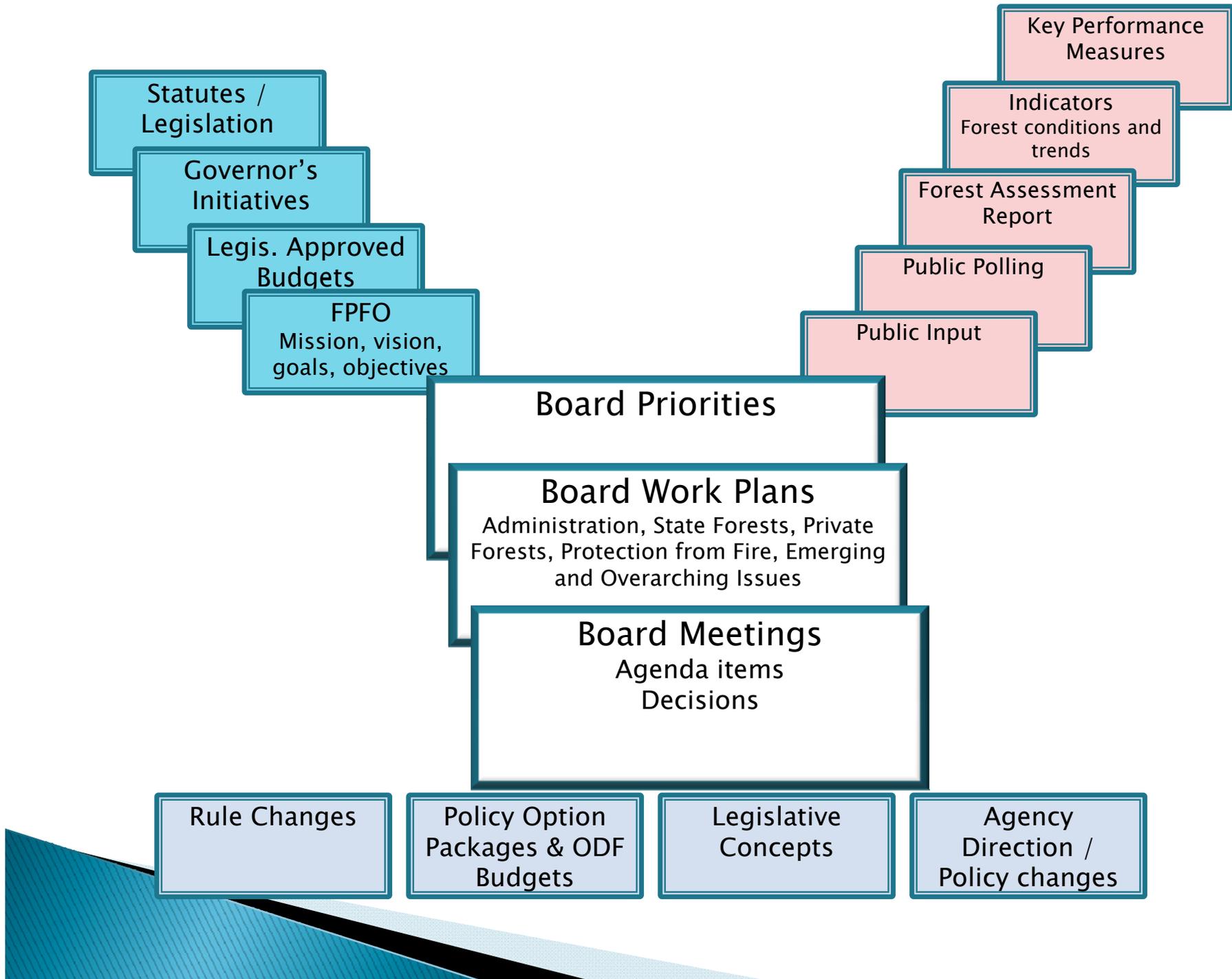


Resources Planning's Forest Assessment Project

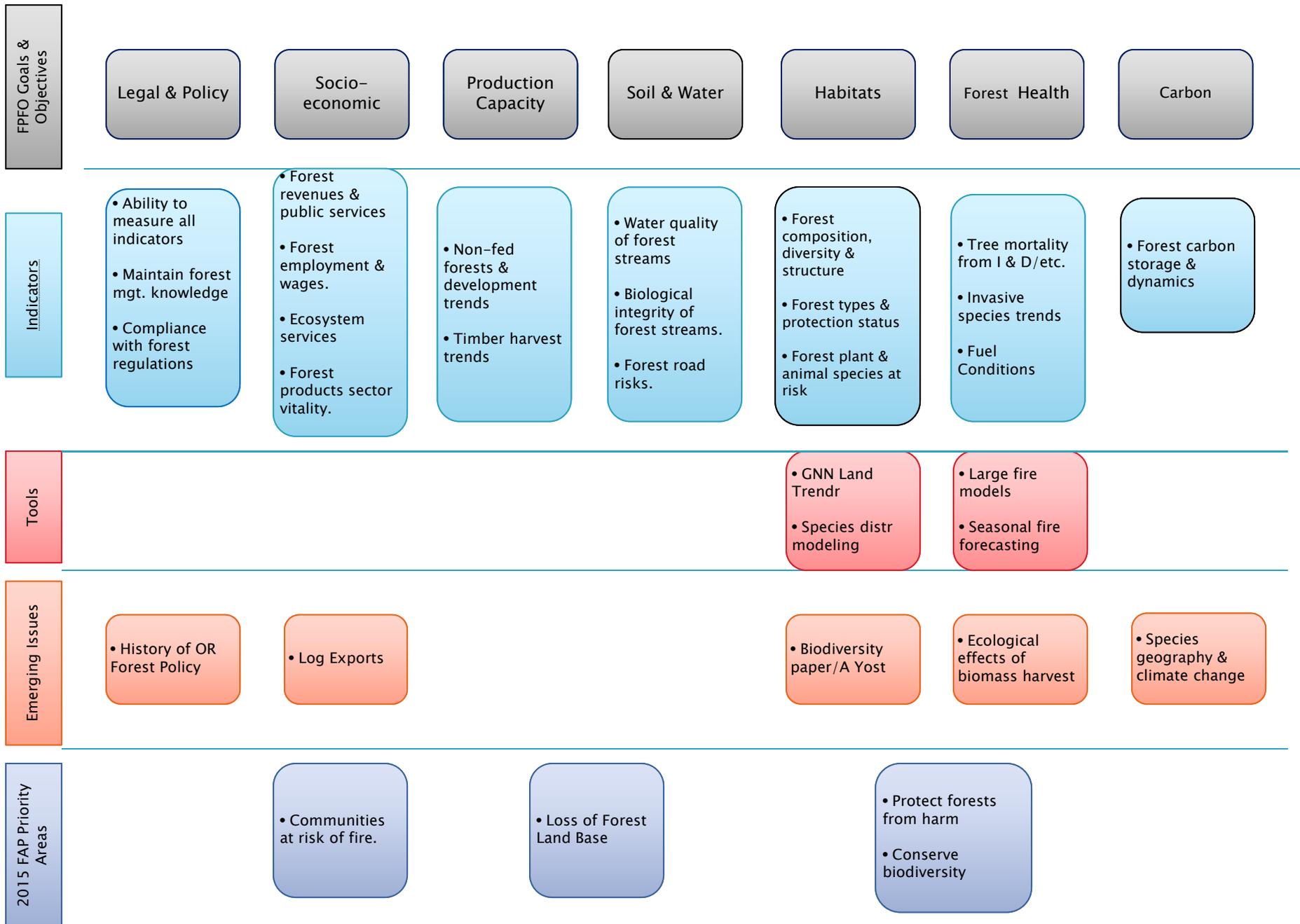
Kevin Birch
Andrew Yost



Background

- ▶ Past Forest Assessments
- ▶ Explore issues in advance of policy change and/or new FFOs
- ▶ One tool to use w/ new Emerging & Cross Cutting Issues Work Plan
- ▶ Populate in October – Board priority issues
- ▶ Plan to publish each biennium – Board reference tool

Forest Assessment Project



Climate Change and Species Geography

An Emerging Issue

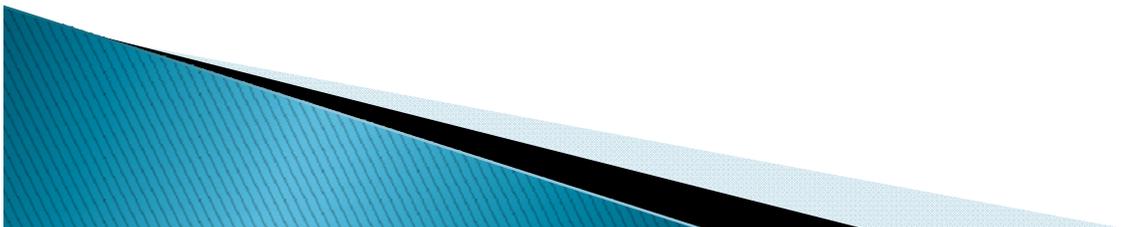
for the

Board of Forestry

Recent contributions that Forest Resources Planning have made to climate change policy in Oregon include:

- ▶ Oregon's Climate Change Adaptation Framework
- ▶ Global Warming Commission's *Roadmap to 2020*
- ▶ The original climate change legislation HB3543.

We also contributed to the Climate Change Research Institute's 2010 Climate Assessment Report on *The Potential Effects of Climate Change on Oregon's Vegetation*.



There is a strong dependent relationship between vegetation and climate

Forest ecosystems adapt to Changes in climate by changing The species composition

Big questions for today

Which ones...

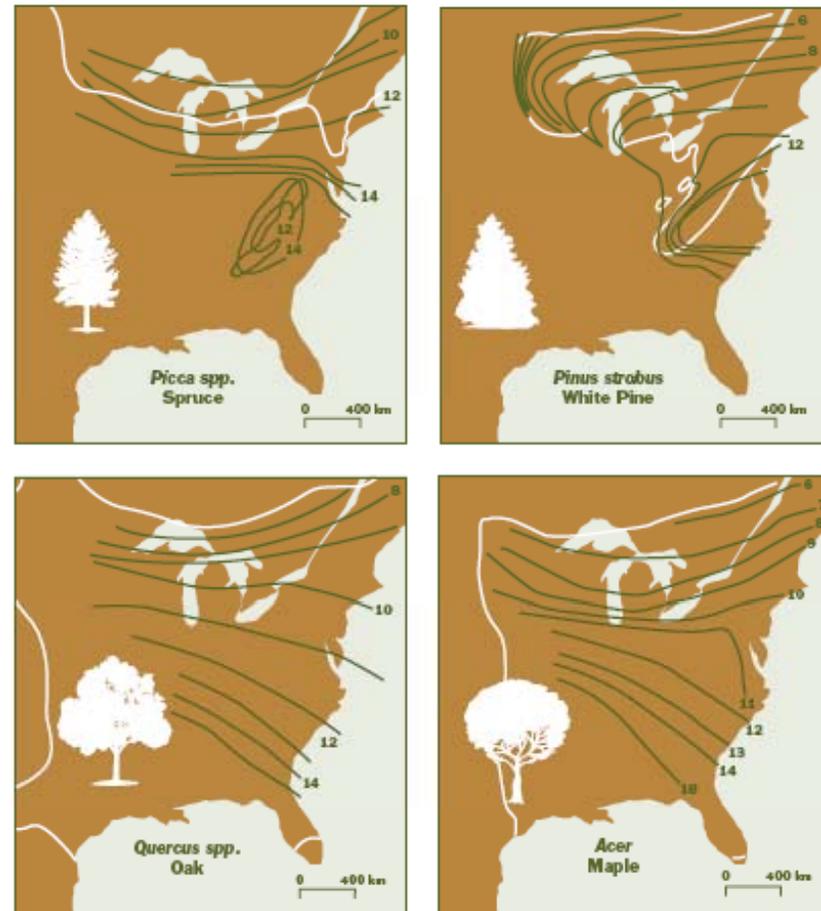
How fast...

Where...

How much...

Figure 1

Changes in the Ranges of Four Tree Species Since the Last Ice Age



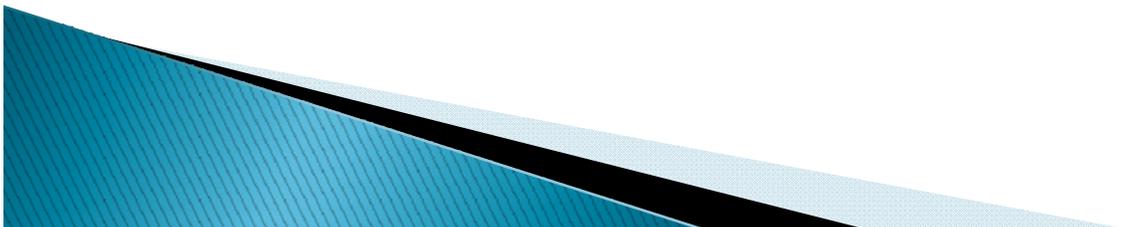
The lines in the maps above mark the boundaries of the species ranges in units of millennia (e.g., 12 indicates the range boundary of the species 12,000 years ago). The changes in the species ranges are in response to climate changes of roughly the same magnitude as that projected over the 21st Century due to climate change. The species clearly displayed marked differences with respect to their migration patterns and rates. Source: Davis, 1981.

7
nge +

Our collaboration with the Climate Change Research Institute and the USFS PNW Research Station has led to a significant contribution to advancing the science of the effects from climate change on forest ecosystems.

From this research we will can begin to answer questions such as:

- *What analytical techniques are available or need to be developed*
 - detect, quantify, and map any actual changes in the geography of any one species
 - account for why a change occurred (fire, management, insects & disease, temperature, precip)
 - Validate , refute, and refine modeled predictions
- *Are observations consistent with predictions?*
- *If they are, what policy alternatives should be developed?*



Dr. Heather Lintz will now report preliminary results from
This research.

