



Te Uru Rākau
Forestry New Zealand

NATIONAL ENVIRONMENTAL STANDARDS FOR PLANTATION FORESTRY

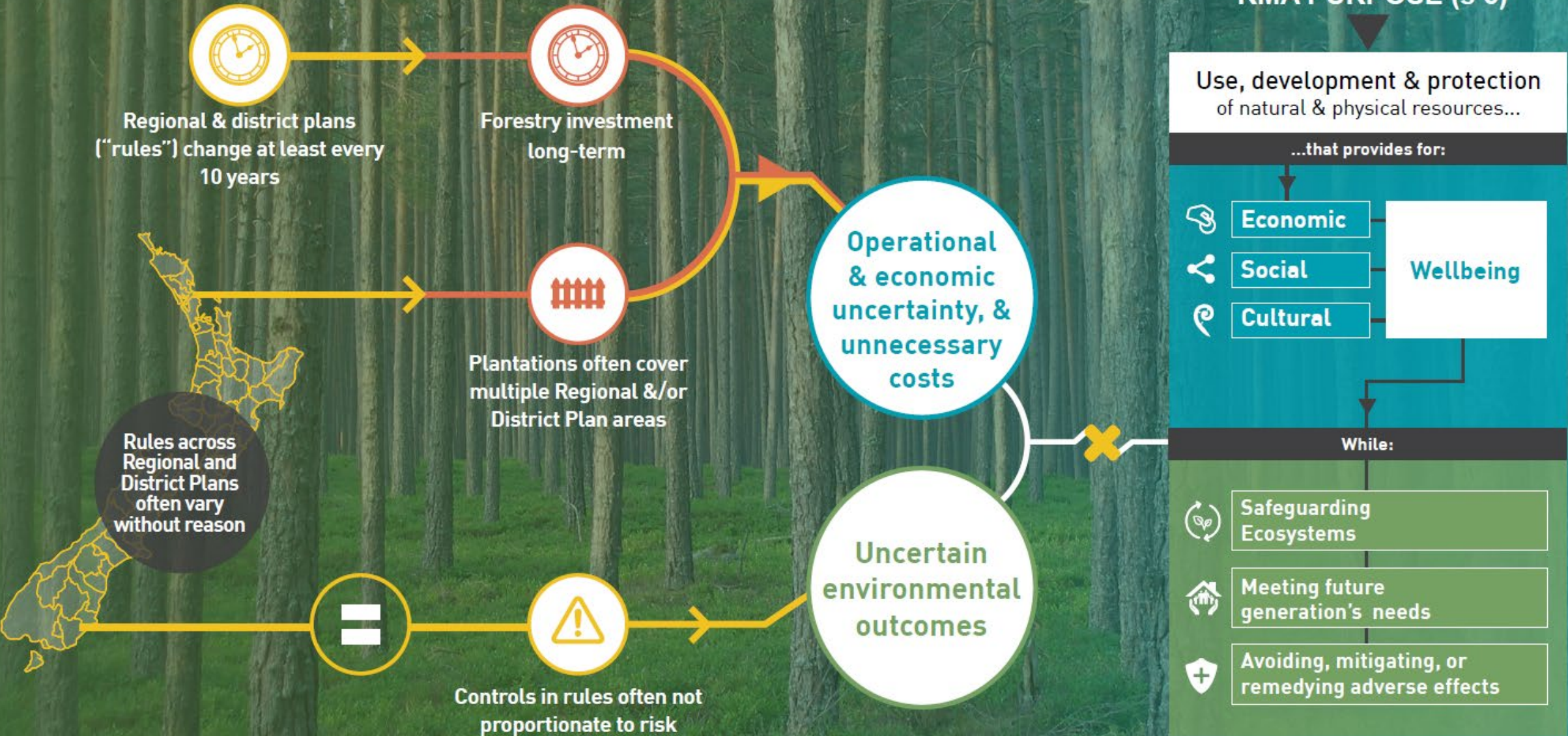
DR ELIZABETH HEEG, MANAGER, LAND MANAGEMENT ANALYSIS
TE URU RĀKAU (FORESTRY NEW ZEALAND)

A photograph of a dense forest with many tall, thin tree trunks and a green undergrowth. Two overlapping circles are centered in the image: a white one on the left and a dark grey one on the right.

PART 1

INTRODUCTION AND OVERVIEW

CASE FOR CHANGE



OBJECTIVES OF THE NES-PF



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ARE TO



Maintain or improve
environmental outcomes
associated with plantation
forestry activities

AND



Increase the efficiency



Improve certainty

...in how plantation
forests are managed

**All objectives
achieved by:**



Removing unwarranted variation
in regional and district plan
rules



Providing fit-for-purpose
forestry regulations to manage
effects



Permitting activities if efficient +
no significant adverse effects



Allowing more stringent plan
rules in certain circumstances
to protect locally significant and
sensitive environments

NES-PF OVERVIEW



**SINGLE NATIONAL
SET OF REGULATIONS
TAILORED TO FORESTRY**



**REPLACES EXISTING
REGIONAL & DISTRICT
PLAN FORESTRY RULES**

**NES-PF REGULATIONS APPLY
TO FORESTRY THAT IS:**



Planted for commercial purposes



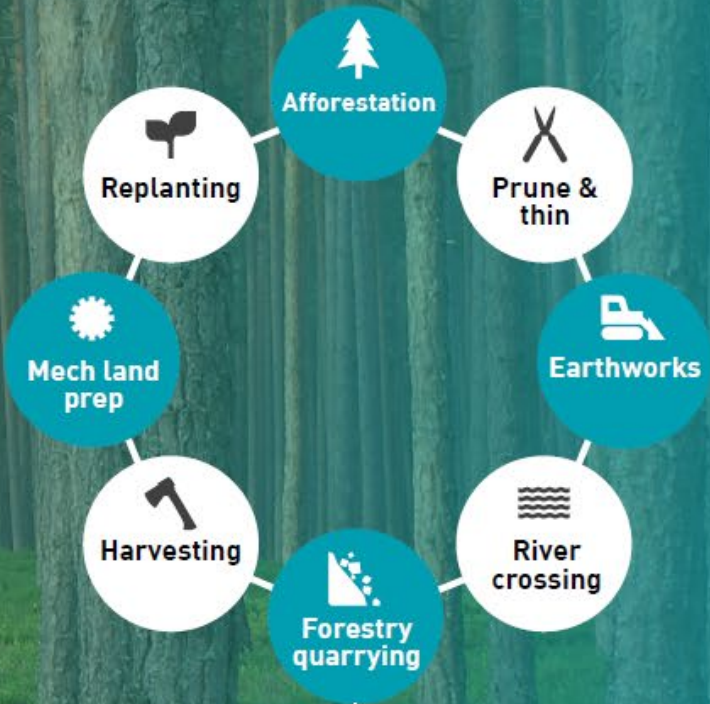
At least 1 hectare plus



To be harvested

**IT ALSO APPLIES TO ALL
ASSOCIATED FORESTRY
INFRASTRUCTURE**

**REGULATES EIGHT
ACTIVITIES**



**THAT REPRESENT THE
PLANTATION FORESTRY
LIFECYCLE**

NES-PF OVERVIEW: Continued



NES-PF RULES ARE BASED ON

Regional & district plans



Good forestry management practices



NES-PF TAKES A RISK-BASED APPROACH WHERE

Risk assessment tools used to identify risk levels



Foresters identify & manage high-risk activities



Councils monitor compliance



FORESTRY
ACTIVITIES
CLASSIFIED
AS EITHER

PERMITTED

Majority

of activities
nationally

WITH CONDITIONS

CONTROLLED



RESTRICTED
DISCRETIONARY



DISCRETIONARY

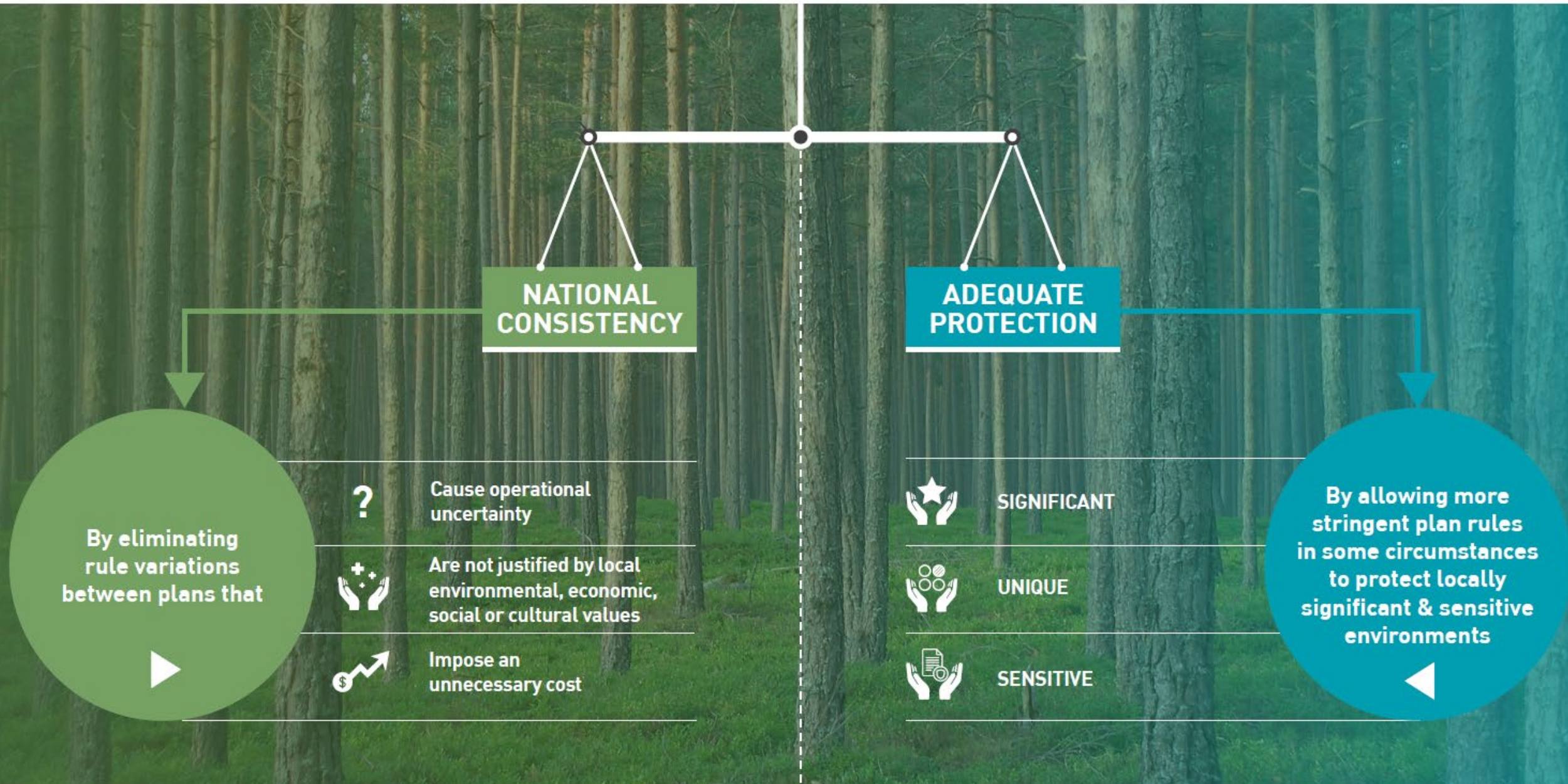


The background is a photograph of a forest with many tall, slender trees and a green forest floor. Two overlapping circles are centered on the image: a white one on the left and a dark grey one on the right.

PART 2

**BALANCING
NATIONAL
CONSISTENCY
WITH LOCAL
PROTECTION**

WHEN PLAN RULES MAY BE MORE STRINGENT: Balancing consistency & protection



NES-PF PROVIDES ADEQUATE PROTECTION

**NATIONAL
CONSISTENCY**

**ADEQUATE
PROTECTION**

**BY ALLOWING PLAN RULES TO BE MORE
STRINGENT IN CERTAIN CIRCUMSTANCES**



**TO PROTECT MATTERS OF
NATIONAL IMPORTANCE,
NAMELY:**

“Outstanding natural
features & landscapes”

“Significant natural
areas”



**ACHIEVE OTHER NATIONAL
INSTRUMENT OBJECTIVES**

FW objectives to give
effect to FW-NPS

NZCPS policies 11, 13,
15 & 22



**PROTECT UNIQUE AND
SENSITIVE ENVIRONMENTS**

Separation granite
point soils

Geothermal areas and
karst geology

Certain human drinking
water sources

A photograph of a dense forest with many tall, thin tree trunks and a green undergrowth. Two large circles are overlaid on the image: a white one on the left and a dark grey one on the right, which overlap each other in the center.

PART 3

**NES-PF's
RISK-BASED
REGULATORY
APPROACH**

OVERVIEW OF NES-PF'S RISK ASSESSMENT TOOLS

INTRODUCES THREE RISK ASSESSMENT TOOLS

- 1  **Erosion Susceptibility Classification** **EROSION & SEDIMENT RISK**
- 2  **Wilding Tree Risk Calculator** **RISK OF WILDING CONIFER SPREAD**
- 3  **Fish Spawning Indicator** **RISK OF FISH & HABITAT DISTURBANCE**

TOOLS BASED ON LOCAL GEOPHYSICAL, BIOLOGICAL AND ECOLOGICAL DATA



+

UPDATED AS NEW INFO AND TECHNOLOGY BECOMES AVAILABLE



TOOLS TAILORED TO IDENTIFIED FORESTRY-SPECIFIC RISKS



THUS, CAN MORE ACCURATELY DETECT & GAUGE FORESTRY EFFECTS





WHAT DOES THE ESC DO?

The ESC is a spatial database tool that allows foresters and councils to



IDENTIFY
the land erosion risk **6 of the 8** plantation forestry activities present when conducted on forest land across New Zealand.



The ESC enables a targeted approach to managing risk as the

level of ESC identified erosion risk associated with a given location



each plantation forestry activity's propensity to cause erosion

together determine if a plantation forestry activity is subject to specific permitted activity conditions or require a resource consent under the NES-PF.



HOW DOES THE ESC WORK?

The ESC achieves this targeted risk identification and management

by using data regarding the following environmental factors to identify the erosion susceptibility on site:



Assessed land is then classified into 4 colour-coded categories

that reflect the identified level of erosion susceptibility risk that each unit of assessed land is subject to:

Low Risk	Land less likely to erode
Mod Risk	Plantation forestry activities are permitted if conditions are met
High Risk	Land more likely to erode
Very High Risk	Plantation forestry activities more tightly controlled and may need resource consent

NES-PF requires resource consent in certain circumstances

for the following plantation forestry activities need resource consent when conducted on red and orange zoned land (in certain circumstances):





WHAT DOES THE FSI DO?

The FSI is a spatial database tool that allows foresters and councils to

MANAGE



the level of risk the 8 plantation forestry activities may present to sensitive and threatened freshwater fish species.

IDENTIFY



It takes a targeted approach to manage risk

by ensuring the relevant controls imposed to manage plantation forestry activities are **proportionate** to risks presented to freshwater fish species



By plantation forestry activities

When conducted in a specific location in New Zealand

HOW DOES THE FSI WORK?



The FSI achieves this targeted risk identification and management



by using up-to-date scientific data and knowledge to let councils and foresters know:



Data behind the FSI will be reviewed annually



by the Fish Spawning Indicator Governance Group, factoring in new data findings and developments in technology



Which fish species are threatened or sensitive to habitat disturbance during spawning times



Where the fish species spawn in freshwaters



Which of the two risk classes (based on level of sensitivity) that the identified fish species falls into



The specific times during the year that these fish species are spawning

The NES-PF requires foresters obtain a resource consent

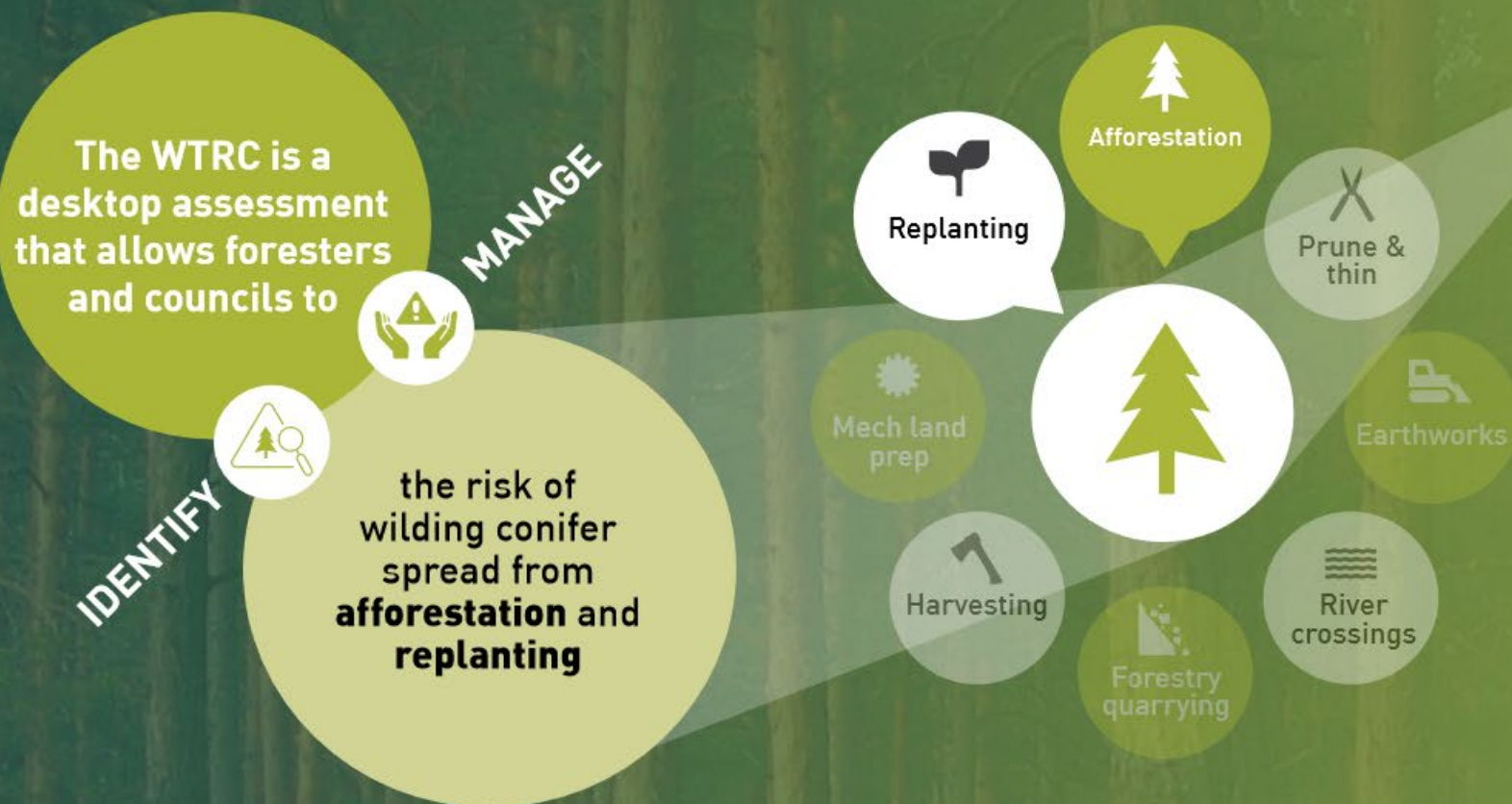
if a plantation forestry activity will disturb the spawning habitat of an identified fish species during spawning periods

The NES-PF specifies the restrictions imposed when this is the case

The FSI was developed for NES-PF specific use, and its application elsewhere needs to be carefully considered



WHAT DOES THE WTRC DO?



By the specific conifer species to be planted



When planting in a specific location in New Zealand

HOW DOES THE WTRC WORK?



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The WTRC achieves targeted risk identification and management

by using **SIX** indicators to ascertain the level of wilding conifer spread risk associated with planting conifer species on a specific site:



A points system is used to determine the level of risk

Specifically, the WTRC assigns risk points for each indicator to gauge the risk of wilding conifer spread



Spread vigour of tree species



Conifer species palatability to livestock



Topographical placement of the site to be planted



The receiving sites land-use characteristics



Surrounding vegetation



Wind conditions

The NES-PF specifies the afforestation and replanting scores that trigger the need to obtain a resource consent

The WTRC must be used before afforestation and before an area is replanted in a species different to that which was most recently harvested from the land

The WTRC must be used by a person with

silviculture and forest ecology tertiary qualifications and 2+ years' silviculture experience

OR

at least 5 years' experience in silviculture that includes forest establishment

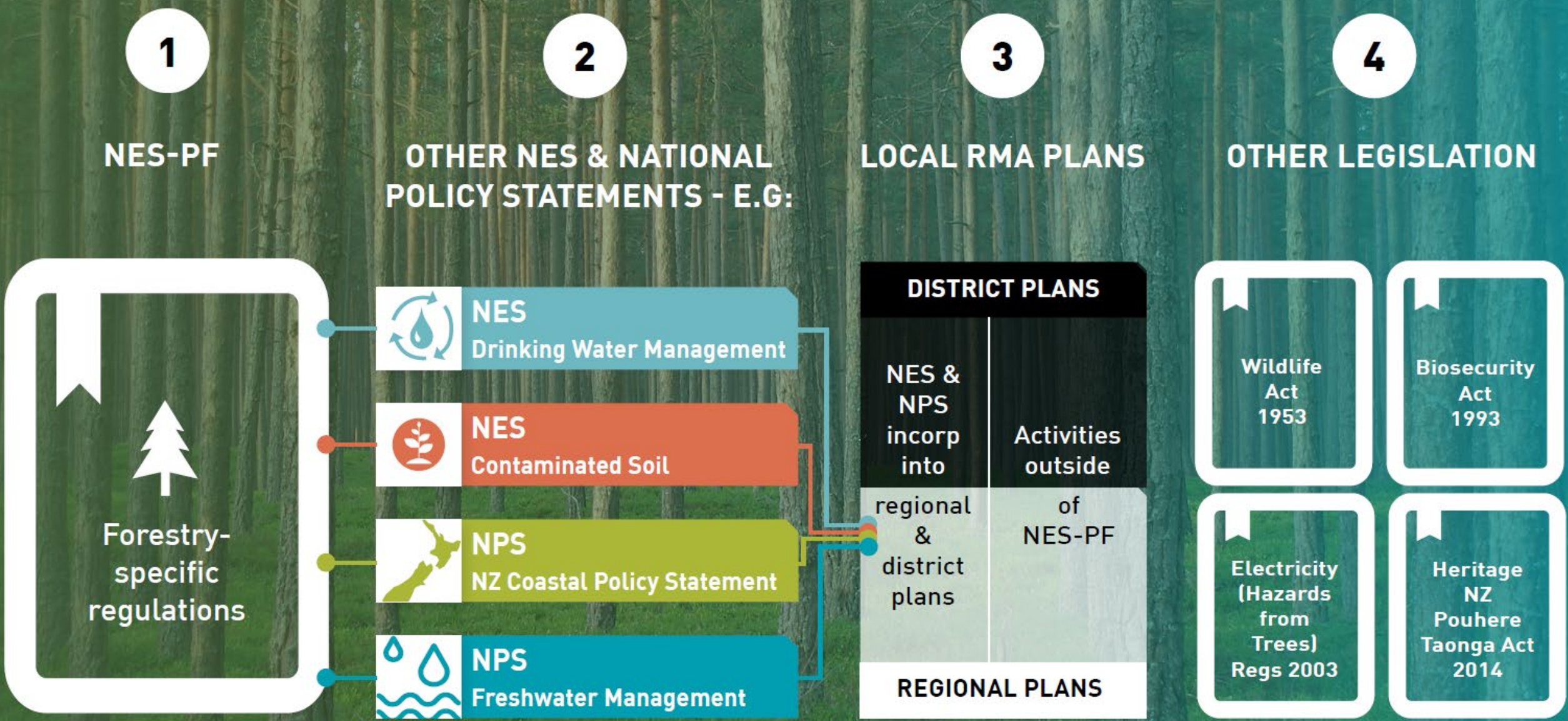


A photograph of a dense forest of tall, thin trees with green foliage in the background. In the foreground, there are two overlapping circles: a white one on the left and a dark grey one on the right. The text 'PART 4' is centered in the white circle, and 'IMPROVED ALIGNMENT WITH THE RMA' is centered in the dark grey circle.

PART 4

**IMPROVED
ALIGNMENT
WITH THE RMA**

FULL PLANTATION FORESTRY REGULATORY LANDSCAPE



NES-PF IMPLEMENTATION



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- Prior to the NES-PF coming into effect, we conducted a series of workshops with councils
- We also partnered with NZIF and held a series of workshops with their members
- We have done some targeted plan alignment workshops with councils following commencement, and continue to run a helpline and dedicated email address to answer queries on the regulations

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The background is a photograph of a forest with many tall, slender trees and a lush green ground cover. Two overlapping circles are centered on the image. The left circle is white and contains the text 'PART 5'. The right circle has a wood grain texture and contains the text 'WHAT'S AHEAD?'.

PART 5

WHAT'S AHEAD?



NES-PF REVIEW

- Review and evaluation scheduled to ensure the NES-PF is able to meet its objectives. An initial review will take place after 1 year (mid 2019), followed by reviews at the three and five year mark and every five years thereafter.
- The one year review will look at feedback received since commencement and we will be seeking information from councils and foresters about how they are implementing the NES-PF.
- Quantitative and qualitative data will be limited after one year, though we can get quantitative data on consent numbers and plan changes through MfE's National Monitoring System (NMS).

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MONITORING



- Meaningful national environmental monitoring data is difficult to collect

Developing national framework for determining effectiveness of NESPF

- In the meantime using compliance with the NES-PF as a proxy for good outcomes and seeking to gather compliance information from councils.
- Identifying compliant operations to use as a baseline for future monitoring
- Looking at existing monitoring information to see what monitoring tools can be applied to forestry operations over a full plantation lifecycle



Te Uru Rākau

Forestry New Zealand

QUESTIONS & DISCUSSION

Contact: Elizabeth.heeg@mpi.govt.nz

More info @ <https://www.teururakau.govt.nz/growing-and-harvesting/forestry/national-environmental-standards-for-plantation-forestry>



DATA BEHIND THE FSI

The FSI is primarily based on the following three categories of information

1

Non-migratory species habitat range data provided by the DOC

2

Habitat range of freshwater species from NIWA's NZ Freshwater Fish Database

3

Modeled fish habitat ranges to fill in the gaps, also provided by NIWA



Provides consistency while accounting for local variation - in particular it

Provides a single consistent method for managing fish and habitat disturbance



Is underpinned by localised biological and ecological data that accurately determines risk on a case-by-case basis



The FSI provides information for the North and South Island only – not for New Zealand's offshore islands





DATA BEHIND THE WTRC

The data relied on by the WTRC to ascertain risk levels is taken from



Wilding conifer spread has been researched for decades by Scion (NZ Forest Research Institute Ltd; a Crown Research Institute; Ledgard; University of Canterbury School of Forestry et al., 1999)



The WTRC will be reviewed during the NES-PF monitoring and evaluation process that occurs at the end the first, third and fifth year of NES-PF's operation



WTRC is an evolving tool



The 'Wilding Tree Risk Guidelines' that support the WTRC were published in June 2015. The NES-PF incorporates these guidelines and WTRC by reference so that they both have legal effect



The WTRC has two calculators: one for **new plantings** (DSS1); and one for assessing a sites wilding conifer invasion risk (DSS2). The above guidelines relate to **DSS1 only**