



# THE NES-PF'S RISK ASSESSMENT TOOLS

**DISCLAIMER:** Please note that all information in this presentation:

- 1: is provided for guidance and educational purposes only
- 2: should not be relied on as substitute for the laws of New Zealand and/or legal advice; and
- 3: is written in relation to the NES-PF context only.

# NES-PF RISK ASSESSMENT TOOLS

## NES-PF BACKGROUND

The Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 (NES-PF) are a set of national regulations to manage the environmental effects of plantation forestry:

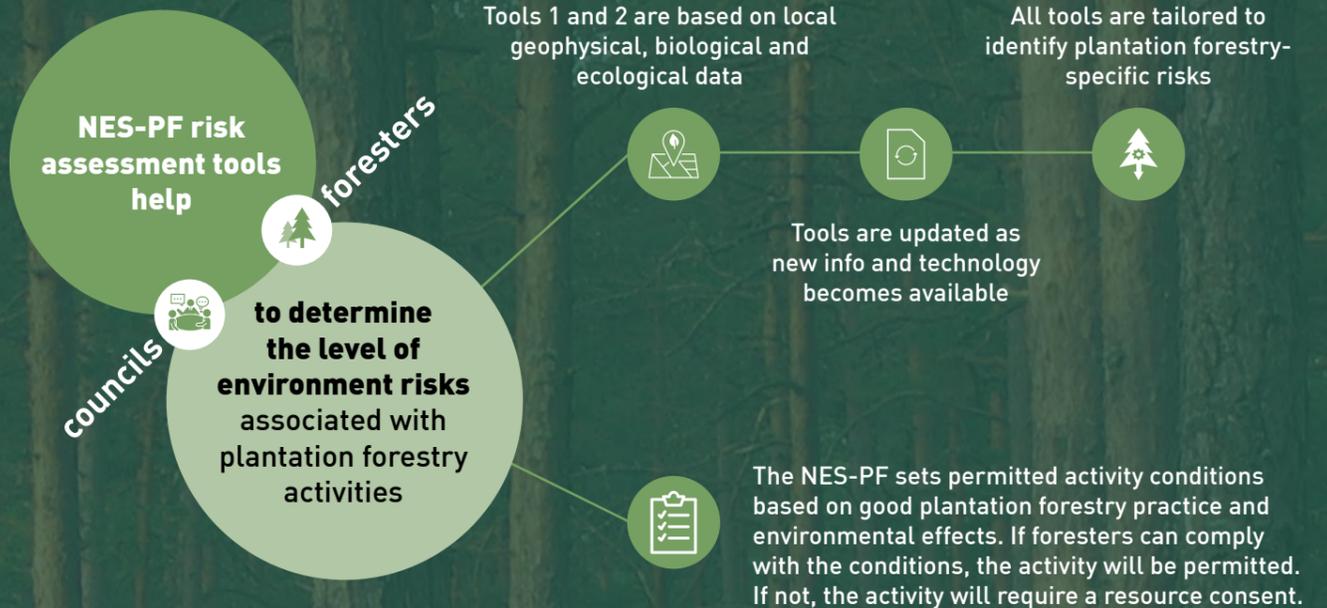


Its purpose is to

**Maintain or improve environmental outcomes** of plantation forestry activities

**Increase the efficiency and certainty** in the management of plantation forestry activities.

## NES-PF AND THE RISK ASSESSMENT TOOLS



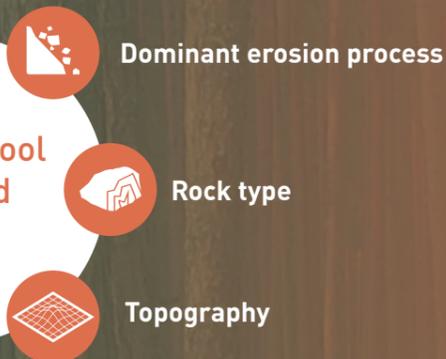
### 1. EROSION SUSCEPTIBILITY CLASSIFICATION (ESC) [click for more info](#)

**The ESC is a spatial database tool MPI developed to identify**

levels of erosion risk by classifying land into one of four colour coded erosion susceptibility categories below:



**The ESC tool is based on the**



**The ESC classification determines restrictions**

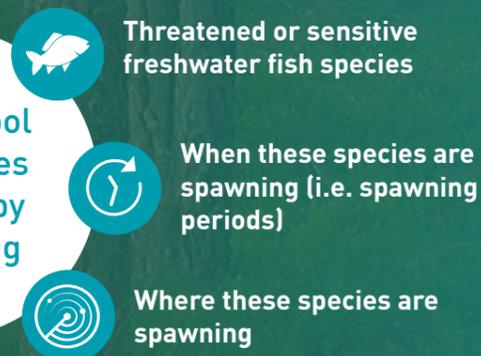
NES-PF typically imposes less controls on activities conducted on lower risk green and yellow land, and more controls over activities conducted on higher risk orange and red land.

### 2. FISH SPAWNING INDICATOR (FSI) [click for more info](#)

**The FSI is a spatial database tool MPI developed to identify**

level of risk that plantation forestry activities present to sensitive or threatened freshwater fish species found in our rivers, lakes and wetlands.

**The FSI tool determines this risk by identifying**



**The FSI info determines appropriate restrictions**

Plantation forestry activities that disturb spawning habitats during spawning periods will require resource consent. FSI info informs conditions imposed on these activities.

### 3. WILDING TREE RISK CALCULATOR (WTRC) [click for more info](#)

**The WTRC is a desktop assessment tool developed to identify**

the level of wilding conifer spread risk associated with afforestation and replanting in any location.

The WTRC uses these 6 indicators to determine the level of wilding conifer risk at a given site

- 1 Spread vigour of tree species
- 2 Species palatability to livestock
- 3 Topographical placement of site
- 4 Site's land-use characteristics
- 5 Surrounding vegetation
- 6 Wind conditions

**The WTRC indicators determine restrictions**

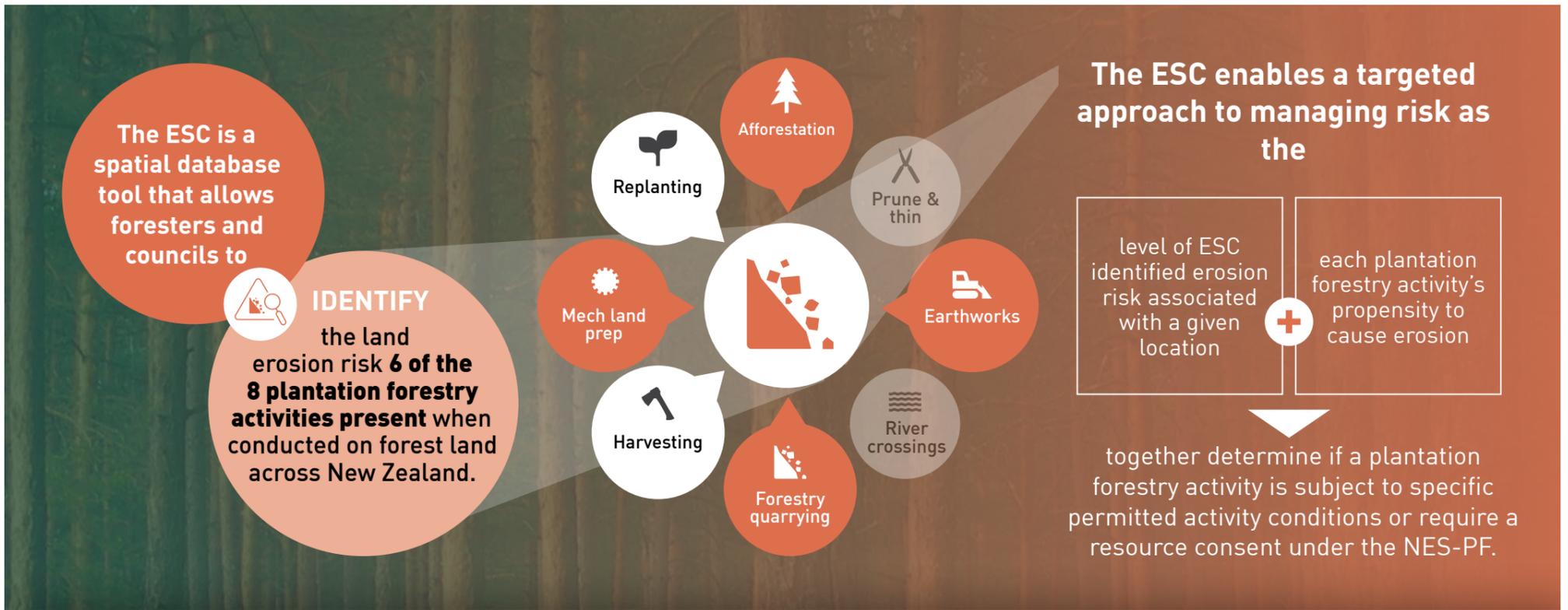
to be imposed on afforestation and replanting. Points are assigned to each indicator. If the total score is over the required threshold a resource consent is required for afforestation



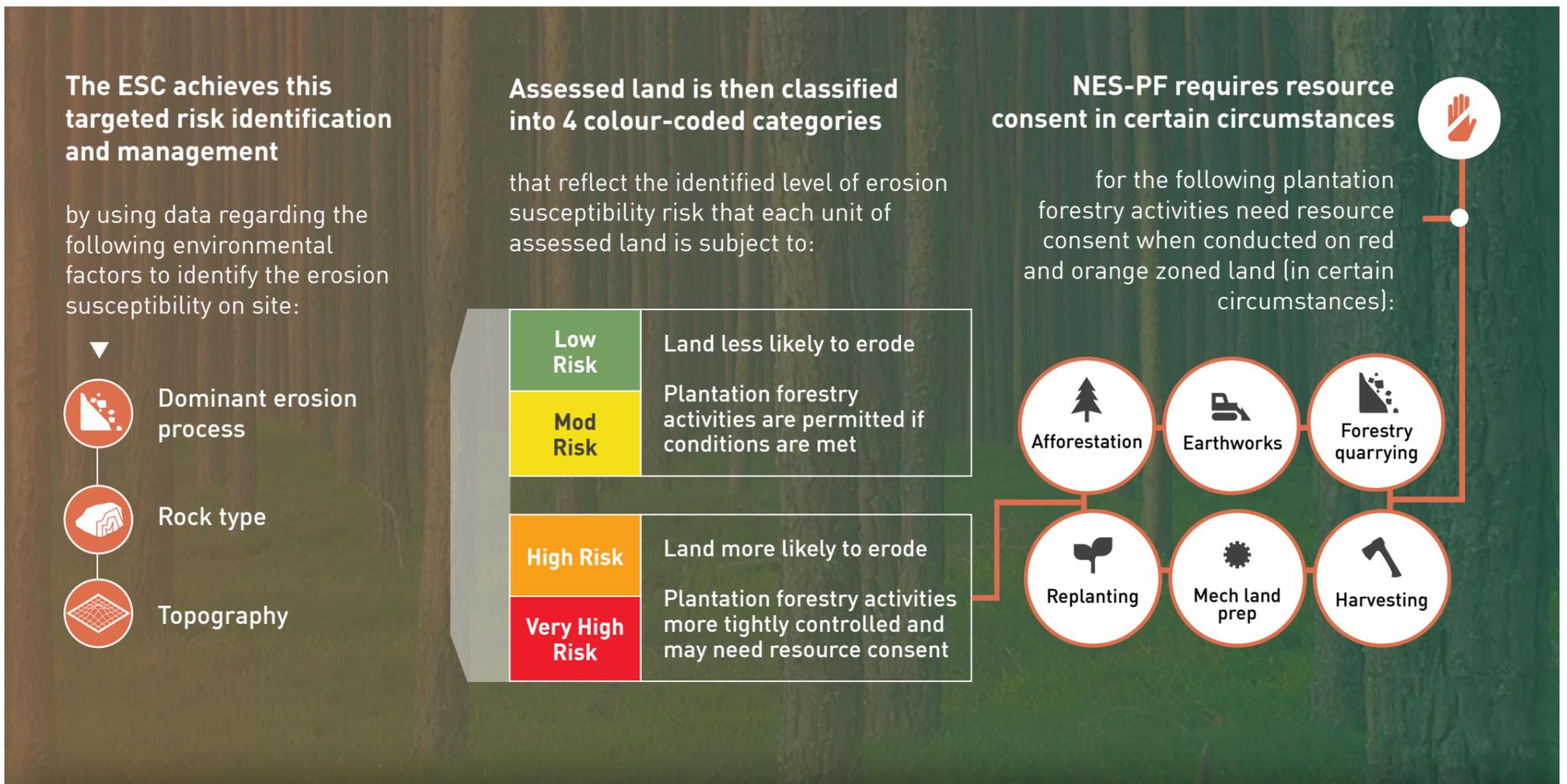
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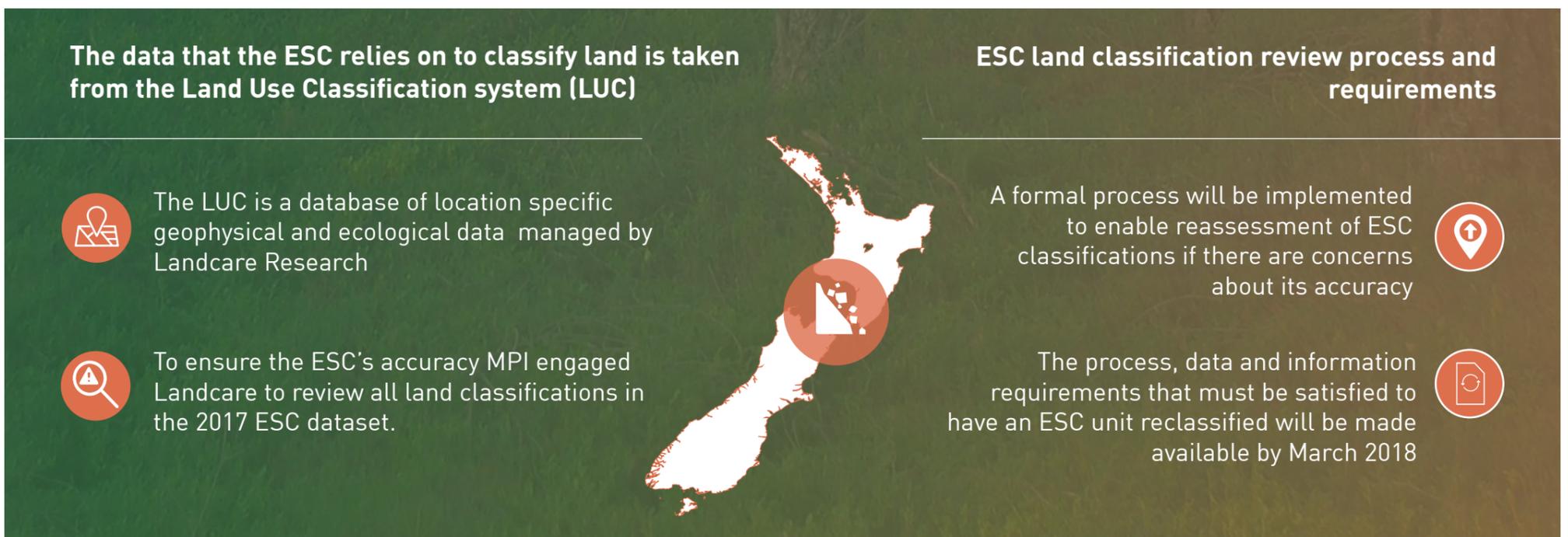
## WHAT DOES THE ESC DO?



## HOW DOES THE ESC WORK?



## DATA BEHIND THE ESC

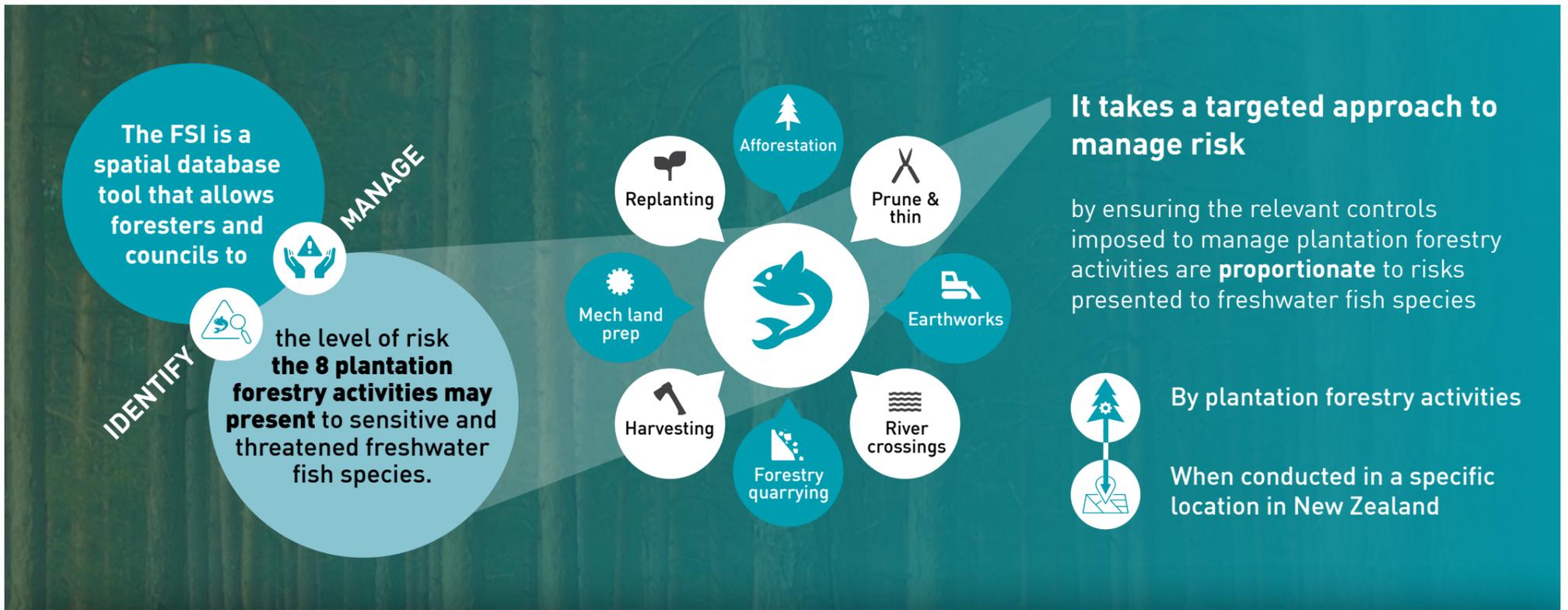




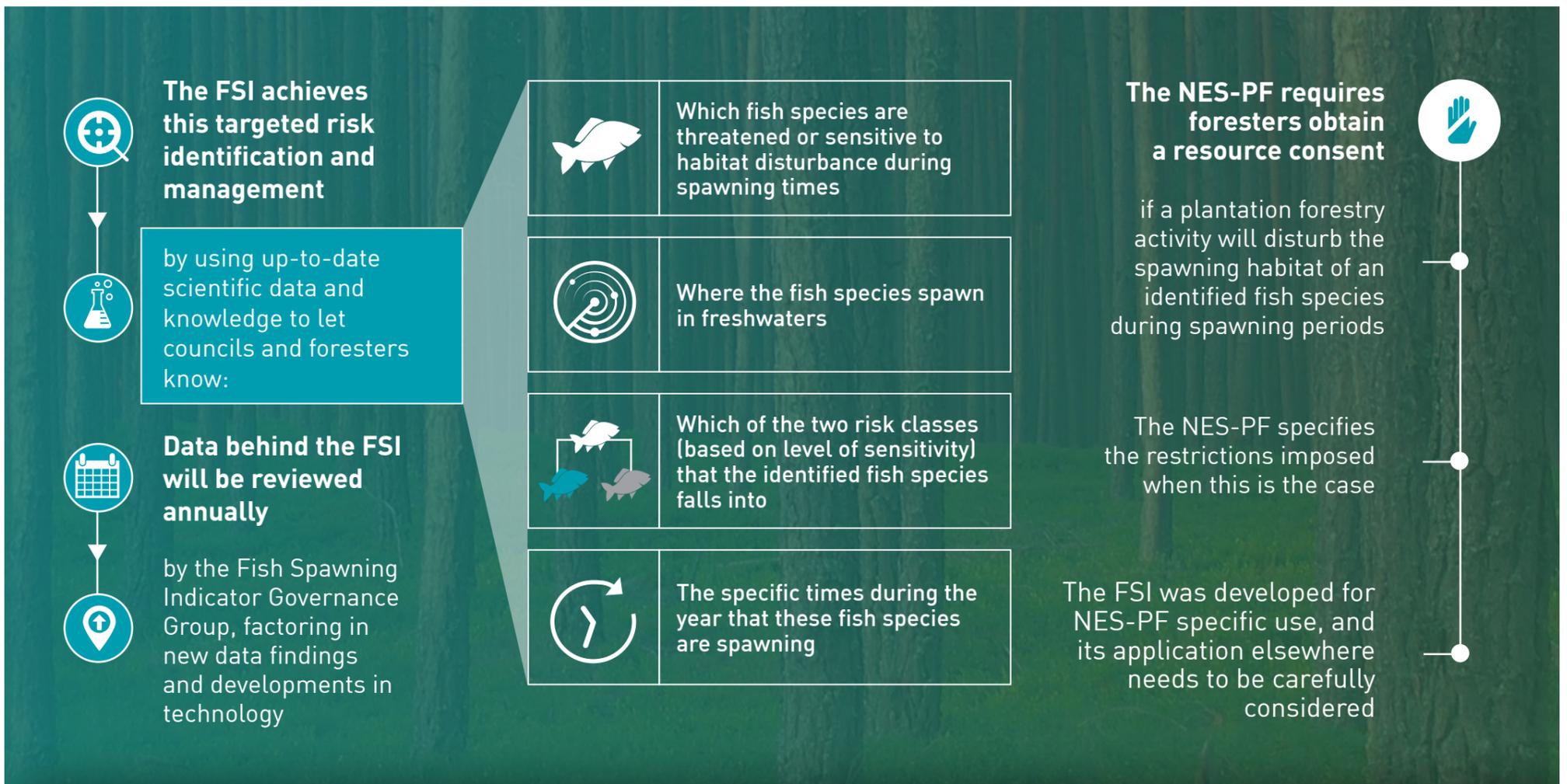
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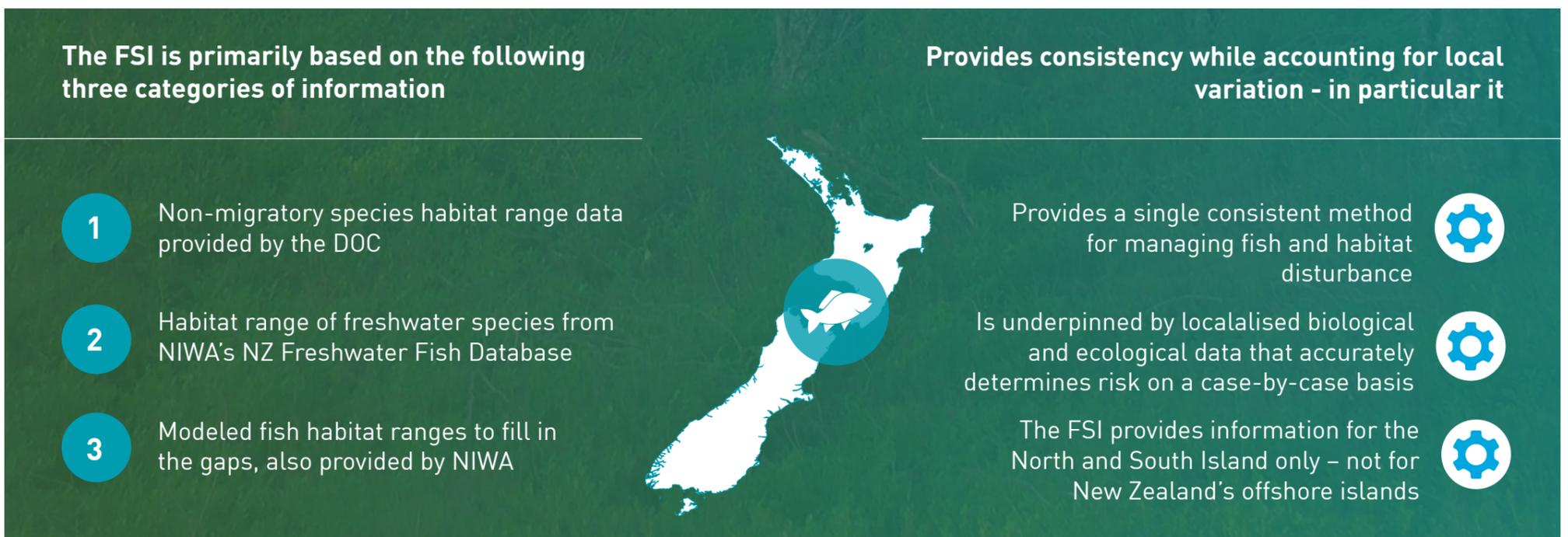
## WHAT DOES THE FSI DO?



## HOW DOES THE FSI WORK?



## DATA BEHIND THE FSI





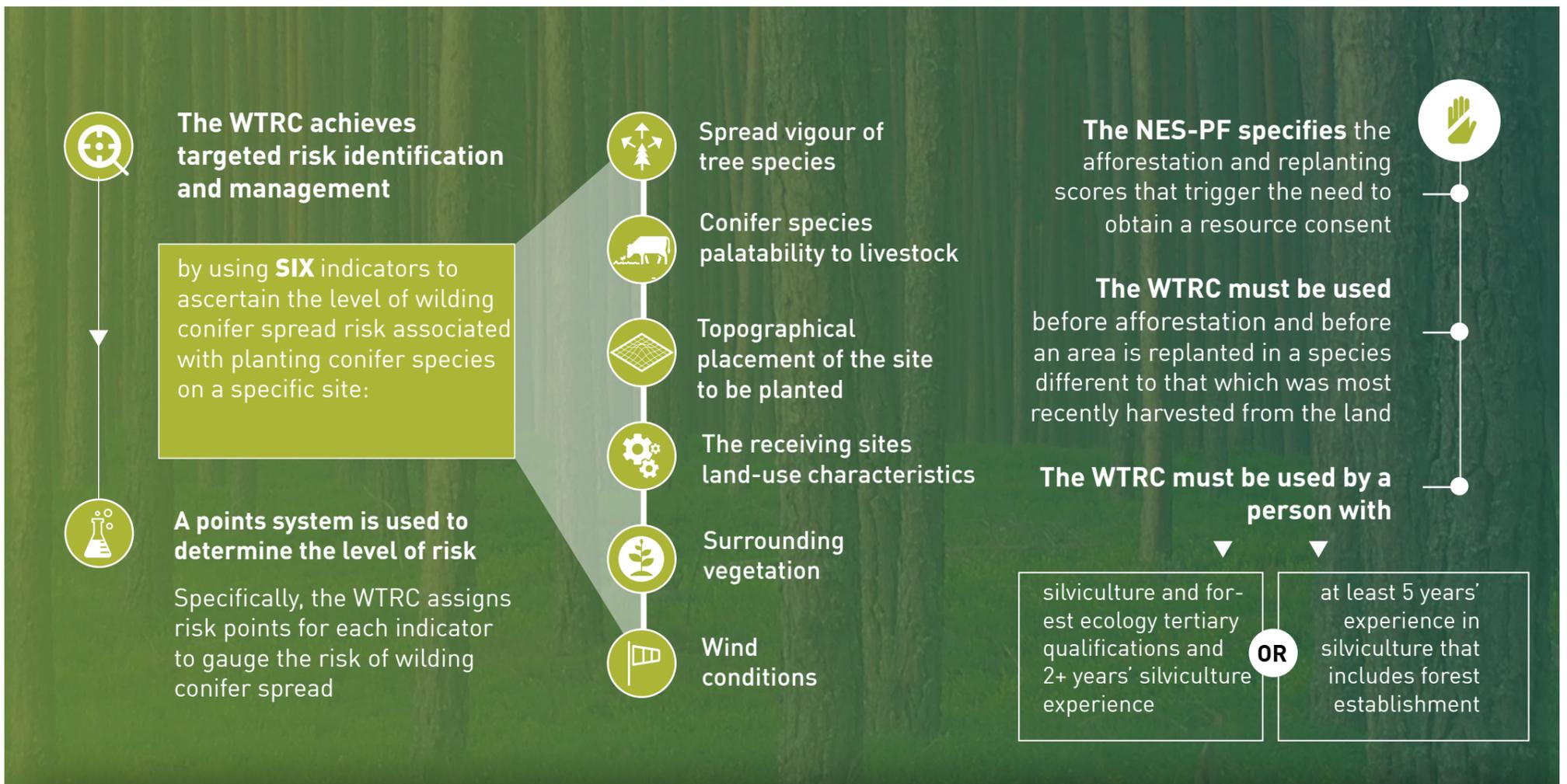
# WILDING TREE RISK CALCULATOR (WTRC)



## WHAT DOES THE WTRC DO?



## HOW DOES THE WTRC WORK?



## 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**