



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:

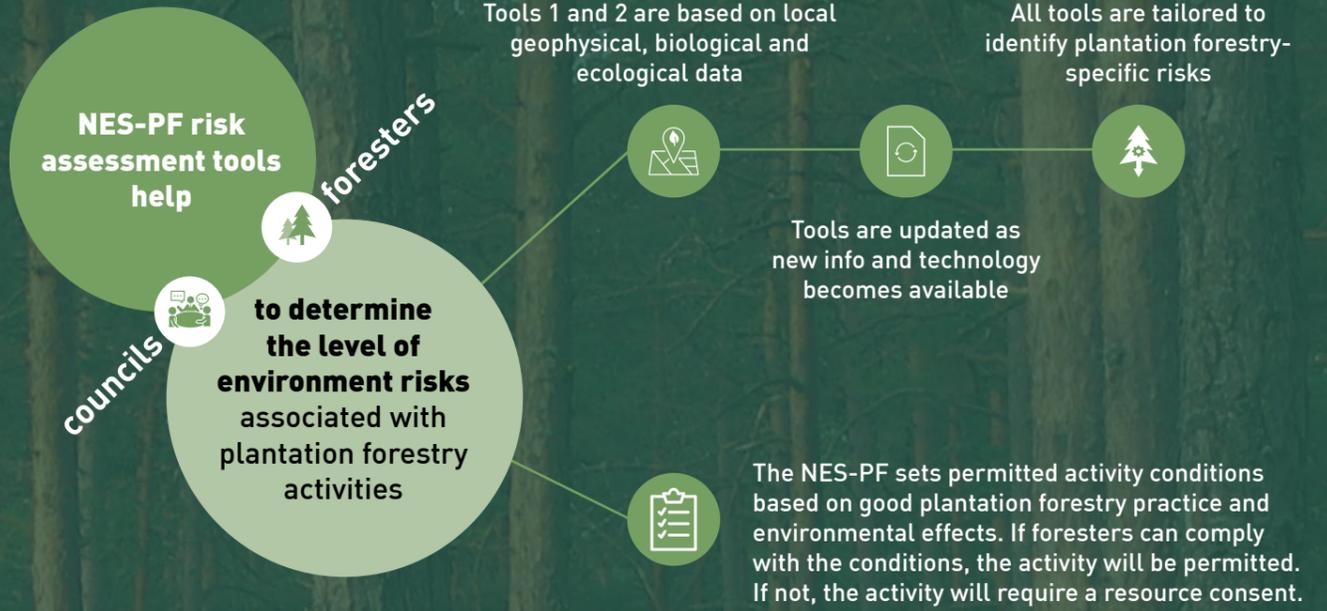


Its purpose is to

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



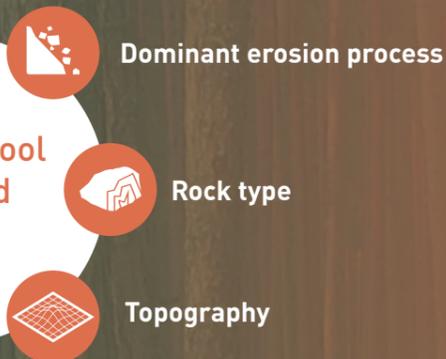
1. EROSION SUSCEPTIBILITY CLASSIFICATION (ESC) [click for more info](#)

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

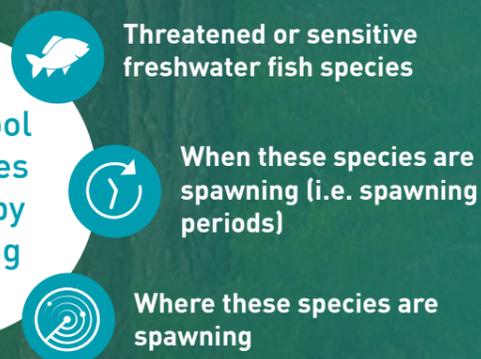
NES-PF typically imposes less controls on activities conducted on lower risk green and yellow land, and more controls over activities conducted on higher risk orange and red land.

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

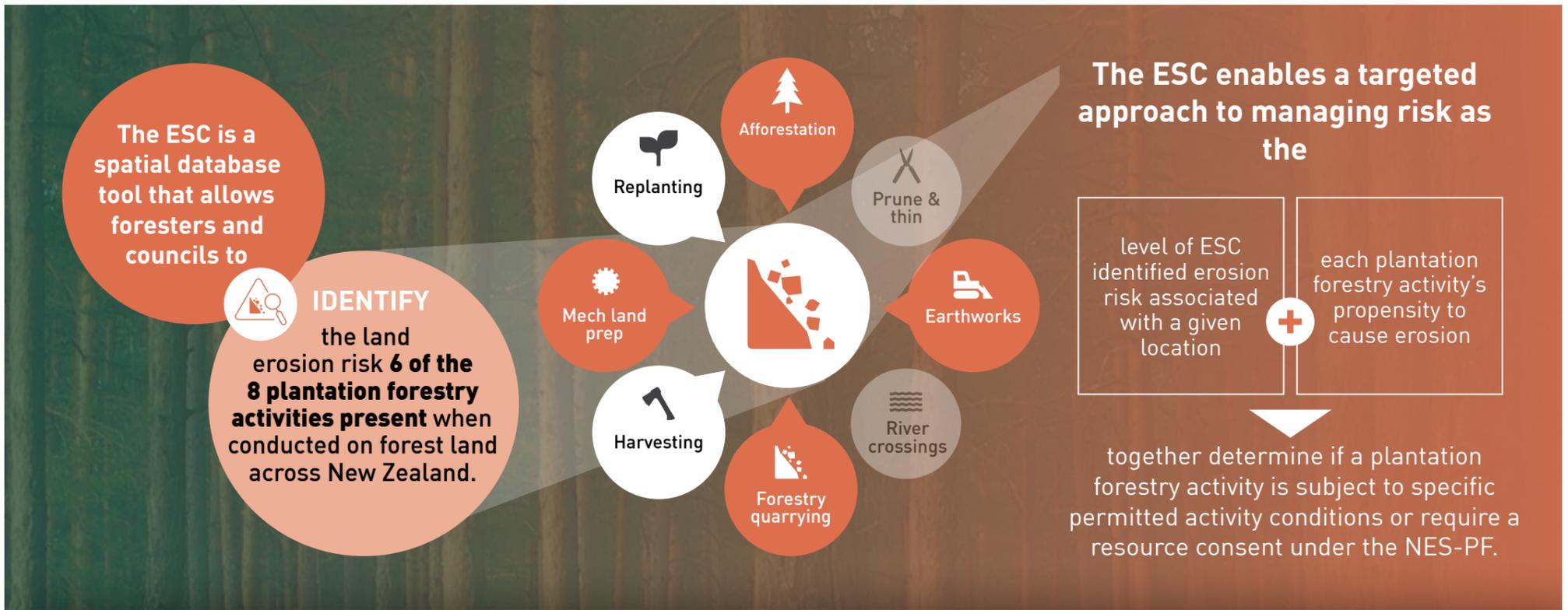
to be imposed on afforestation and replanting. Points are assigned to each indicator. If the total score is over the required threshold a resource consent is required for afforestation



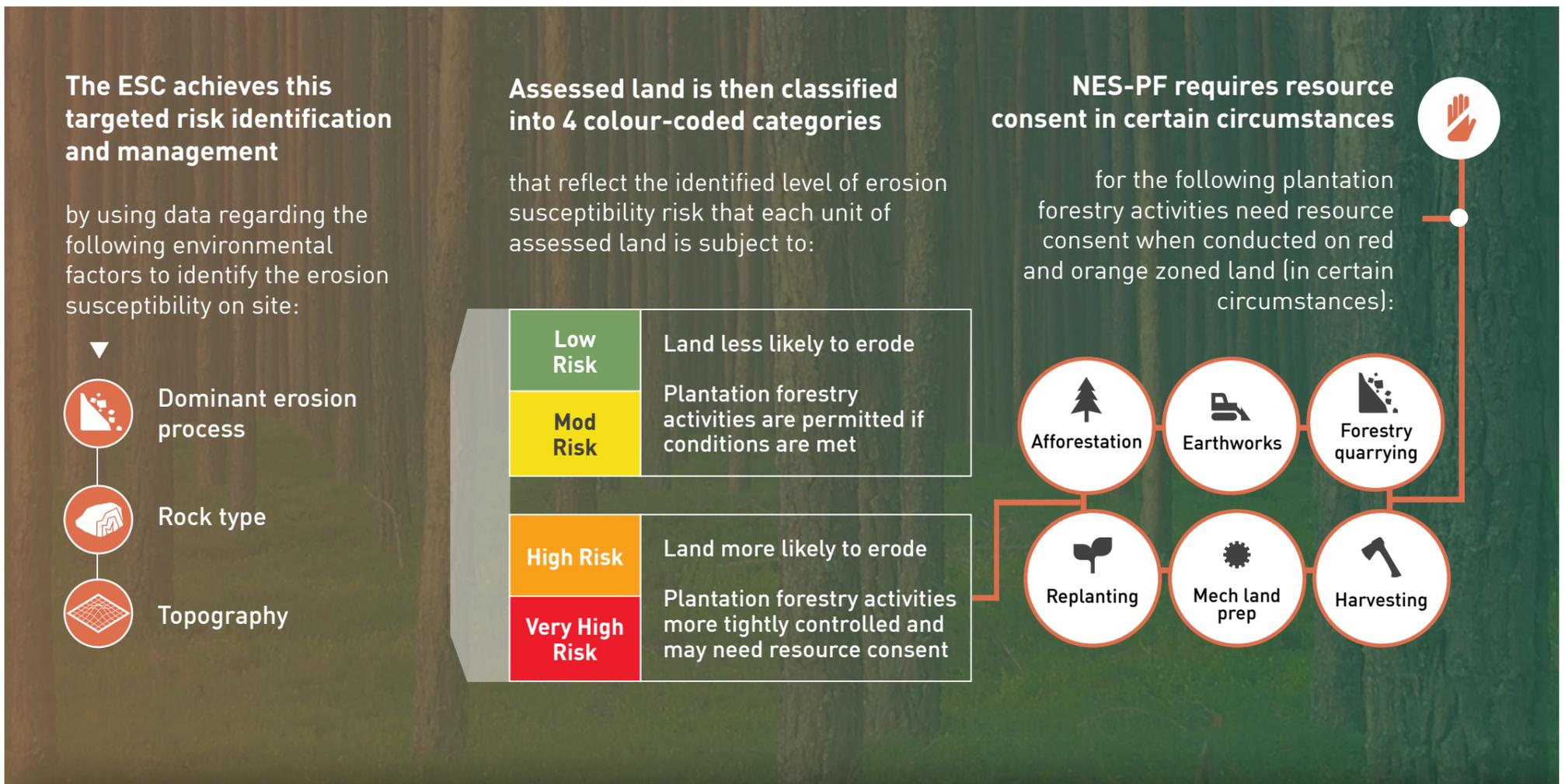
EROSION SUSCEPTIBILITY CLASSIFICATION (ESC)



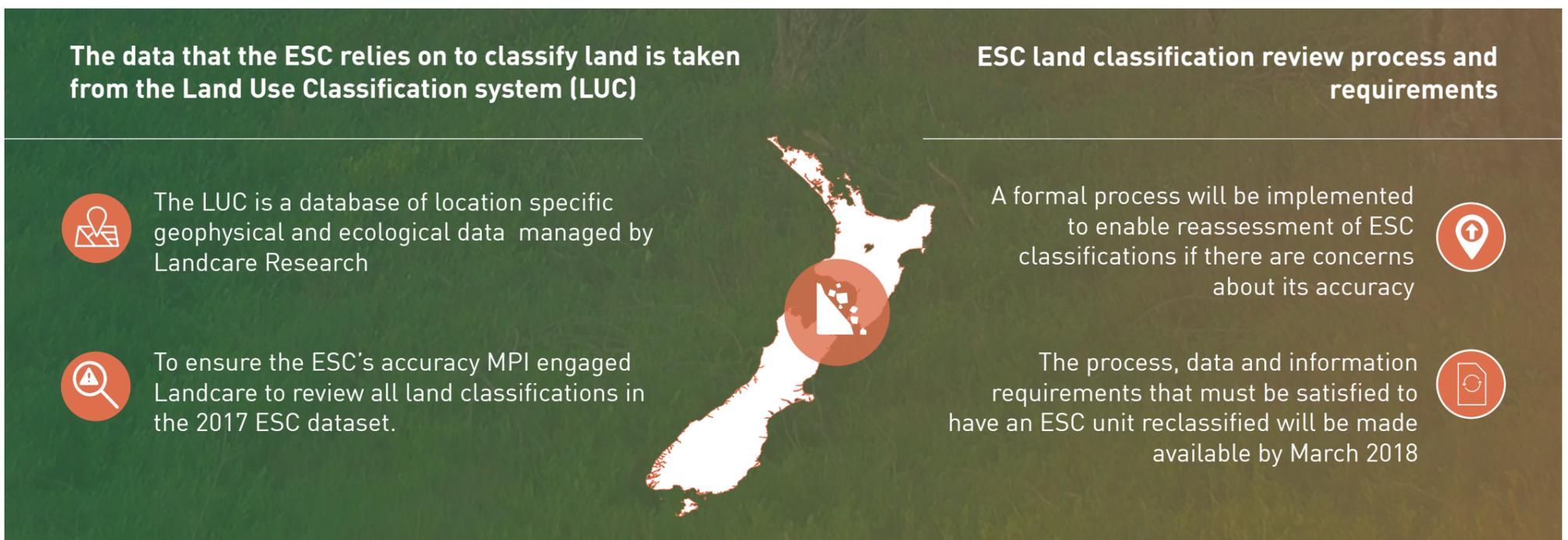
WHAT DOES THE ESC DO?



HOW DOES THE ESC WORK?



DATA BEHIND THE ESC

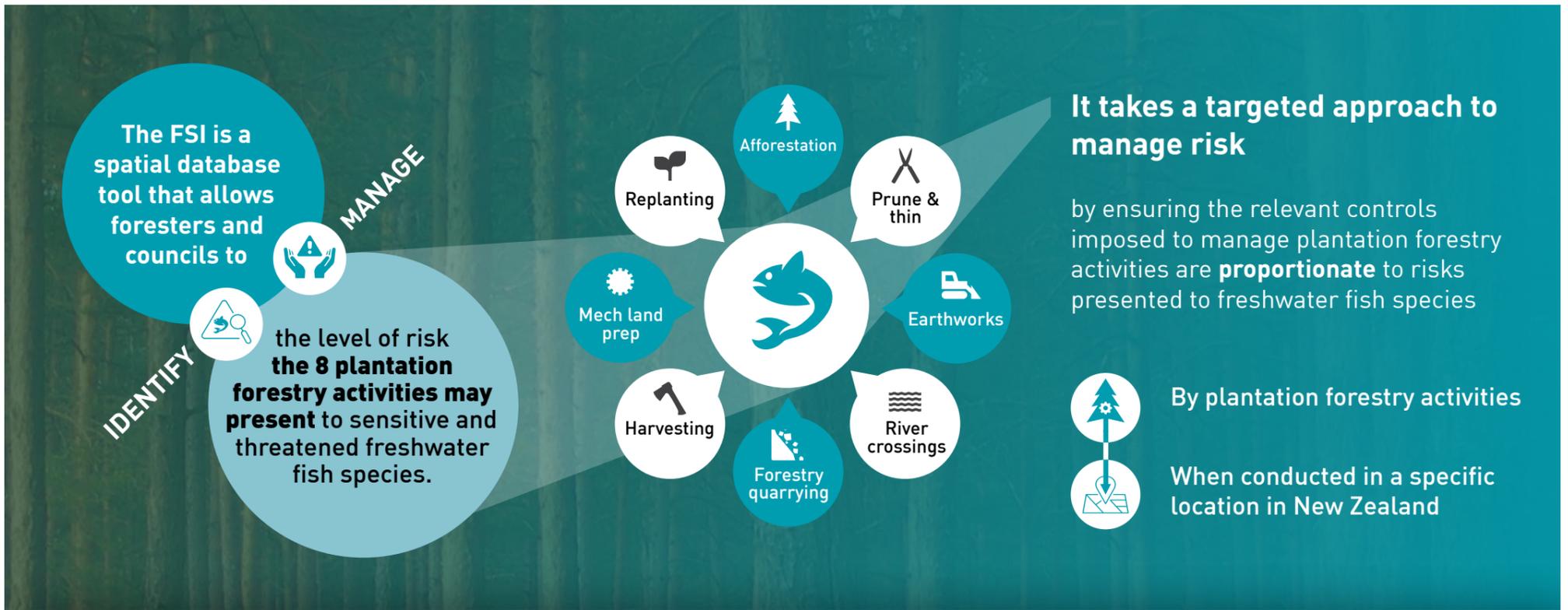




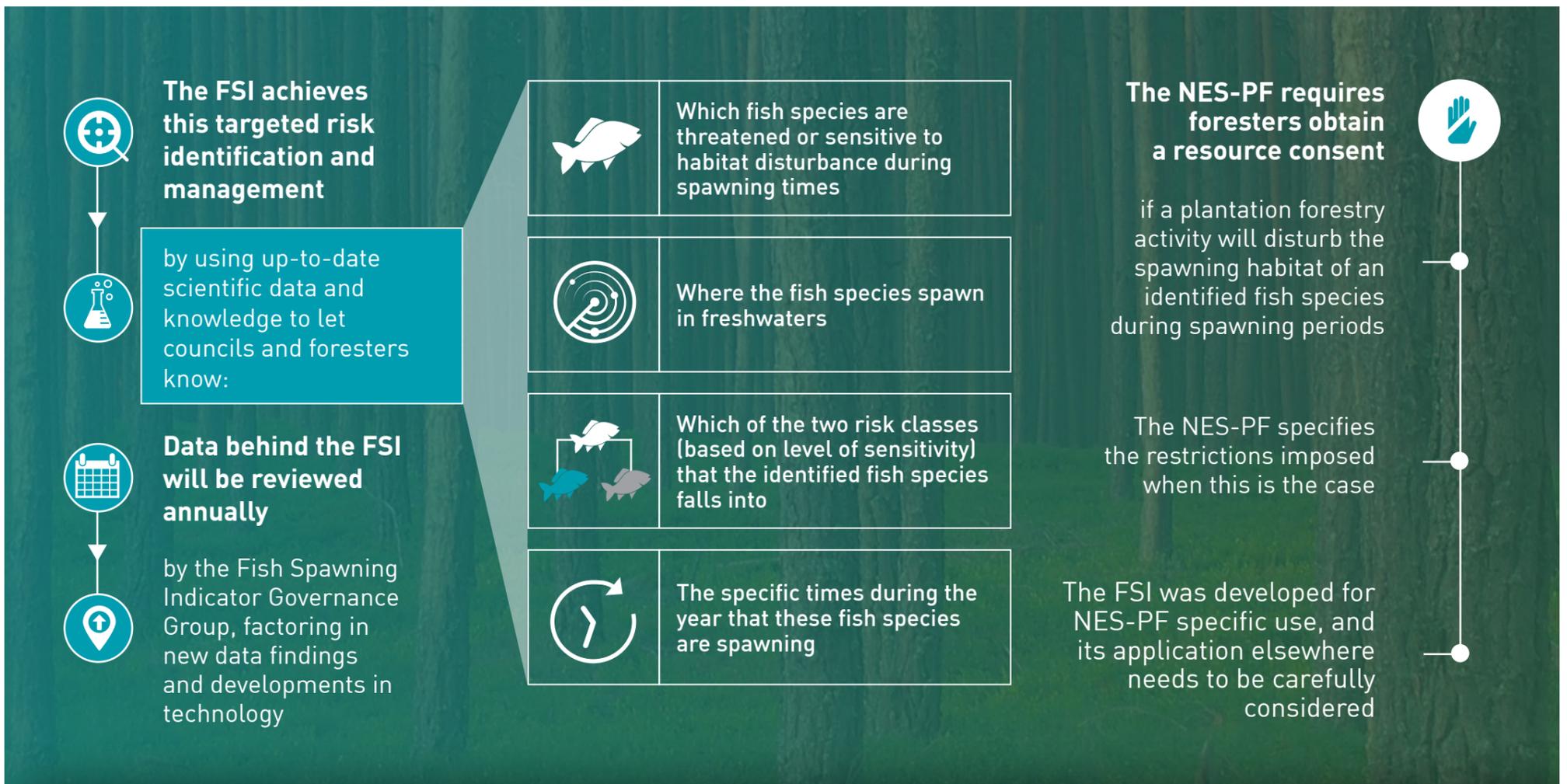
FISH SPAWNING INDICATOR (FSI)



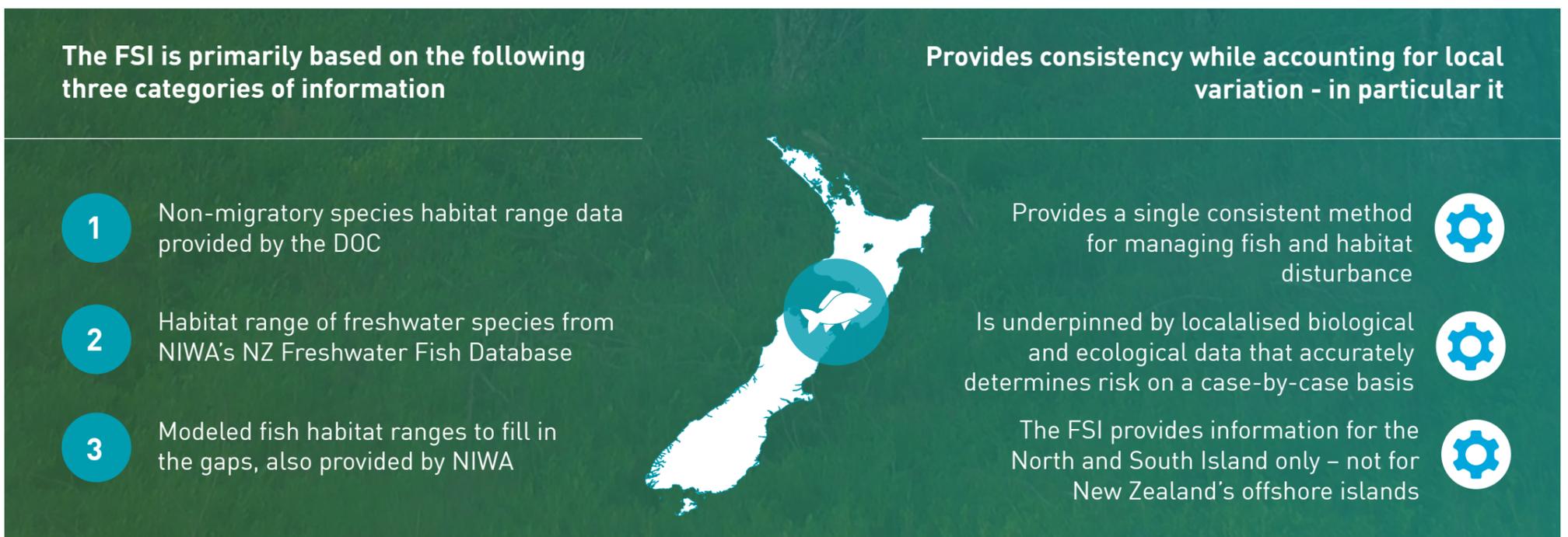
WHAT DOES THE FSI DO?



HOW DOES THE FSI WORK?



DATA BEHIND THE FSI





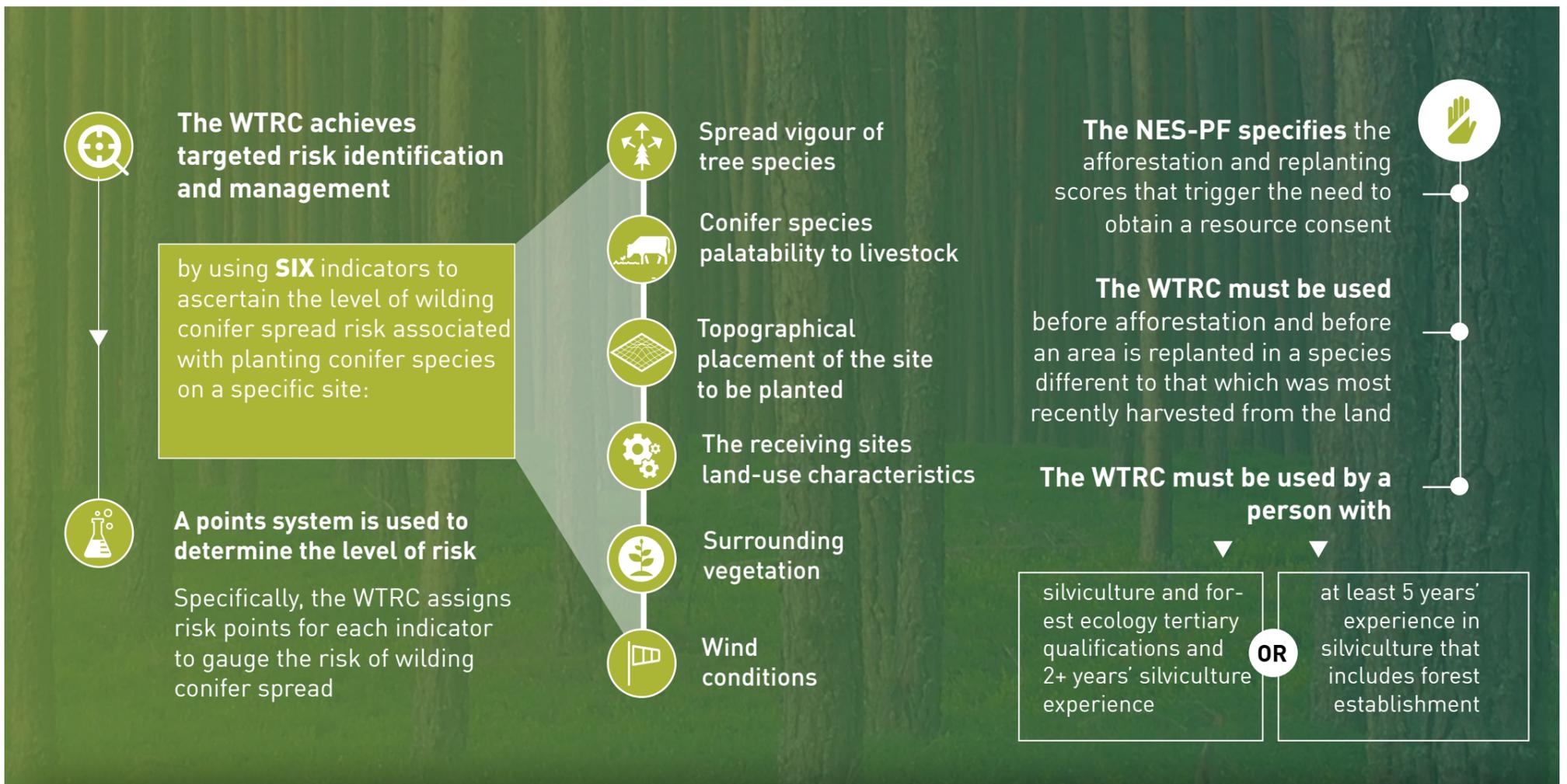
WILDING TREE RISK CALCULATOR (WTRC)



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**