary forest cover/landscape attributes
 • If uncertain about potential IP prior to field visit engage Qualified Professional during field visit
 • Detail any IP located in field and discuss management options with Area Forester/Woodlands Supervisor, Woodlands Manager and/or a Qualified Professional
 • Update IAPP website with new information using Report-A-Weed tool:
     o UTM Zone
     o UTM Easting
     o UTM Northing
     o Species
     o Observation Date
     o Area (m^2)
     o Location
     o Name and e-mail address
     o If uncertain of identification, take a photo of the plant and state in comments that this has been done.
 • Determine if proposed activity should occur based upon IP recommendations
	Practices Forester
	
	 Multiphase/TFL Forester
	
	 Qualified Professional

Stage 2: Block/Engineering Layout Pre-work (Multiphase/TFL)	
• Confirm location of proposed block or road	*Practices Forester* *Multiphase/TFL Forester* *Operations Technician*
• Summarize findings from block planning stage if applicable for handover to multiphase staff/contractor(s).	*Operations Technician*
• Prior to pre-work meeting, check IAPP website to determine if any new IP have been mapped within area of proposed activity prior to pre-work meeting o Record any findings of relevant IP	*Multiphase/TFL Forester* *Operations Technician*
• Update IP tracking form and attach to IP Block/Road Activity in LRM with other relevant documents and comments	*Operations Technician* *Multiphase/TFL Forester*
• Provide IP summary to contractor with any IP management recommendations including those from Qualified Professionals where available	*Operations Technician*

PROCEDURE	RESPONSIBILITY

• Discuss how contractors IP field investigations should be documented
      ○ In site plan under relevant R/S
      ○ As supporting document to Site Plan
      ○ In the SP declaration letter
      ○ Private filing with documentation available upon request
	Practices Forester

• Review capabilities of IAPP and Report-A-Weed websites with contractor; reports, maps, reference material, etc. • Provide copy of Chinook Invasive Plant Strategy BMP	*Operations Technician*
• Operations Tech to communicate with multiphase contractor during monthly progress meetings Re: any new IP found	*Operations Technician*
Stage 3: Field Work Quality Assurance (Inspection)	
• Select blocks for review based on risks to sensitive areas as defined in BMP	*Practices Forester*
• Review pre-work (Multiphase/TFL) notes and material, including IP management strategies	*Operations Technician* *Practices Forester*
• Check IAPP website utilizing to determine if any new IP have been mapped within area of proposed activity prior to pre-work meeting. Record any findings of relevant IP.	*Operations Technician* *Practices Forester*
• Review district IP reports to be familiar with potential IP to ease identification in field	*Operations Technician* *Practices Forester*
• Where uncertain about potential for IP in proposed area of activity, engage Qualified Professional to jointly conduct field review.	*Operations Technician* *Practices Forester* *Qualified Professional*
• Ensure previously identified IP are adequately managed • Record any new IP found in field and discuss management recommendations with multiphase Forester/Practices Forester • If uncertain about management recommendations seek input from Qualified Professional	*Operations Technician* *Practices Forester* *Qualified Professional*
• Update IP tracking form and attach to IP Block/Road Activity in LRM with other relevant documents and comments	*Operations Technician* *Practices Forester* *Multiphase/TFL Forester*

PROCEDURE	RESPONSIBILITY
Stage 4: Site Plan/Road Site Plan Quality Assurance	

• Site Plan prepared by multiphase or in-house
• Site Plans peer reviewed:
 • Review IAPP website to check for any new IP occurrences
  ○ If new IP found determine management requirements with QP input as deemed necessary
  ○ Refine SP/field work to incorporate new IP finding(s) if block still economically viable
 • BA staff should review Site Plan to ensure IP has been considered and management options minimize IP spread.
 • Review IP management options detailed in SP to ensure consistency with previous BA commitments
 • Review any submissions by qualified professional(s) to ensure that they have been properly incorporated into the Site Plan and block/road engineering
 • Seek corrections if inconsistencies or errors/omissions discovered
 • Confirm documentation is present, if required, in relation to IP and associated reports and recommendations.
	Practices Forester
	Multiphase/TFL Forester

• Update IP tracking form and attach to IP Block Activity/Road Activity in LRM with other relevant documents and comments	*Practices Forester* *Multiphase/TFL Forester*
• Annual, detailed BA risk-based review of Site Plan population • Focus on any high risks to sensitive areas that may have been previously identified by BA Planning section • Confirm documentation is present, if required, in relation to IP and associated reports and recommendations.	*Practices Forester* *Operations Technician*
Stage 5: TSL/Contract Package Preparation	
• During preparation of TSL package, review any IP specific details that must be addressed in TSL or contract documents to ensure they are adequately incorporated into plan.	*Operations Technician* *Multiphase/TFL Forester*
Stage 6: TSL/Contract Pre-work	
• Review any IP specific details in Site Plan with Licensee including discussions around how IP management options were integrated into the block/road engineering and related Site Plans • Include details on grass seeding and monitoring requirements, as well as road maintenance activities.	*Forest Technician* *Operations Technician*
• Provide summary of species characteristics to TSL Licensee to enable additional identification of new occurrences in the field ○ IP name; Latin, common ○ Pictures ○ Reports	*Forest Technician*

PROCEDURE	RESPONSIBILITY
Stage 7: Conformance Quality Assurance (Inspection)	
• Review relevant plans and IP descriptions/information to familiarize self with potential species	*Forest Technician*
• Review relevant plans to ensure thorough understanding of how IP species habitat needs were to be addressed in the field.	*Forest Technician*
• Check operations to ensure consistency with legal plans.	*Forest Technician*
• Where deviations from the plan have occurred that impact IP follow standard conformance process. ○ Ensure appropriate agencies have been notified.	*Forest Technician*
• Ensure non-conformances and/or potential non-compliances have been entered into the EMS Issue Tracking System and Action Plan has been developed.	*Forest Technician*
• Return to field for follow-up inspection(s) to ensure any Action Plans/mitigation strategies have been implemented	*Forest Technician*
Stage 8: Post Disturbance IP Activities (Harvesting & Road activities)	

• Roads
    • Review IP tracking form information in LRM to familiarize self with potential IPs
    • Schedule follow-up monitoring of grass seeding effectiveness in Resources
    • Reschedule follow-up treatment and monitoring where an effective results not achieved
    • Complete Resources tracking form and update IAPP web site using "Report-A-Weed" tool when invasive plants have spread beyond last reported location as a result of grass seeding failure
	Forest Technician
	
	Engineering Technician
	
	Contractor

• Silviculture
    • During silviculture surveys review IP tracking form information in Resources to familiarize self with potential IPs
    • Complete Resources tracking form and update IAPP web site using "Report-A-Weed" tool when invasive plants have spread beyond last reported location.
	Forest Technician
	
	Operations Technician
	
	Practices Forester
	
	Contractor