TFL 44
Planning Updates

Nov 5, 2026

TPAG

CÁWAK ʔQIN
FORESTRY

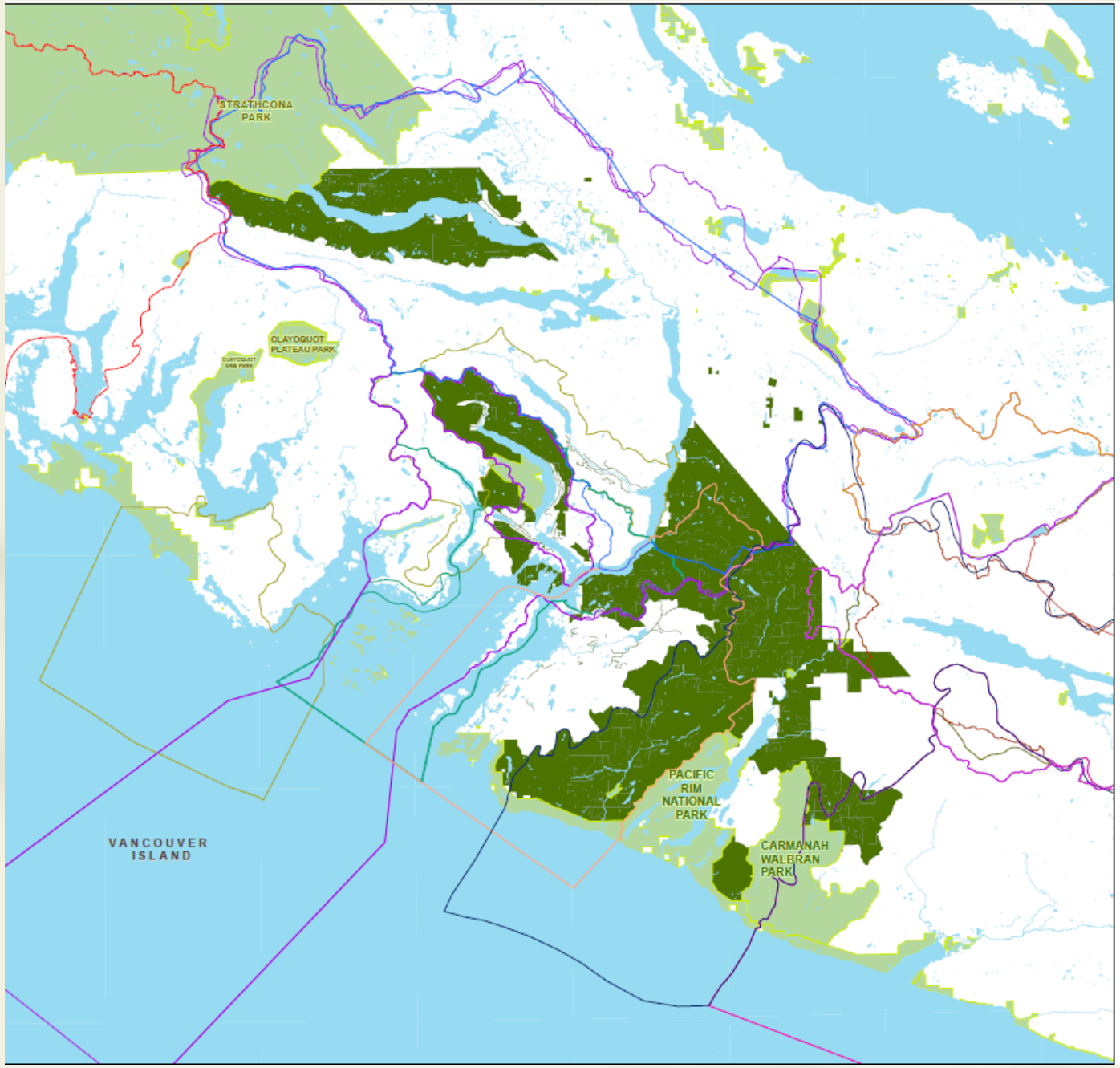
Agenda

- TFL 44 IRMP and FLP/FOP update
  - Timeline
  - Nations Involvement
  - TFL44 Planning Framework

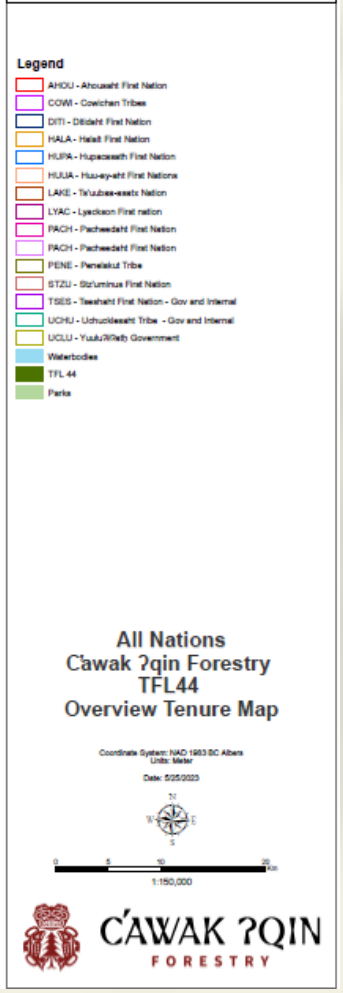
- FLP/FOP - Multiscale modelling

TFL 44 IRMP/FLP/FOP Timeline

- **44IRMP work with Nations (**2024 to Present)
  - Detailed discovery – values, interests and practices
  - Development of the draft Conservation Network
- **44FLP/FOP work with Nations and Province (**Spring 2025 to Present)
  - Alignment on values, tactics and model inputs
- **Multiscale Modelling Outcomes** (Fall 2026)
  - Base Case (Status Quo)
  - Draft Scenarios (evaluating options including Draft Conservation Network)
- **FLP/FOP Public Engagement** (Winter 2026/27)







TFL 44

120,970 ha

within the Territories of 14 First Nations

Ditidaht

Hupacasath

Huu-ay-aht

Pacheedaht

Tseshaht

Uchucklesaht

Ahousaht

Cowichan

Halalt

Lyackson

Penelakut

Stz'uminus

Ts'uubaa-asatx

Yuutu?il?ath

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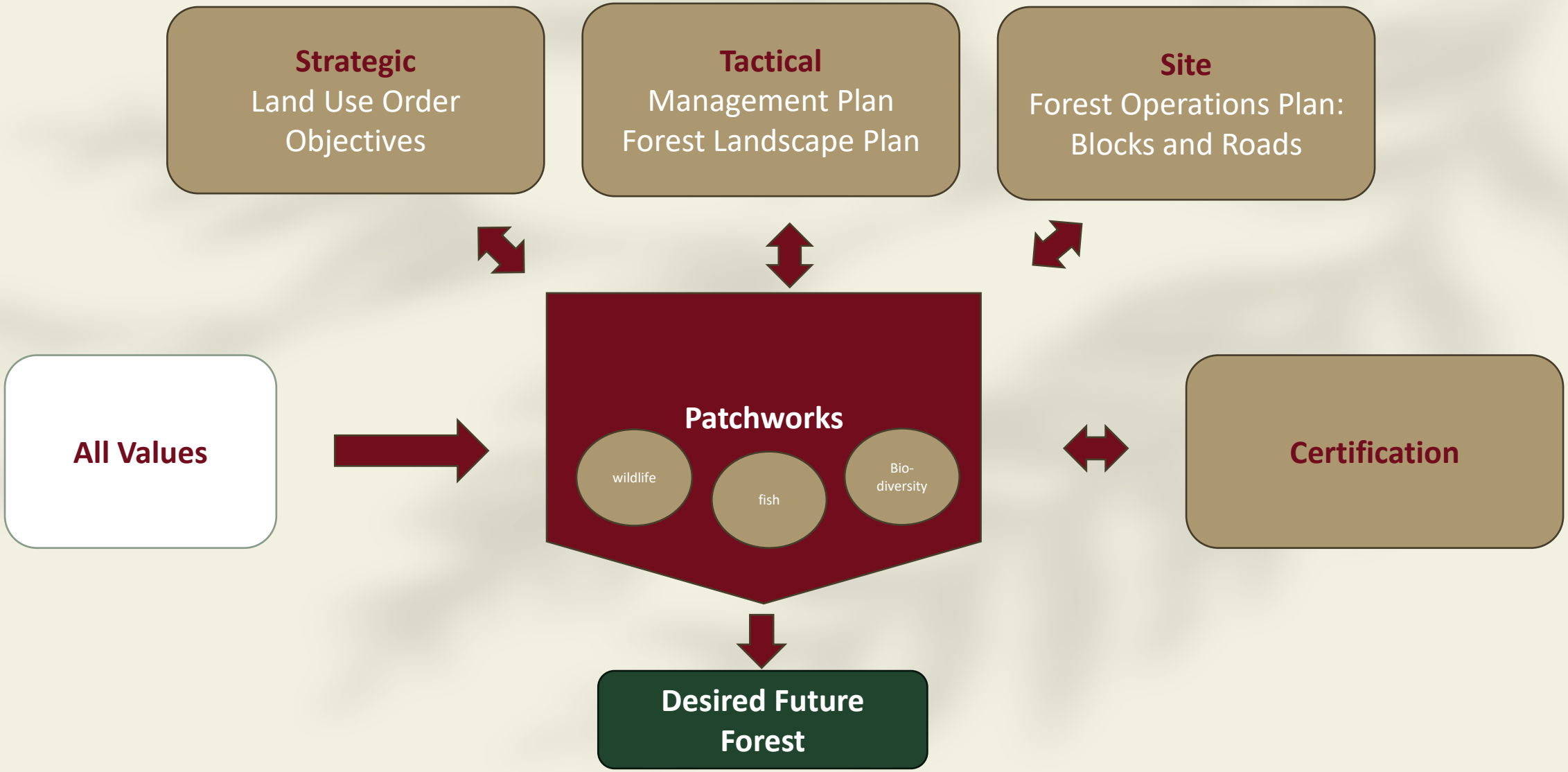
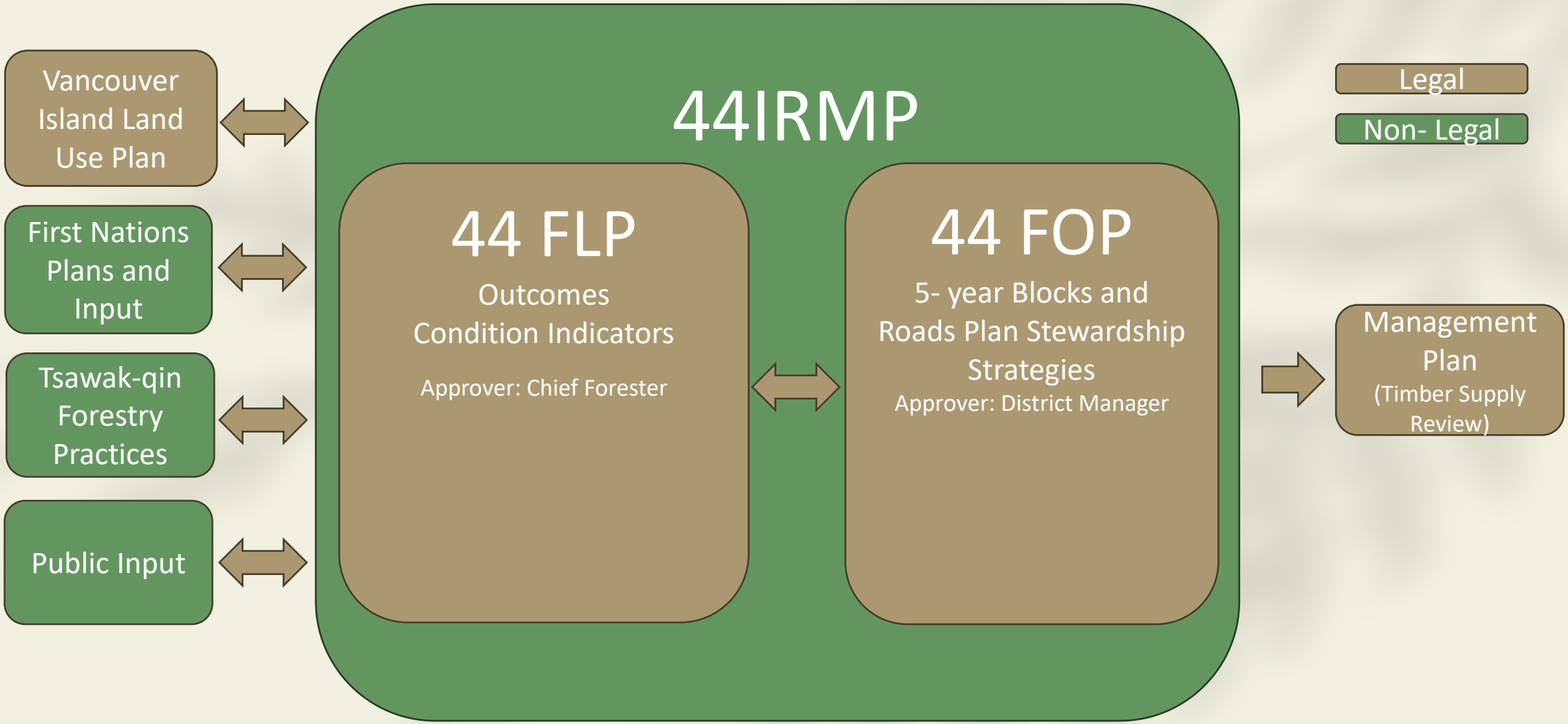
FORESTRY

Multi-Scale Planning - Patchworks



TFL 44 PLANNING FRAMEWORK



MULTI-SCALE PLANNING

44 IRMP

IDENTIFICATION OF NATIONS VALUES AND STEWARDSHIP

- Identification of Nation specific values and stewardship priorities
- Development of the Conservation Network

44 FLP

WHAT THE FUTURE FOREST LOOKS LIKE AT 10 ,100 and 300 YEARS

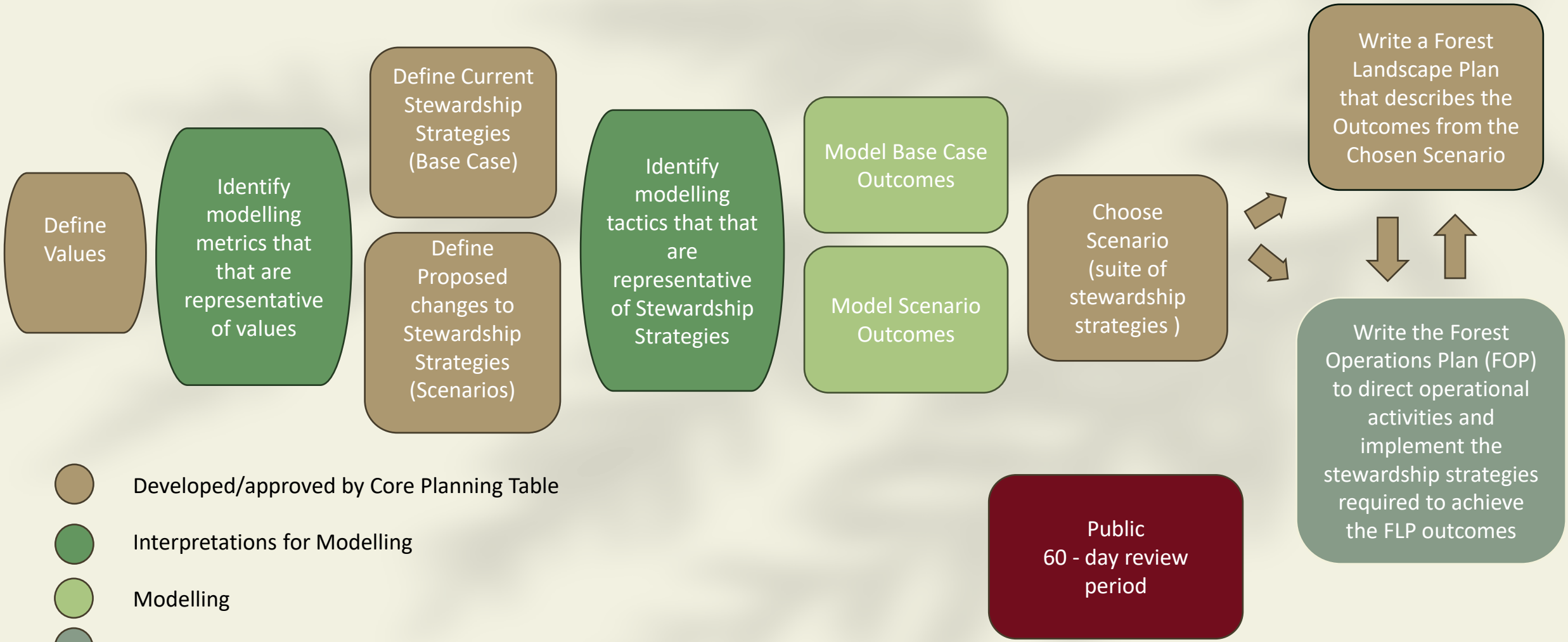
- Synthesize values and stewardship strategies
- Model scenarios
- Agree on preferred scenario and future forest outcome

44 FOP

OPERATIONAL INSTRUCTIONS TO ACHIEVE THE FUTURE FOREST OUTCOME

- Stewardship Strategies
- 5-year plan of blocks and roads to achieve the FLP outcome

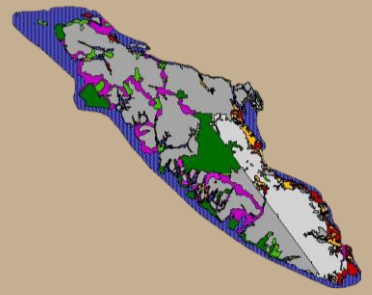
FLP/FOP PROCESS



Multi-Scale Planning

Currently, planning framework in BC tends to be hierarchical

Land Use Plan



Sets broad, long-term direction for land use across a region

How the land can be used

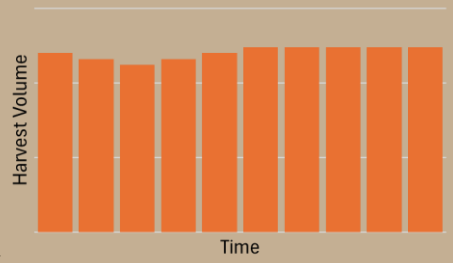
Forest Stewardship Plan



Translates Land Use Plan into forest management objectives, strategies and practices

How to meet the land use objectives

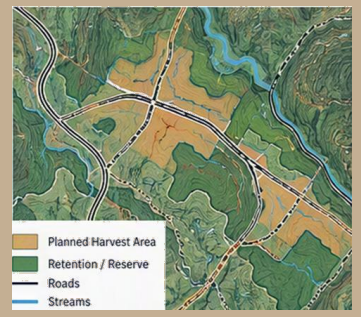
Management Plan



Sets the Allowable Annual Cut (AAC) considering land use objectives, environmental, cultural & social values

How much timber can be harvested

Operations Plan

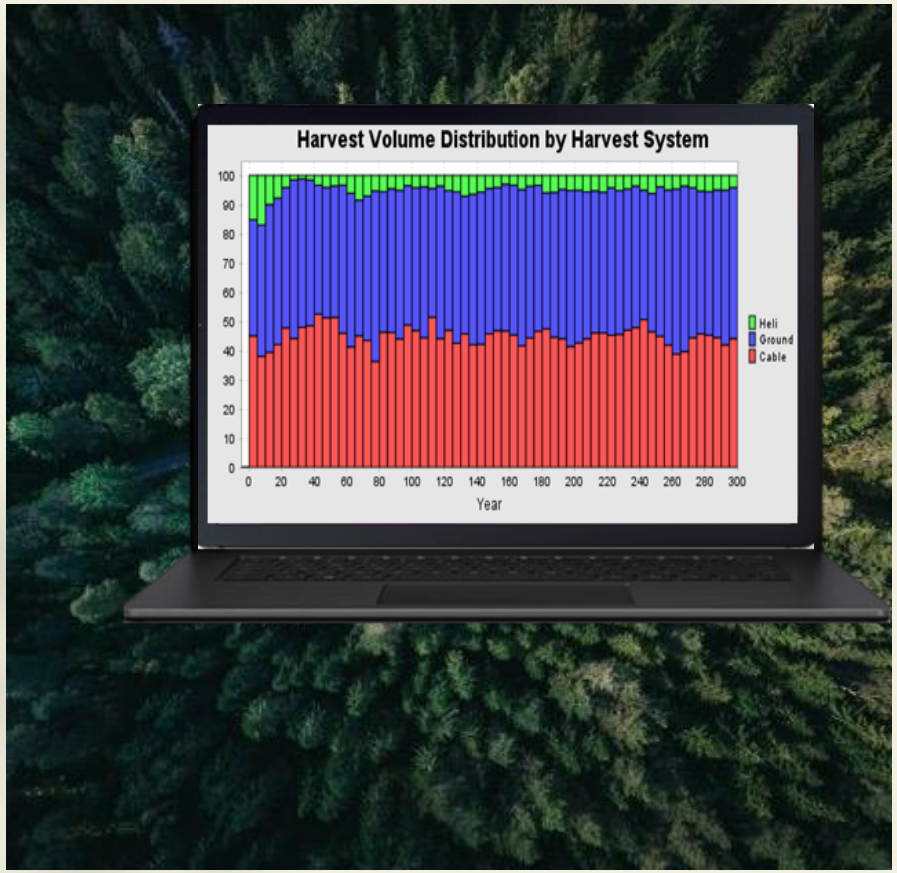


Foresters interpret the higher-level plans and develop site-specific plans to implement practices on the ground

Where, how and when we harvest

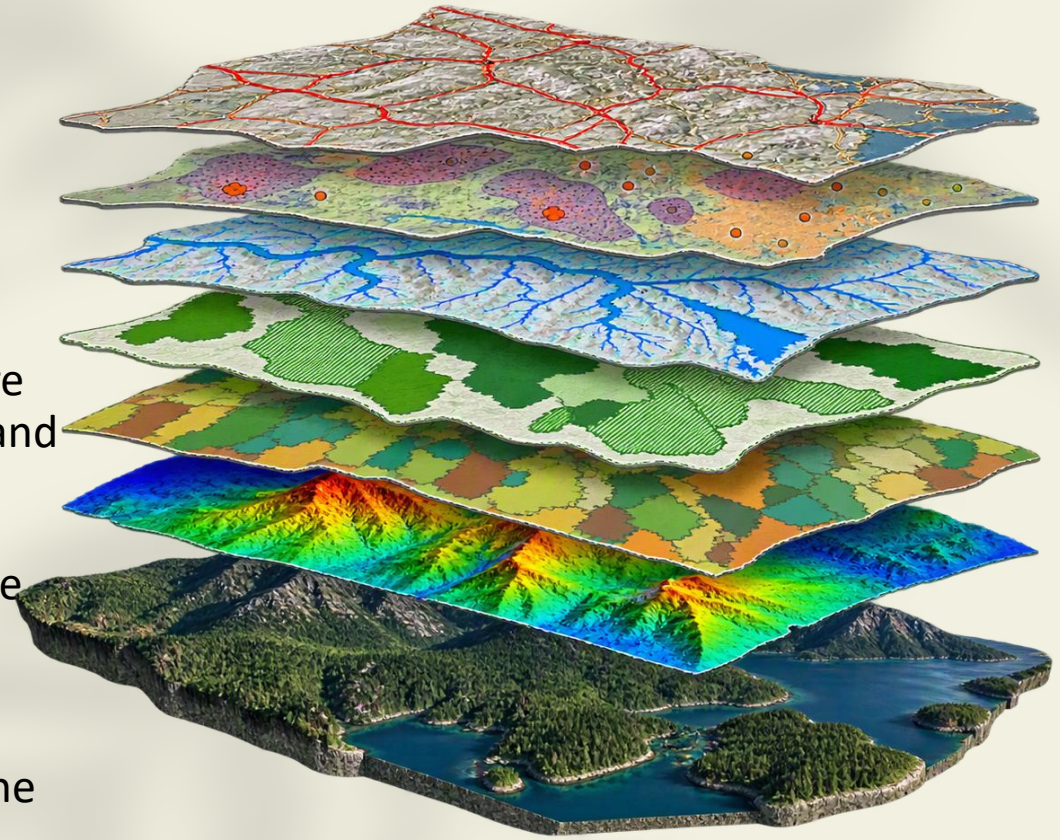
Modelling in Hierarchical Planning

- In the hierarchical approach, forest modelling was focused on supporting AAC determination
- Stewardship decisions were made first, with modelling used to assess impacts rather than guide choices
- Limitations in data resolution and computing meant that the model could not accurately forecast blocks and roads and was not used to support operational planning
- At the same time, regulatory complexity increased making it more difficult to interpret the multitude of often competing objectives on the ground
- As a result, strategic objectives and operational plans often became misaligned



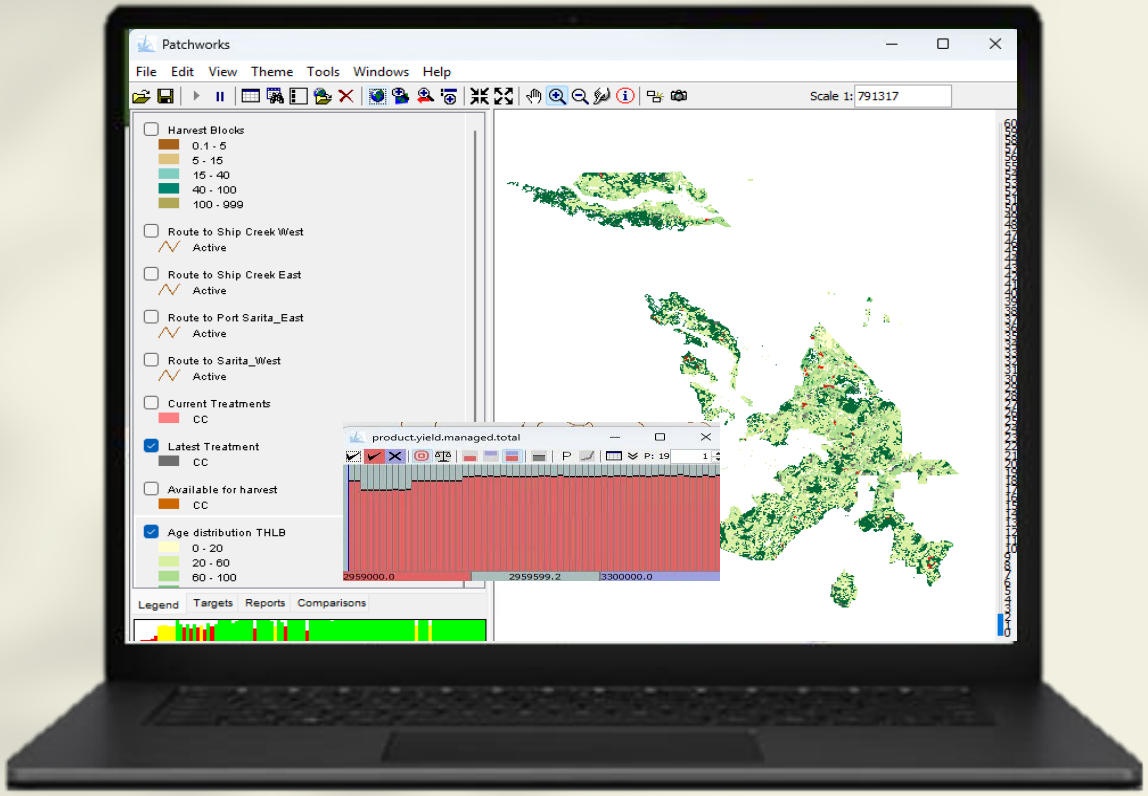
Multi-Scale Planning

- Multi-scale planning is where a single model is used to inform strategic, tactical and operational plans
- LiDAR data and advances in computing have made multi-scale planning possible
- The same model is used to evaluate stewardship options, future forest outcomes, and develop operationally informed harvest and road plans
- Enables Forest Landscape Plan and Forest Operations Plan to be developed concurrently
- Drastically simplifies operational planning as blocks and roads generated by the model are consistent with stewardship and the future forest outcomes



Patchworks: Forest Planning Platform

- Software to support multi-scale planning
- Spatially explicit, visual and dynamic model
- Integrates strategic and operational forest planning in one platform
- Allows the impact of different stewardship practices on multiple values to be evaluated over 300-years
- Includes the spatial harvest and road pattern enabling operational validation and refinement



TFL 44 FLP and FOP

- In the TFL 44 FLP and FOP, we are using multi-scale modelling to evaluate different potential practices through time
- The Technical Team identified core values
  - Red and Yellow Cedar
  - Riparian
  - Biodiversity
  - Cultural Use
  - Wildlife
  - Forest Health
  - Roads
  - Visual Quality
- Use Patchworks to evaluate how different scenarios impact values through space and time



Cedar - Value

- Cedar is central to First Nations culture and well-being.
- A wide range of tree sizes support diverse cultural uses including canoes, textiles, totem poles, and carvings.
- Maintaining a diversity of sizes of western red cedar and yellow cedar enhances biodiversity, ecological integrity, wildlife habitat, and landscape resilience.



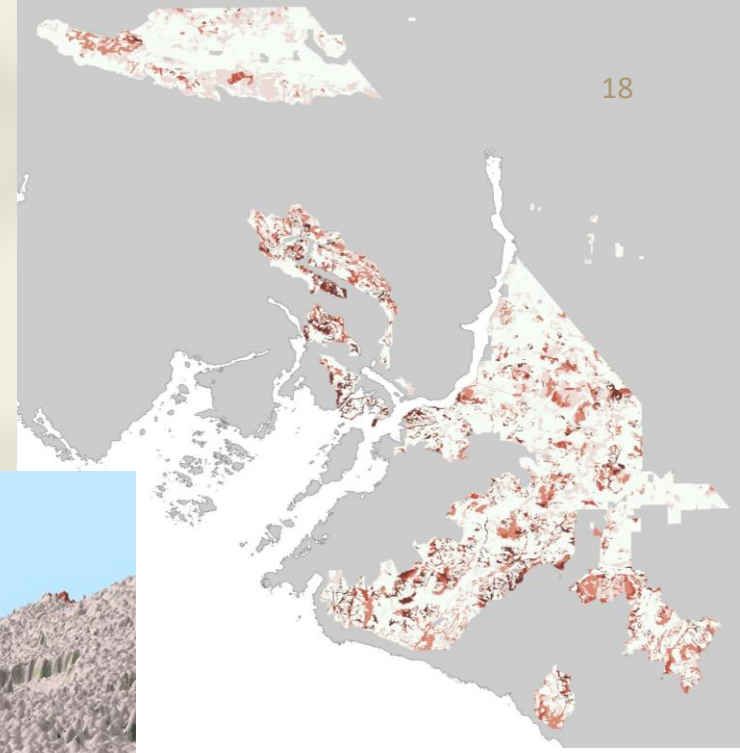
Cedar - Outcomes

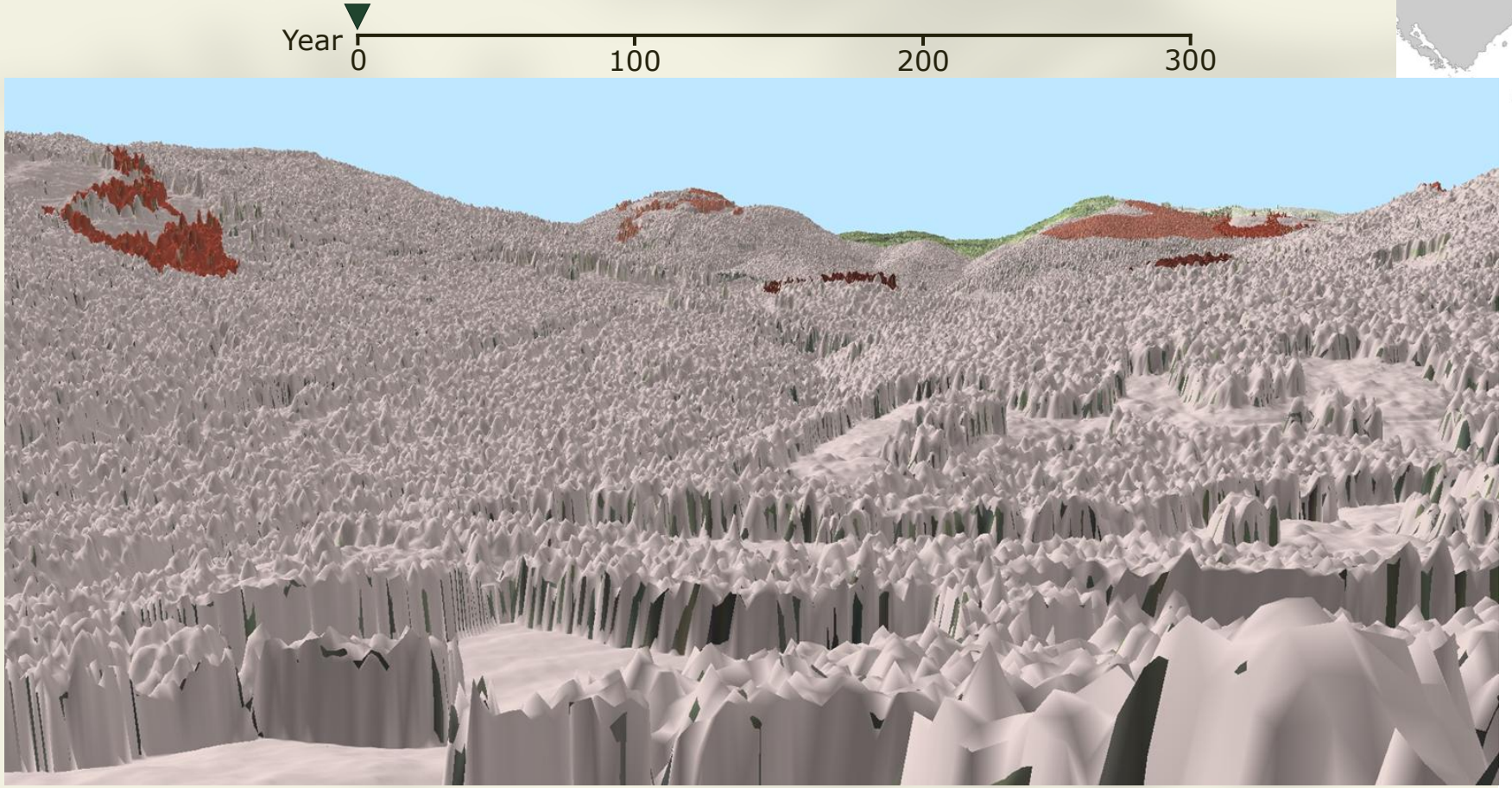
- The estimated number of red and yellow cedar trees in different diameter classes (75-99cm, 100-119cm, 120-149cm, 150cm+).
- The estimated area of red and yellow cedar suitable for bark stripping.

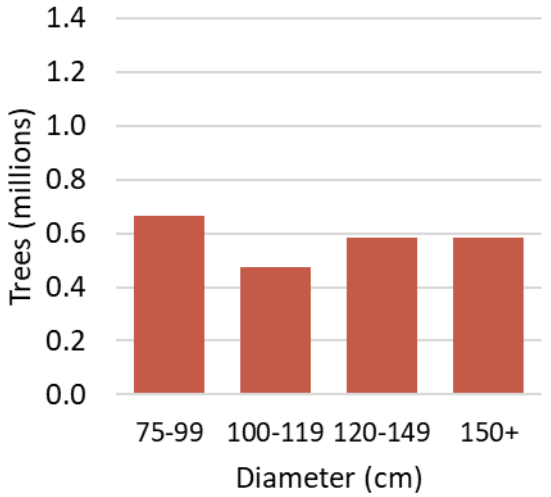




Large Red Cedar



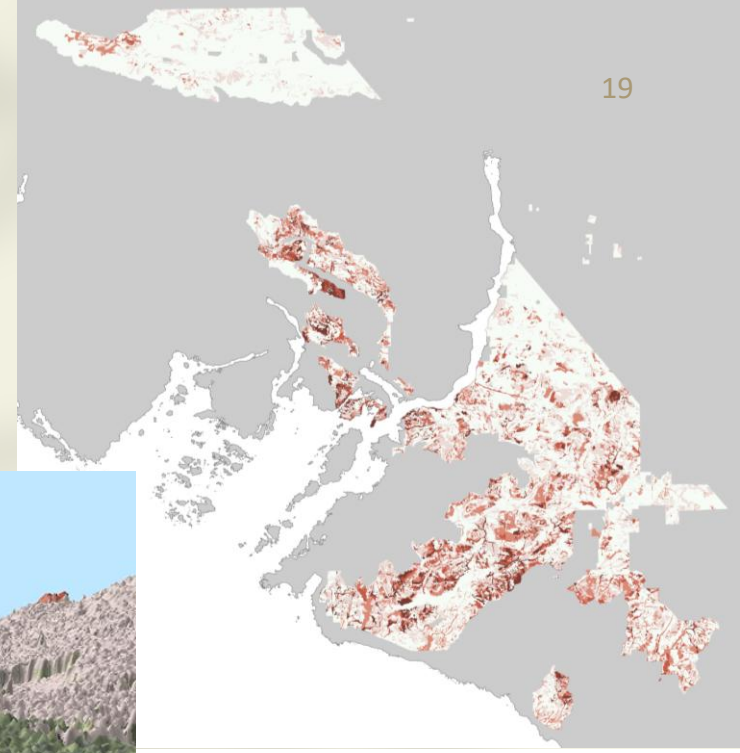


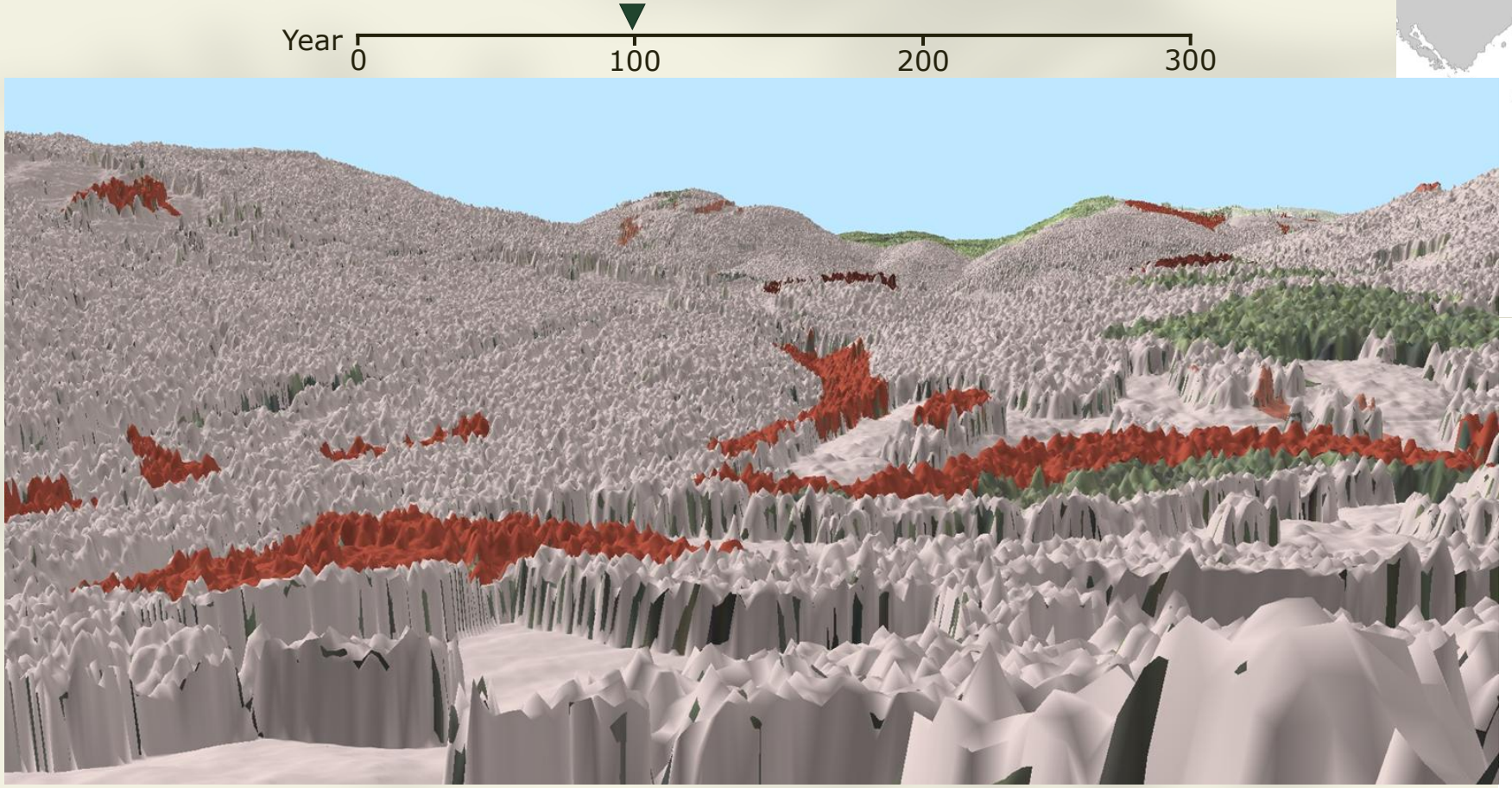


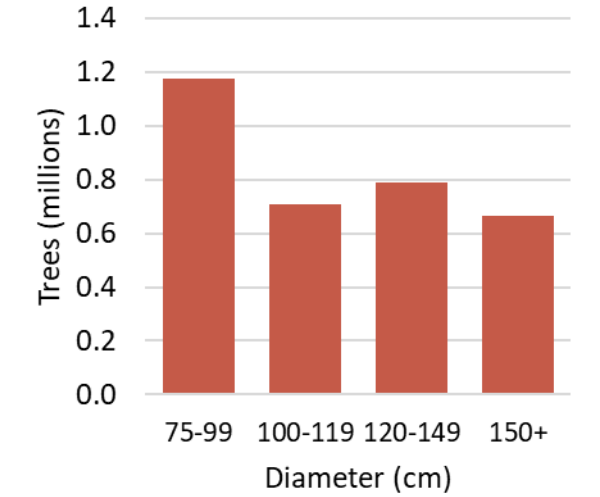


Trees per hectare >150cm diameter

Large Red Cedar









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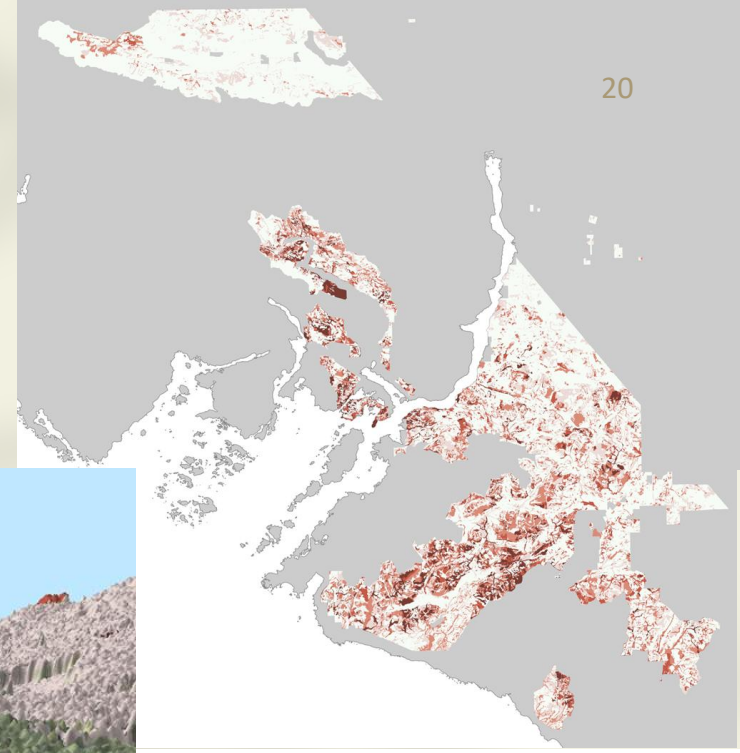
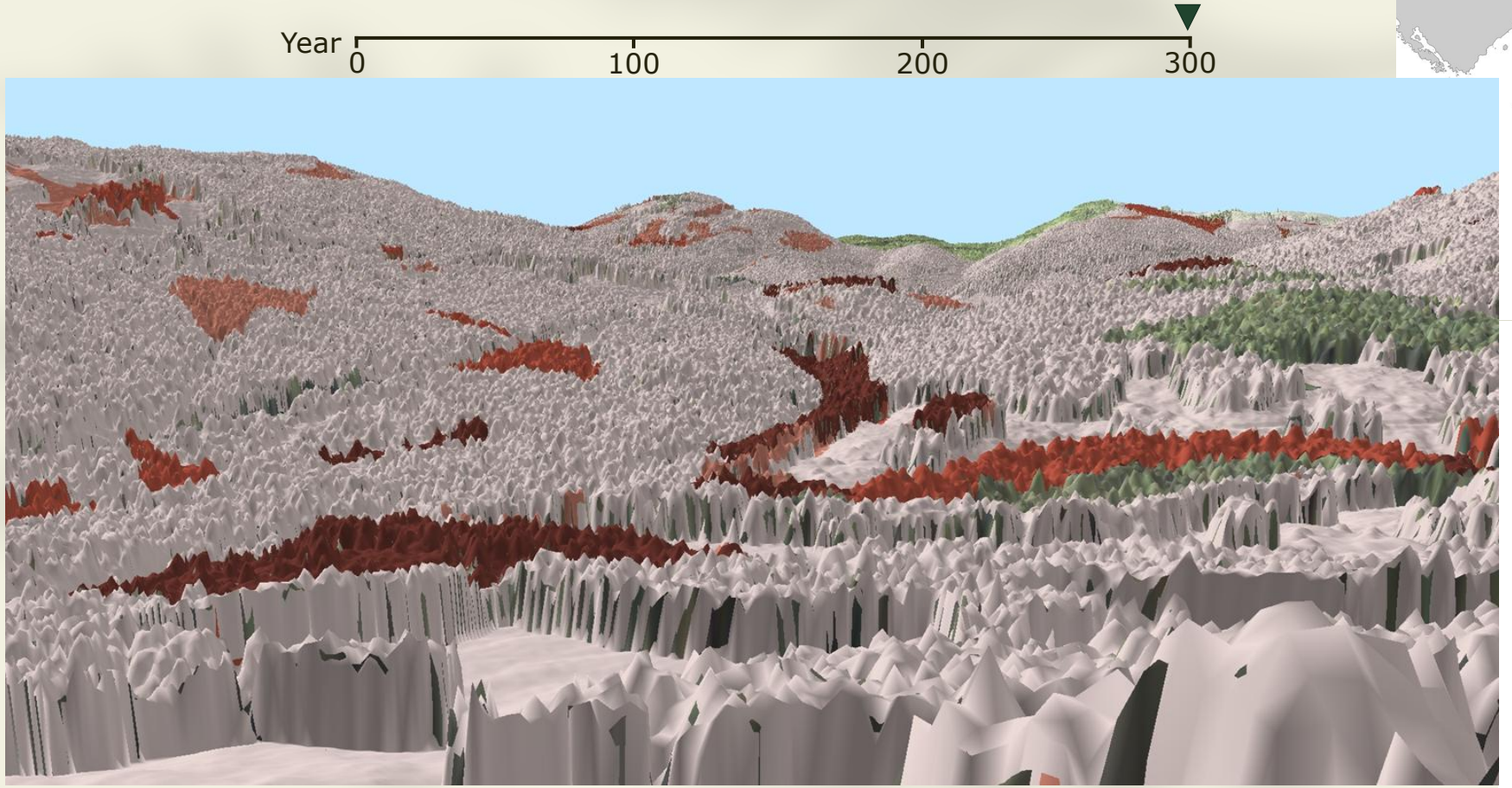
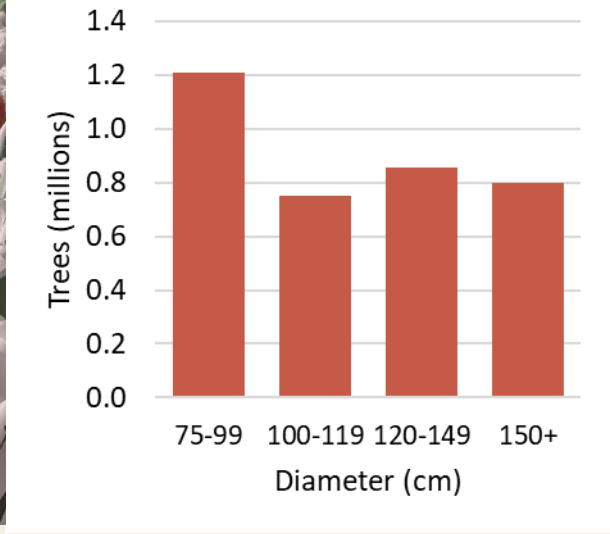
Large Red Cedar



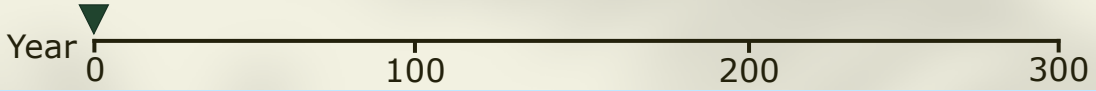


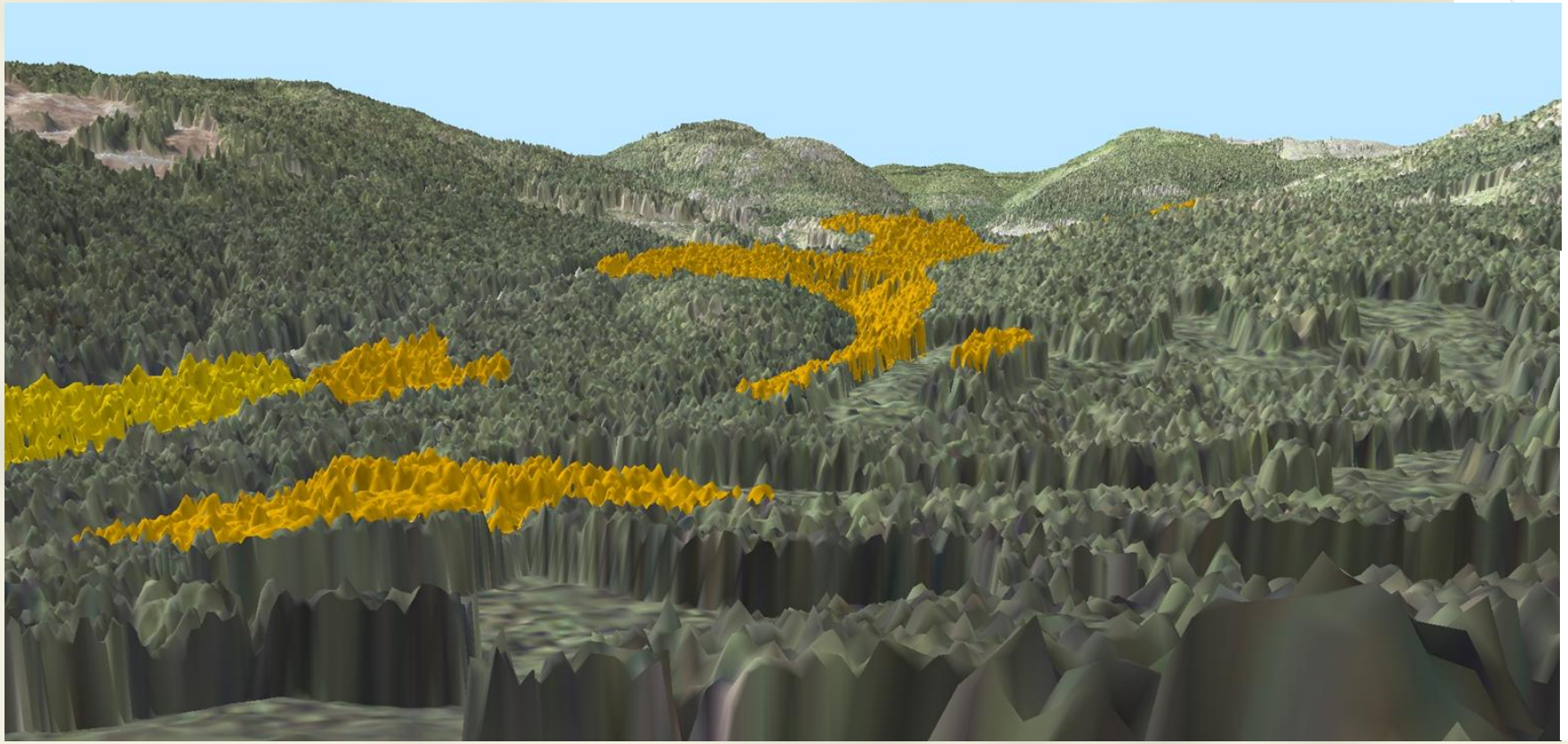




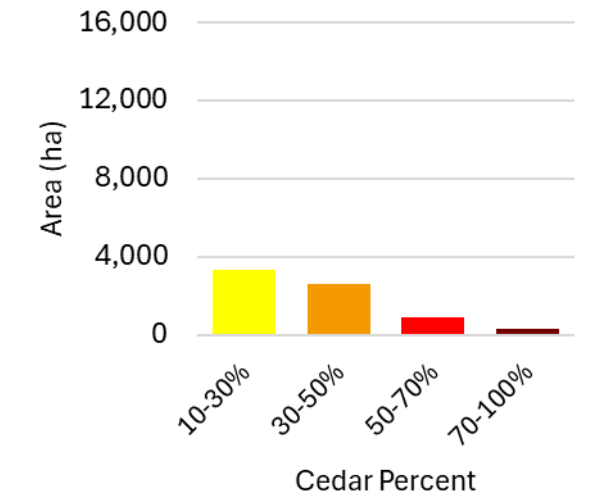
Trees per hectare >150cm diameter

Bark Stripping Cedar





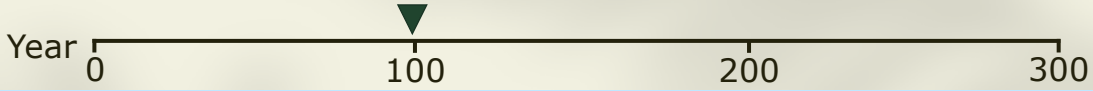


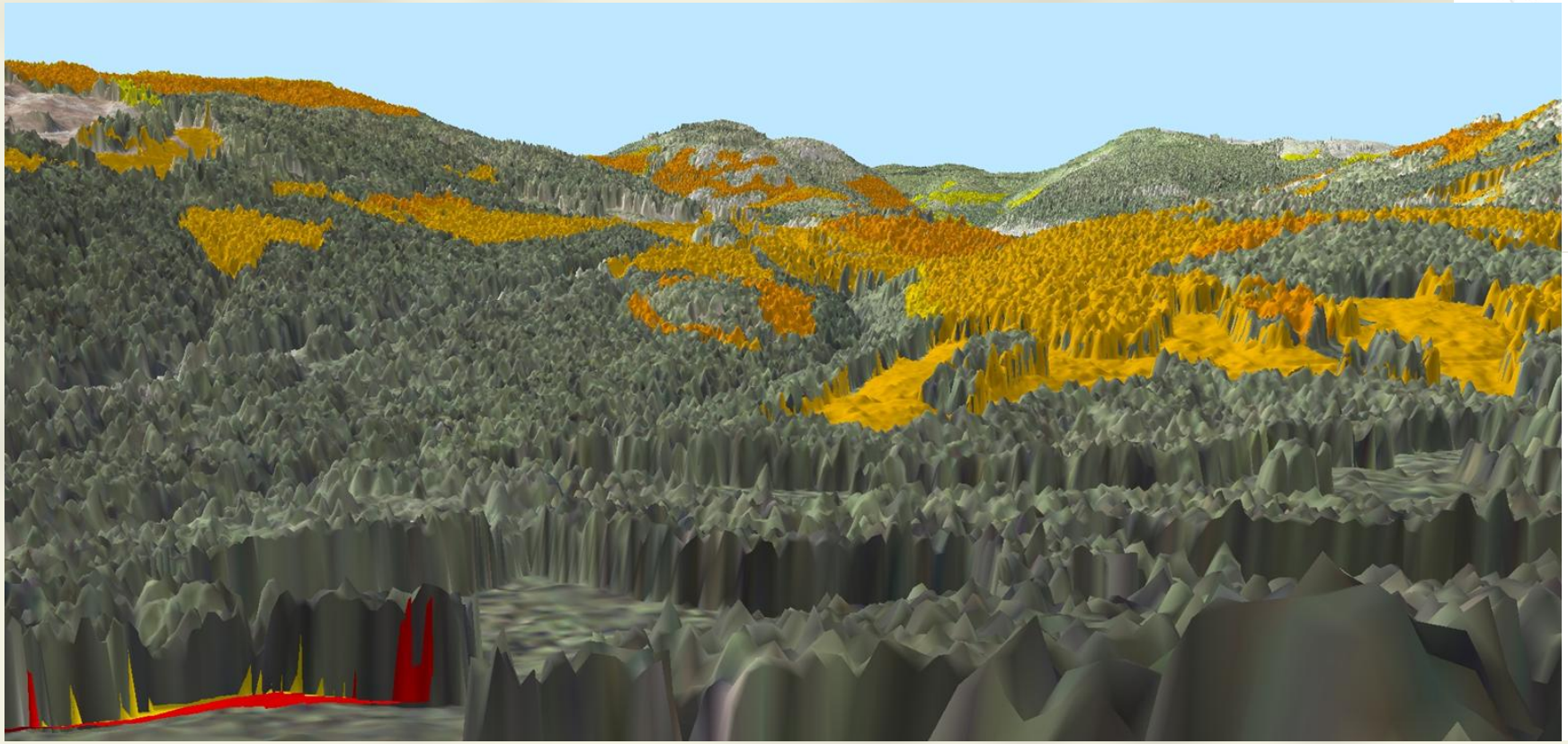


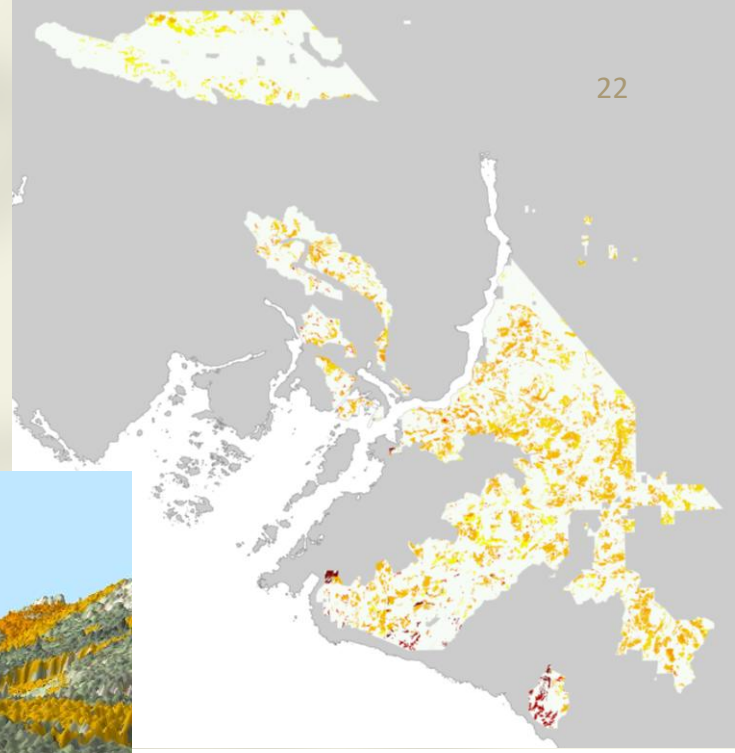


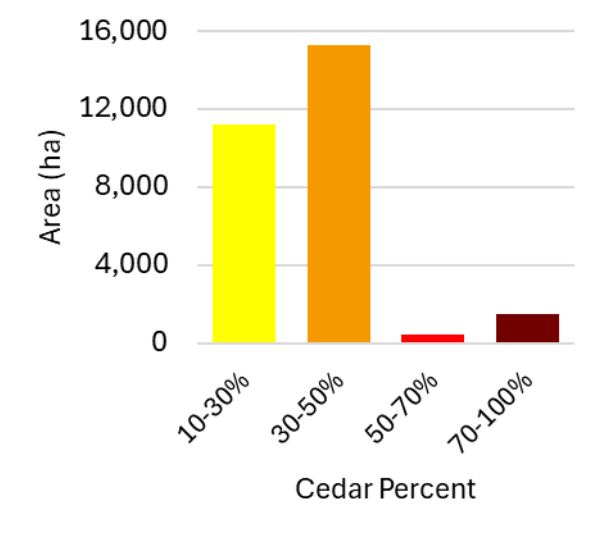
Cedar percent in stands aged 41-100

Bark Stripping Cedar





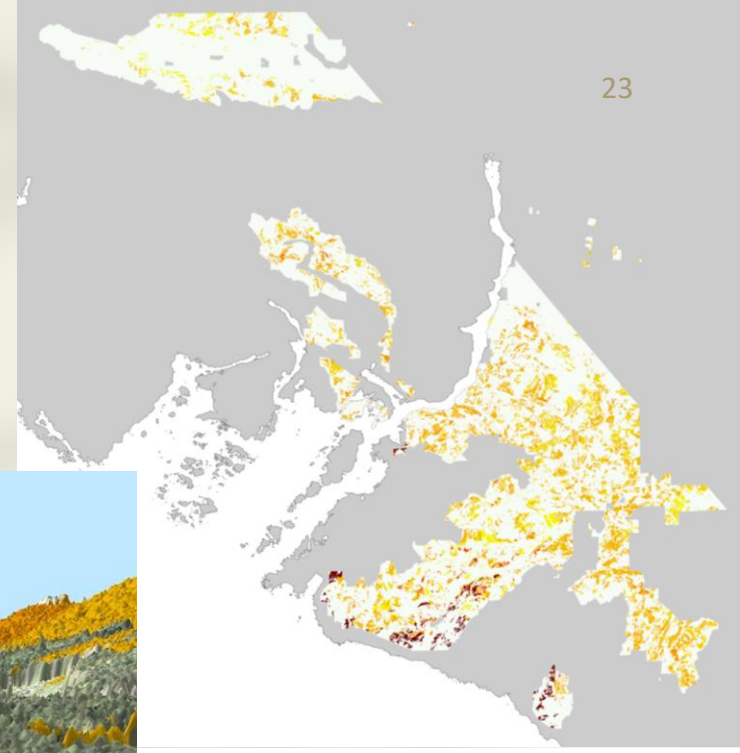


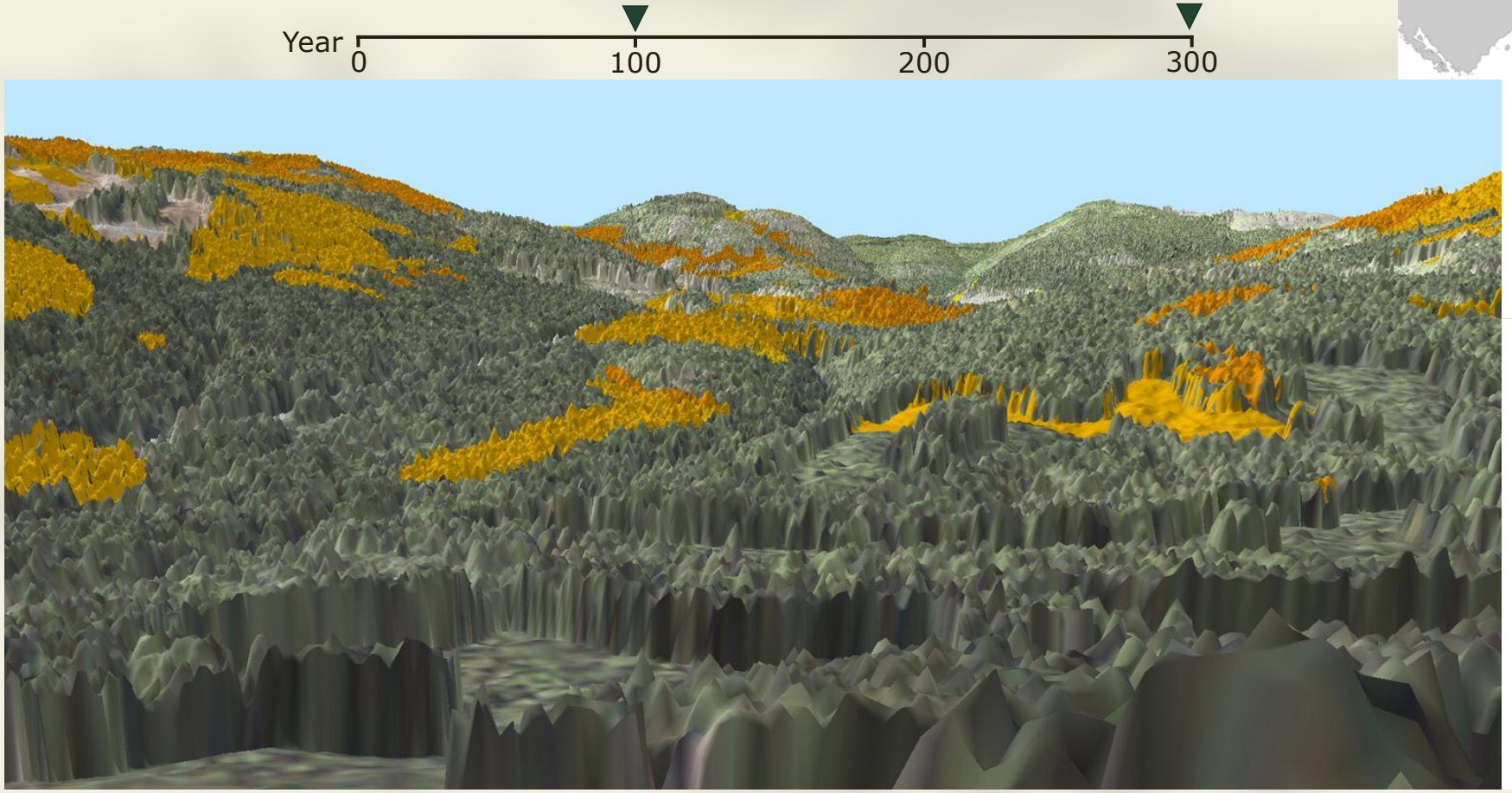


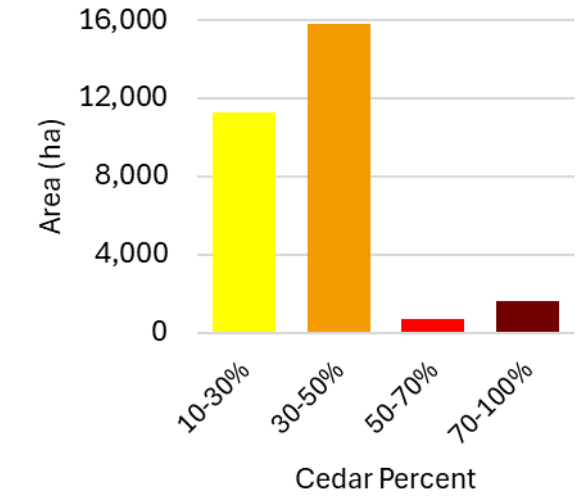


Cedar percent in stands aged 41-100

Bark Stripping Cedar









Cedar percent in stands aged 41-100

Ecosystem & Biodiversity - Value

- Preserve ecological functions critical to healthy environments such as nutrient cycling, water filtration, and carbon storage.
- Support resilience by maintaining natural processes that help forests absorb disturbances like pests, disease, and climate change.
- Sustain diverse habitats needed for wildlife, from old-growth specialists to species relying on early-seral forests.
- Provide important cultural resources including food, textiles and medicine.

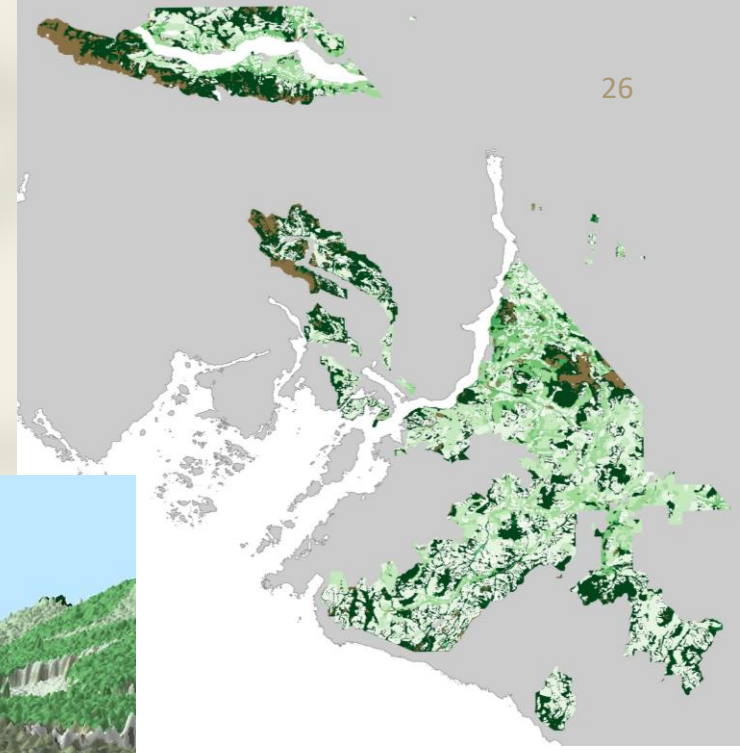


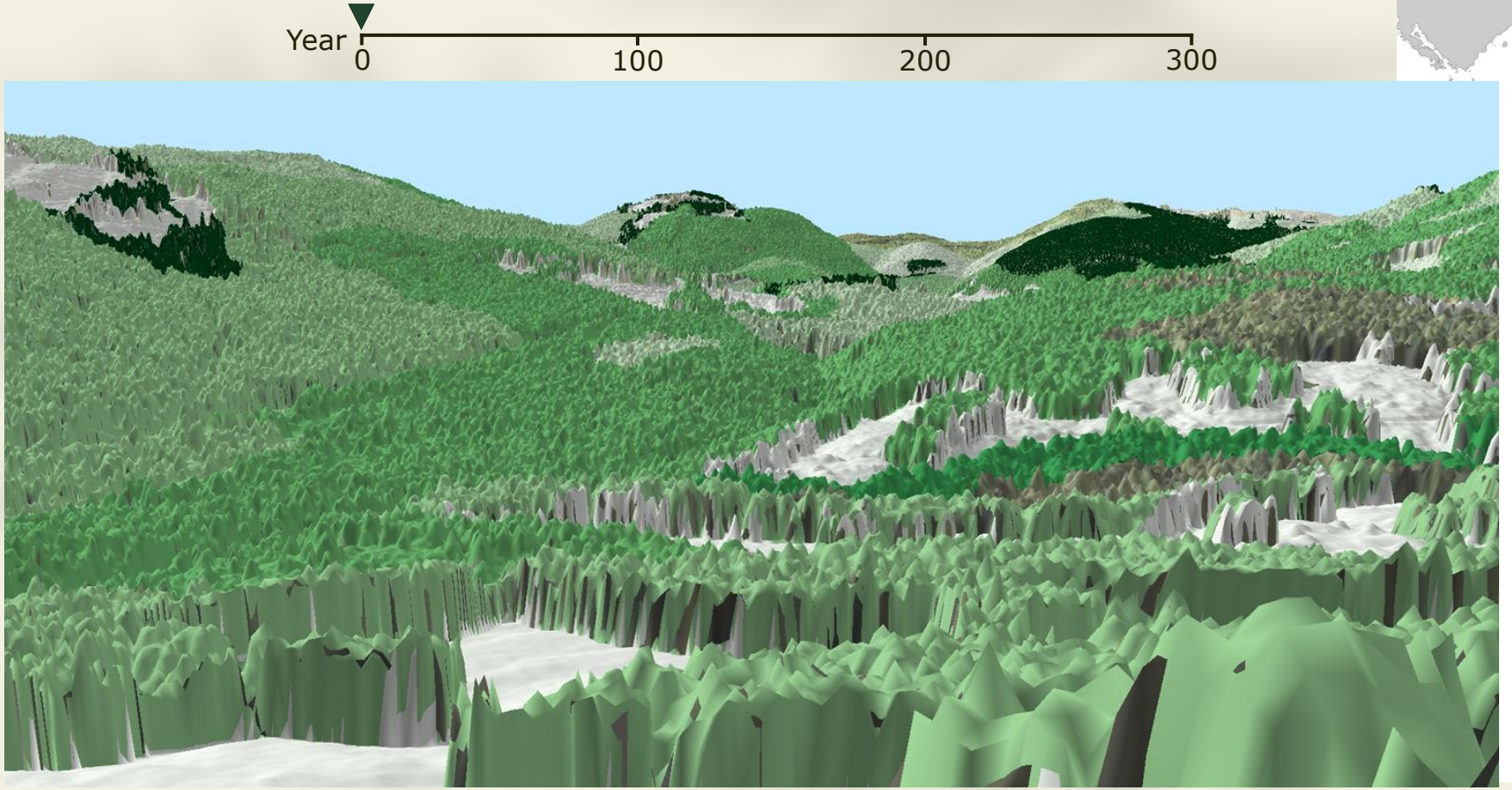
Ecosystem & Biodiversity - Outcomes

- Two outcomes for Ecosystems and Biodiversity are considered
  - Old forest
  - Ecosystem integrity



Age Class

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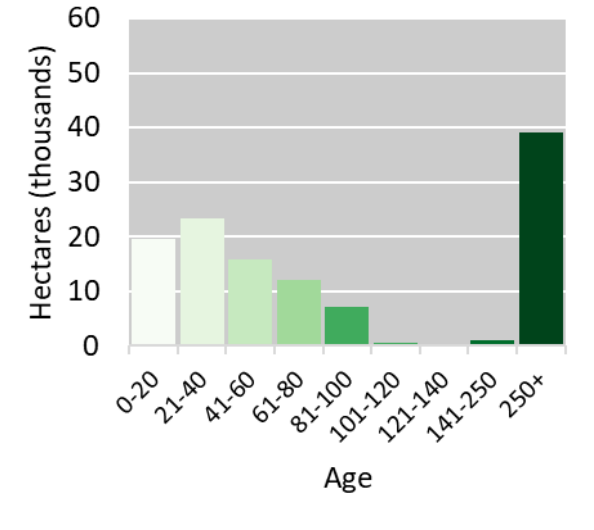
Young
Old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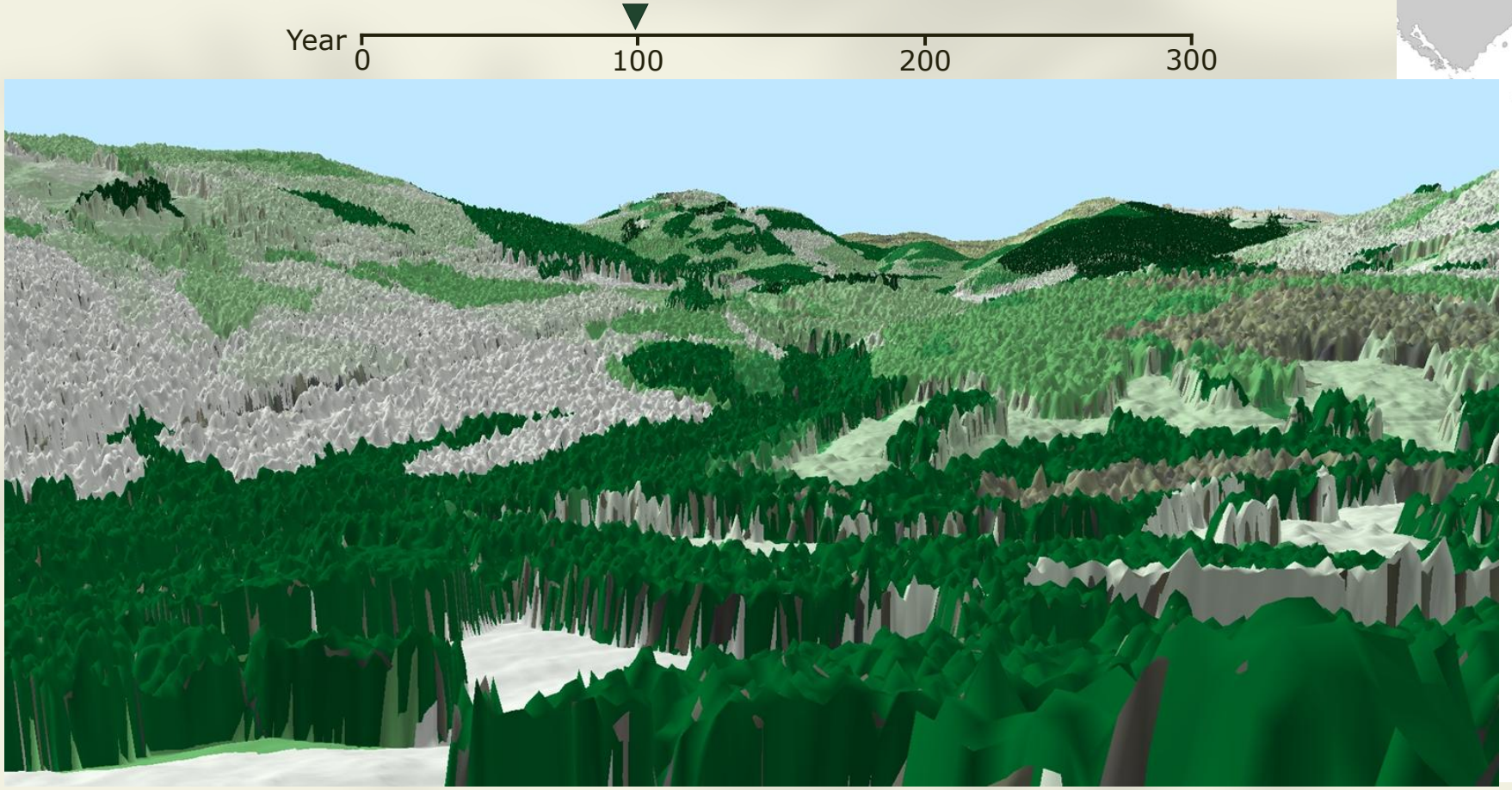
141-250
250+
Age

Age Class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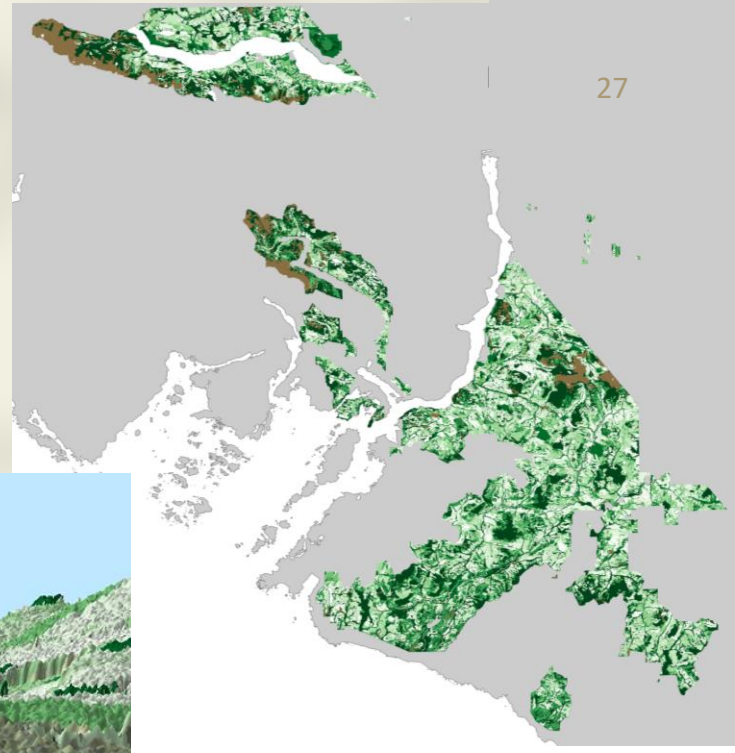

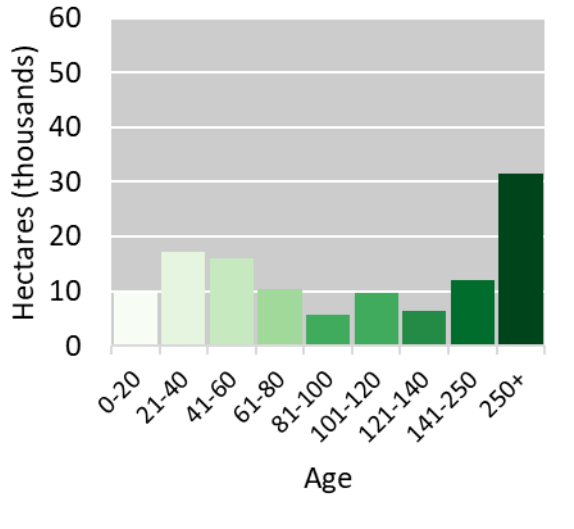
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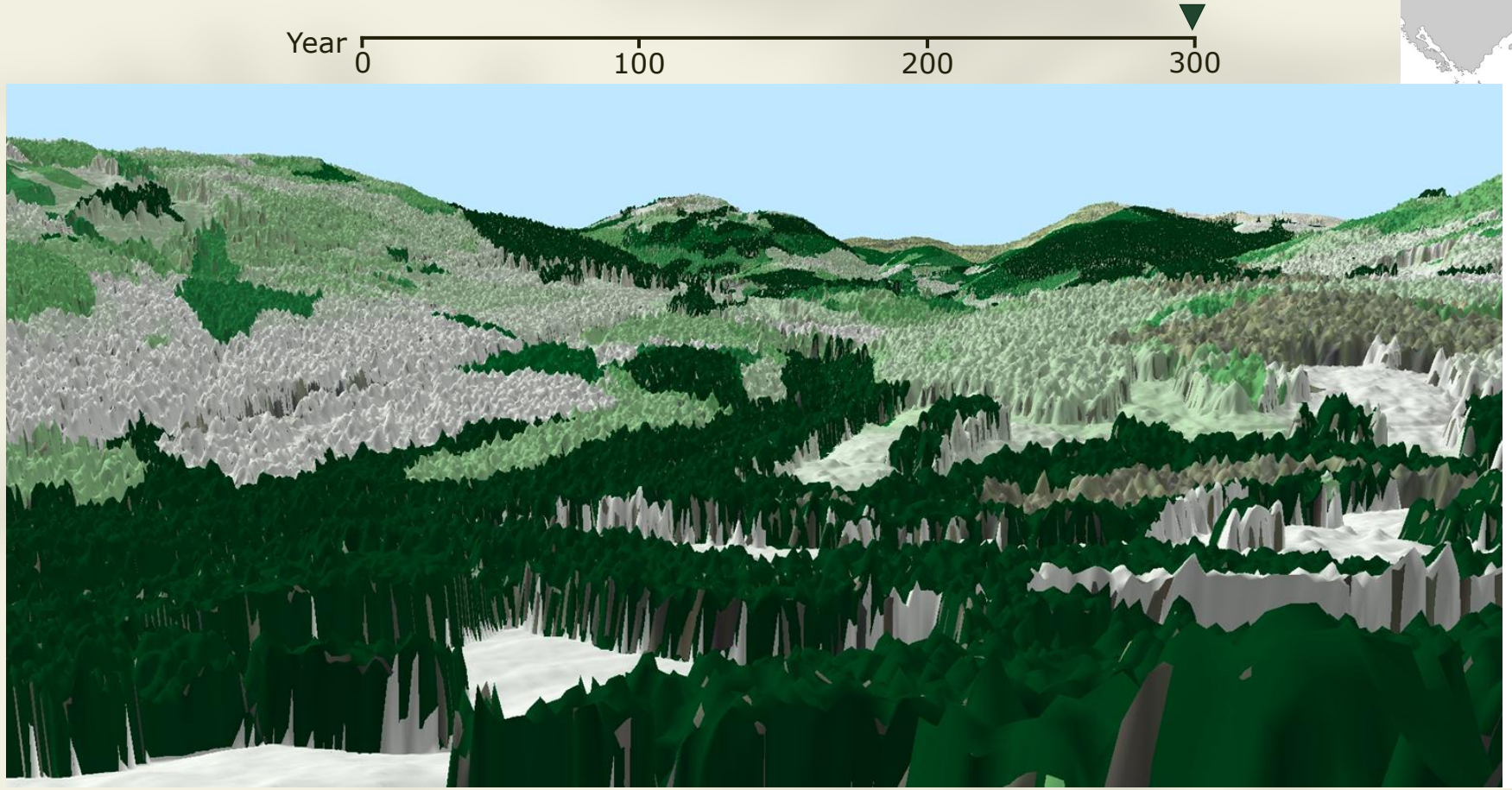
Age Class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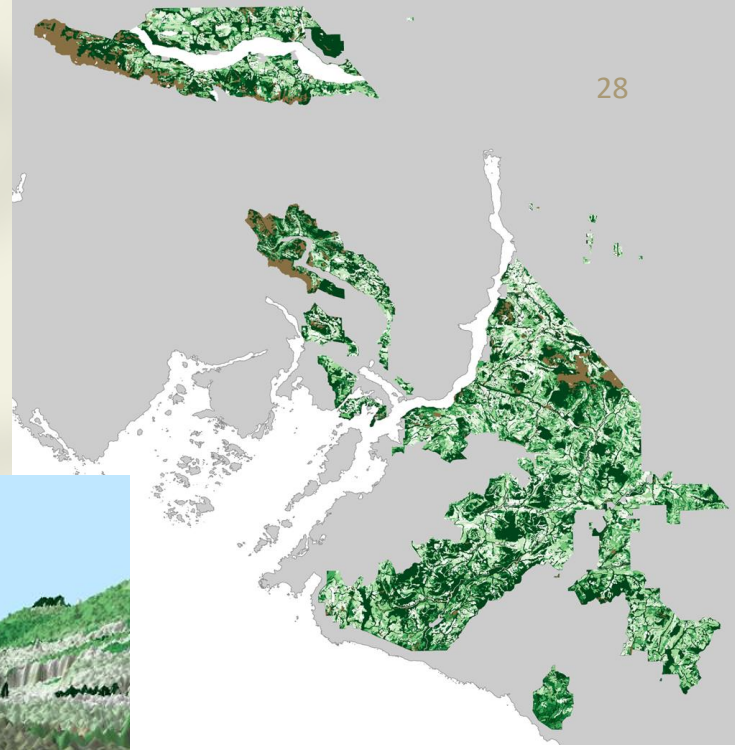

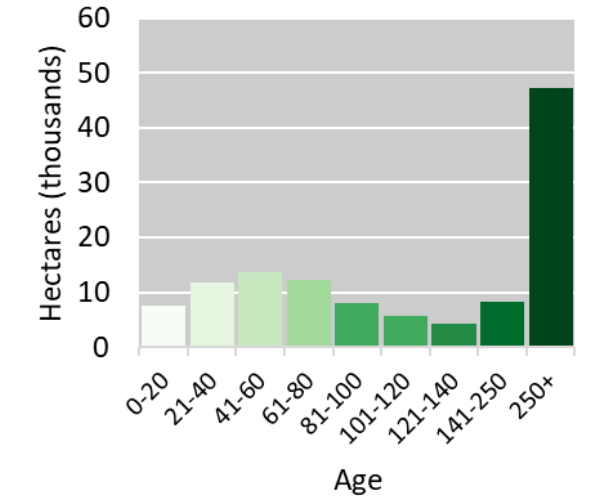
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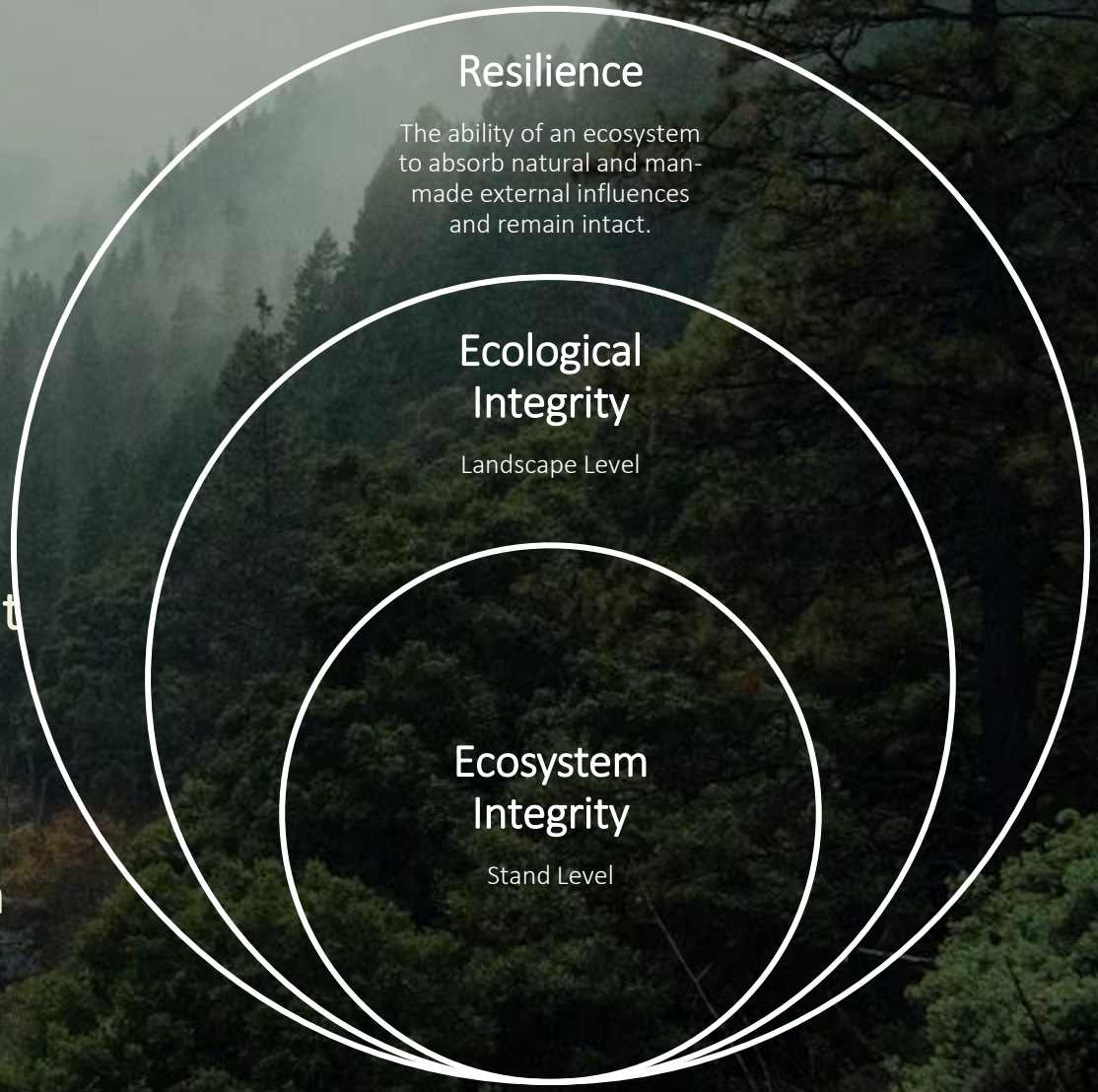
250+
Age

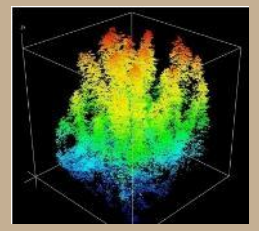
Ecosystem Integrity

- Ecological integrity describes the ability of an ecological system to support and maintain organisms with composition, diversity and function comparable to those of natural habitats.
- Ecosystem integrity is a stand level assessment of ecological integrity.
- Stands with high integrity are resilient, i.e. able to absorb external influences and remain intact



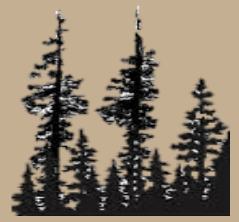
Ecosystem Integrity - Approach

Canopy Complexity



Measured using LiDAR. Complex canopies are associated with other indicators of ecosystem integrity such as understory vegetation development and habitat diversity.

Age



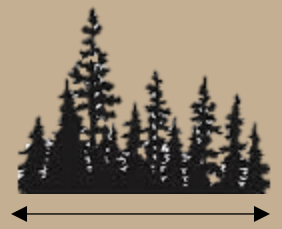
Age is an important component of ecosystem integrity since certain attributes, such as the presence of certain lichens, take significant time to develop.

Species Diversity



Species diversity offers greater resilience to potential disturbances such as pests, diseases and climate change.

Stand Size



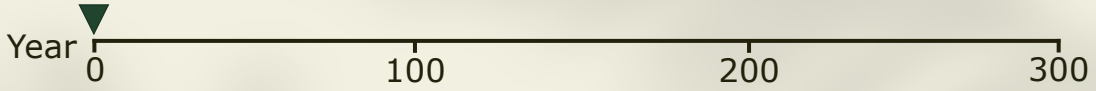
Larger patches have greater ecosystem integrity as they have more interior forest, are less prone to disturbances such as windthrow, and facilitate wildlife movement.

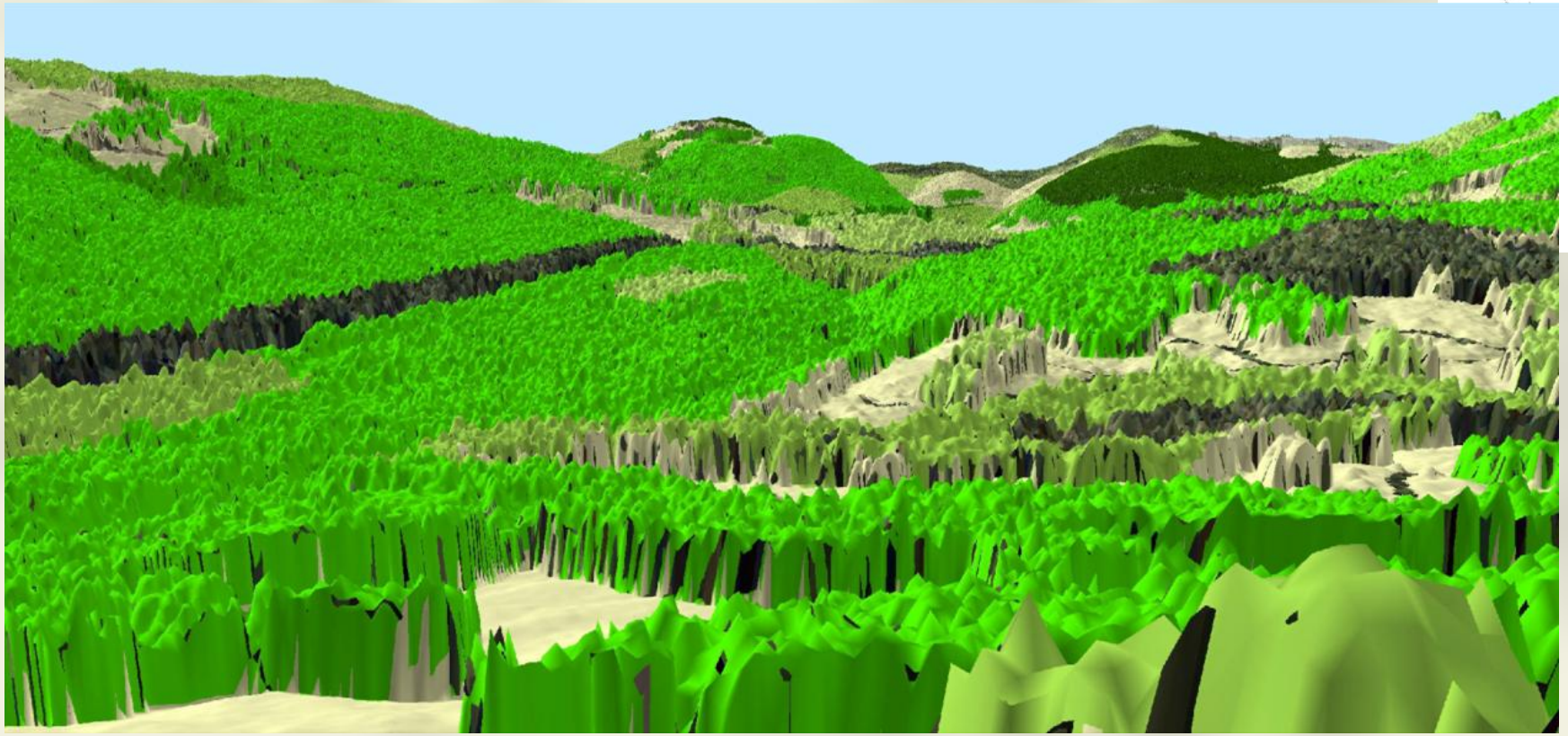
Landscape Context

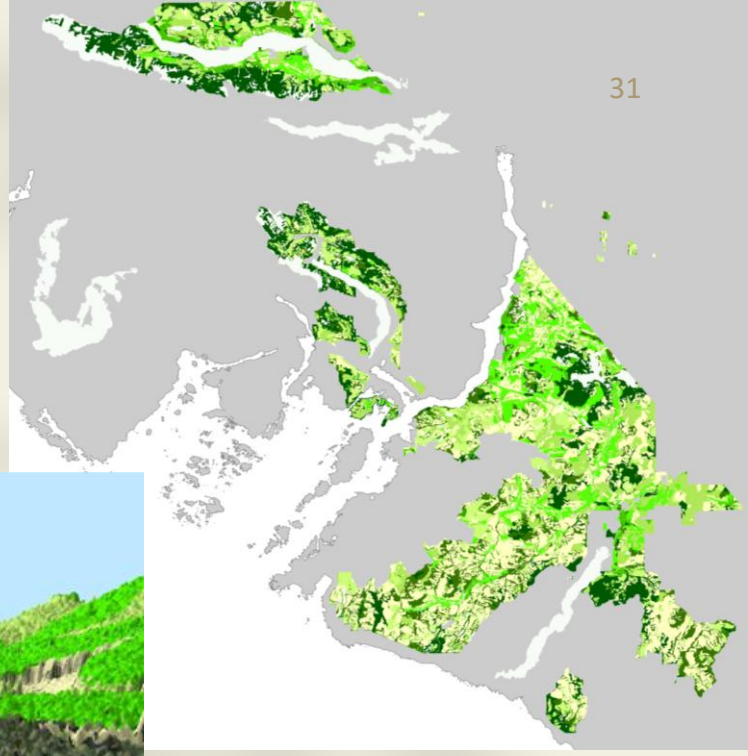


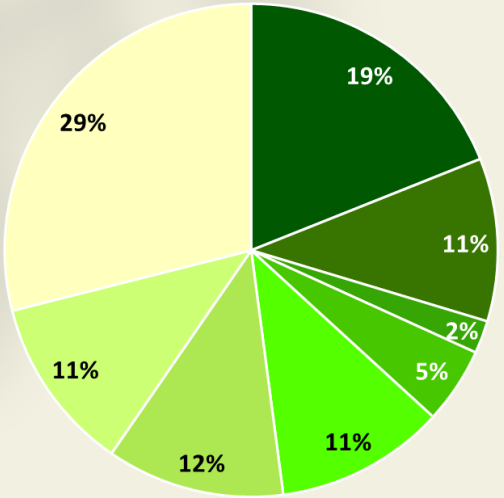
Evaluates the maturity of the forest surrounding the stand, from recent disturbance to old forest. Stands surrounded by more intact, old forest have greater integrity and resilience.

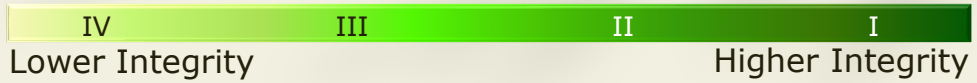
Ecosystem Integrity



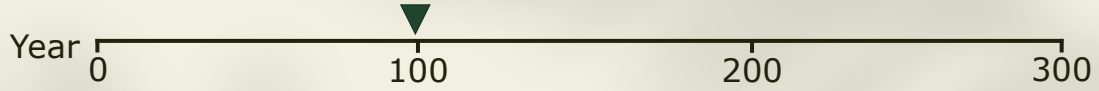


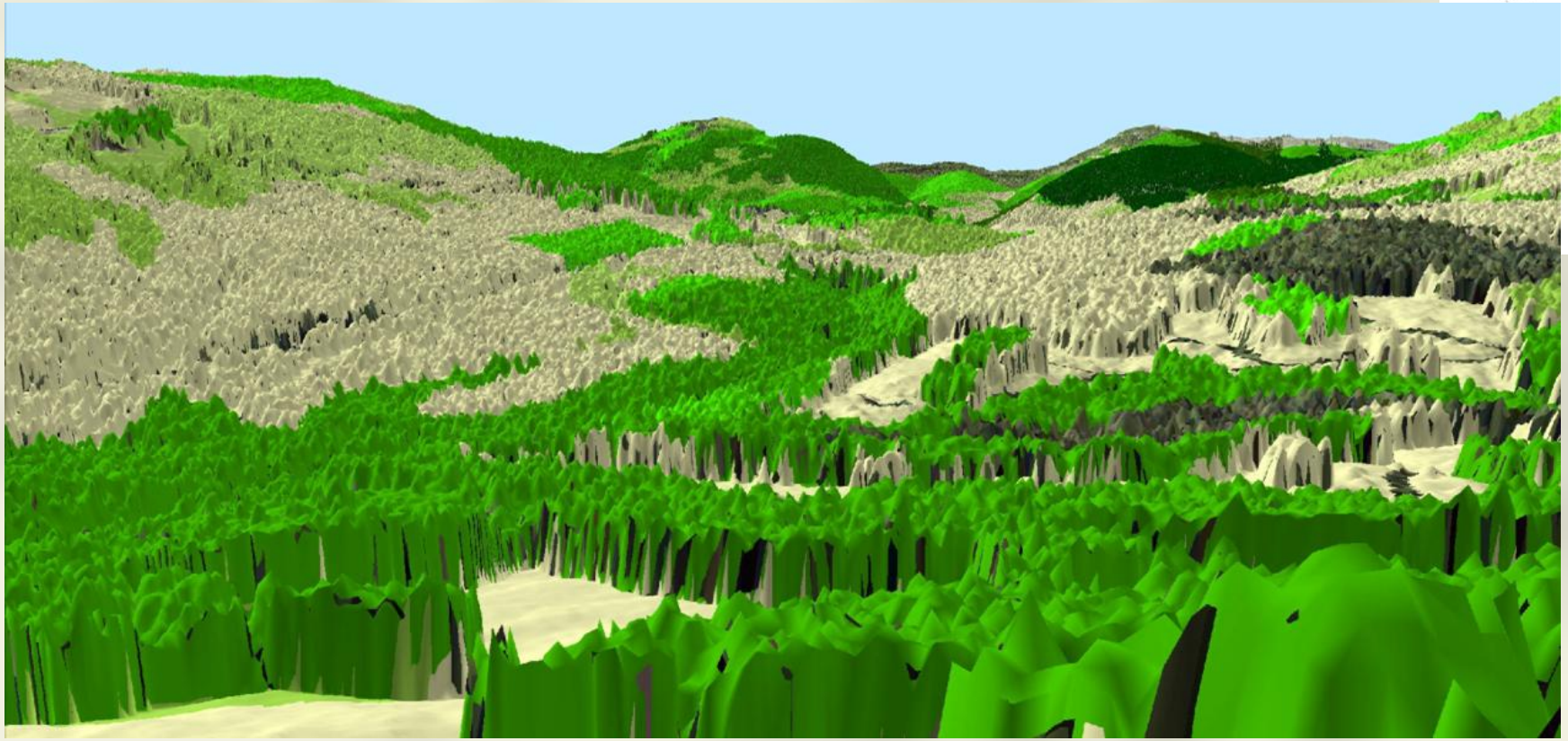


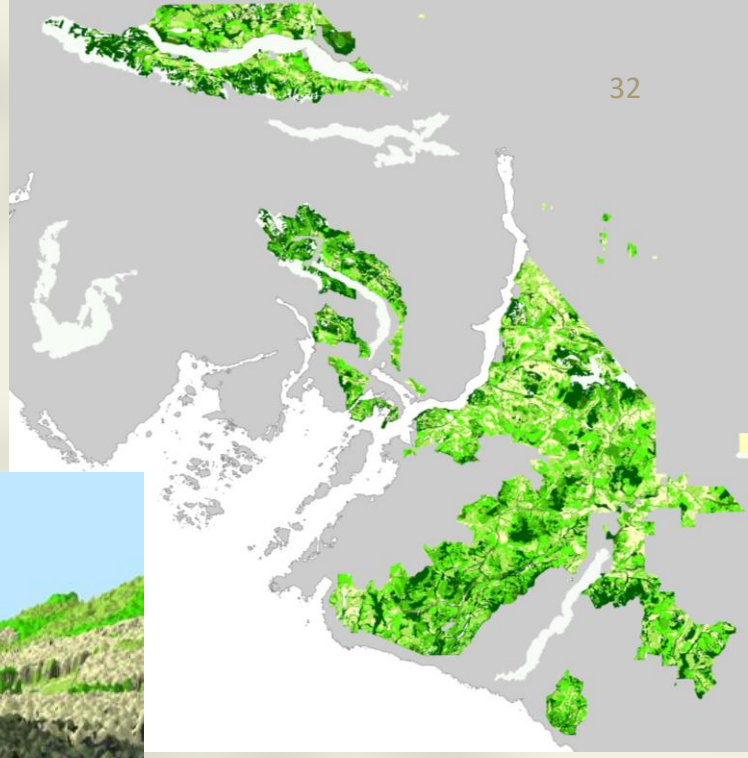


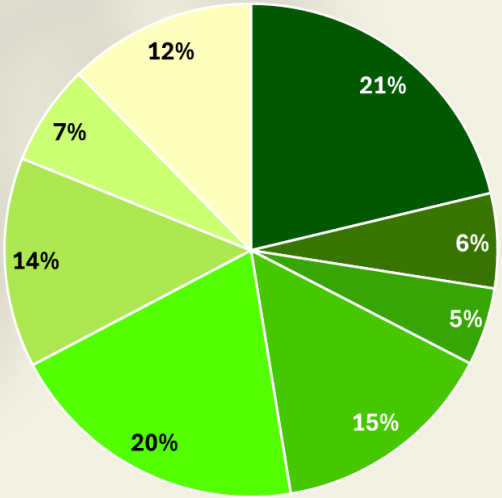


Ecosystem Integrity







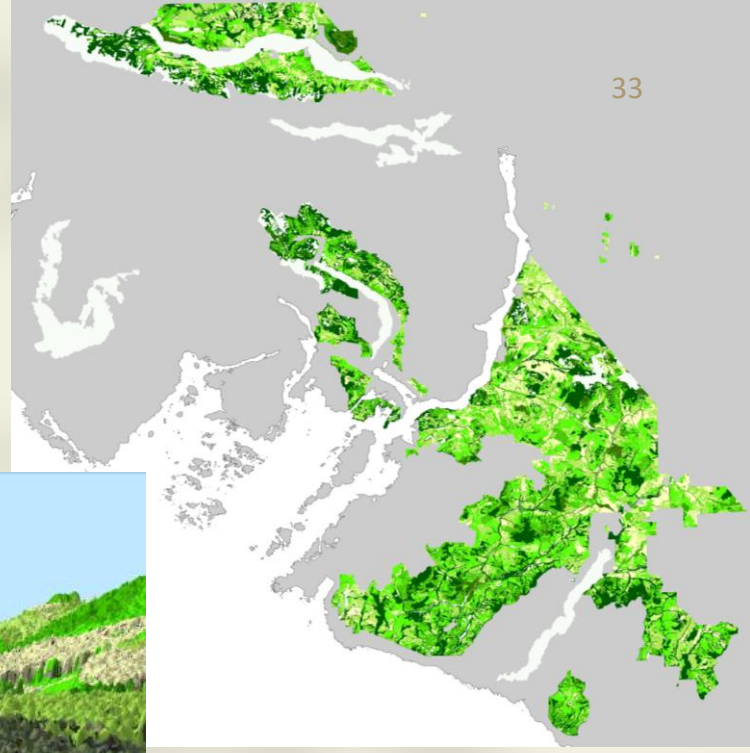


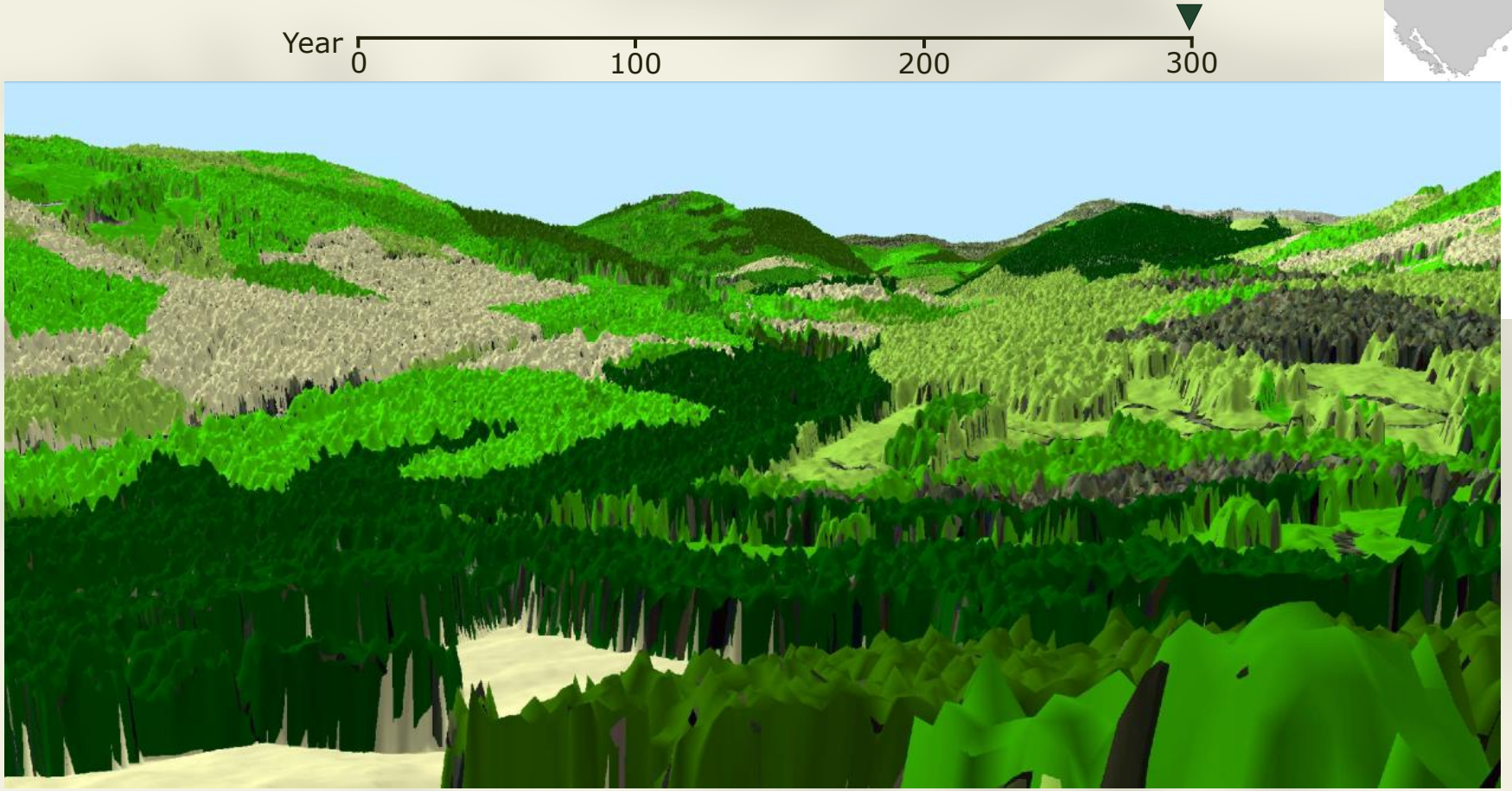


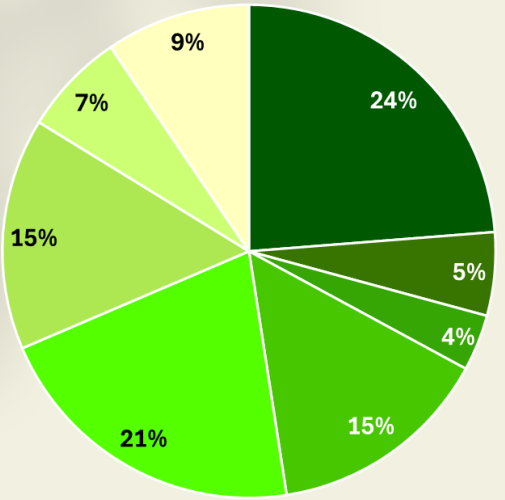
Lower Integrity

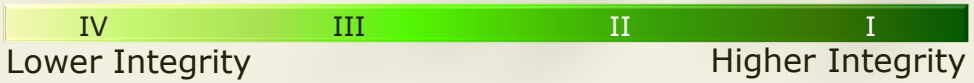
Higher Integrity

Ecosystem Integrity









Connectivity



Species Survival and Adaptation

Forest connectivity enables wildlife to migrate, find resources, and adapt to seasonal and climate changes.

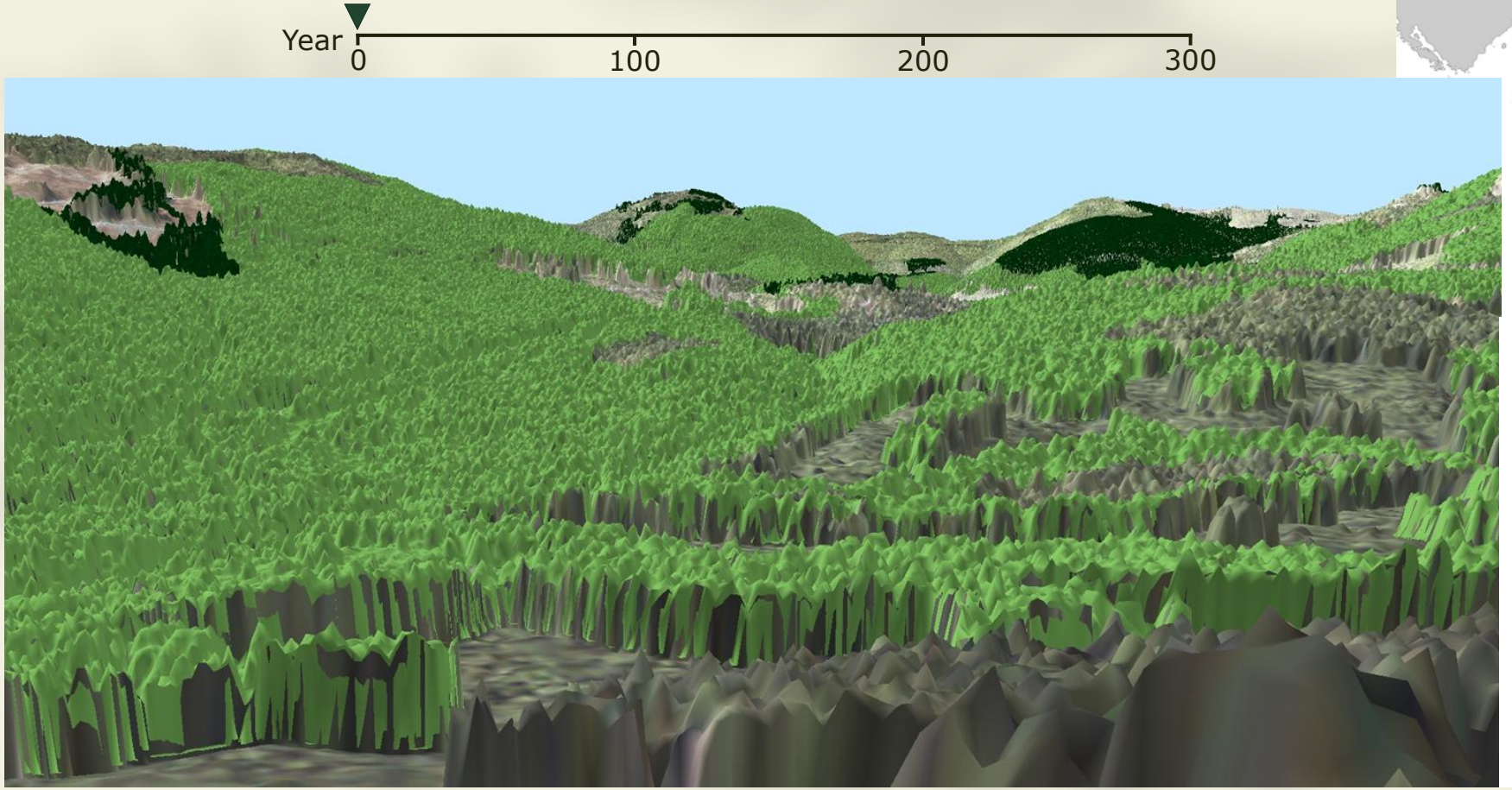
Enhances Ecosystem Resilience

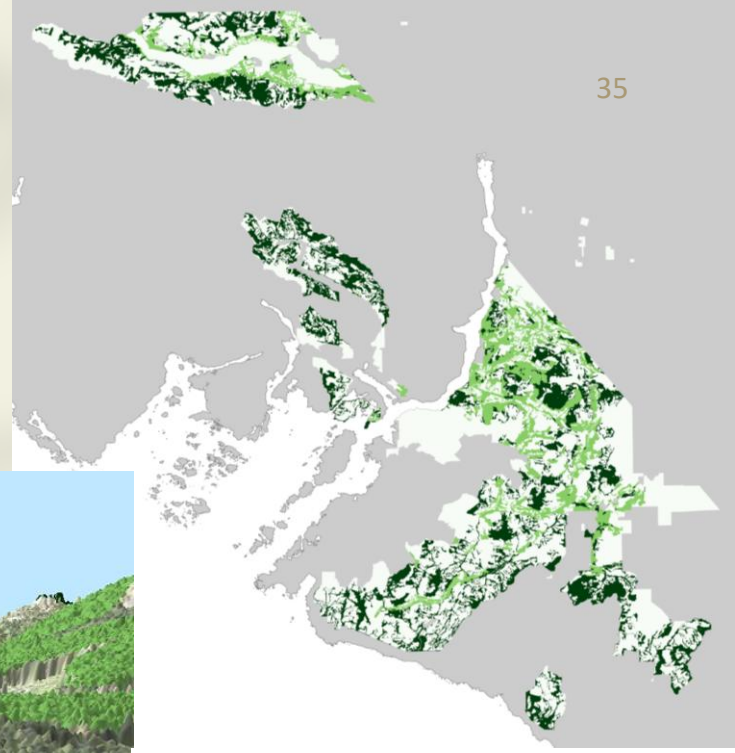
Connected forests recover more effectively from disturbances and environmental stress than fragmented ones.

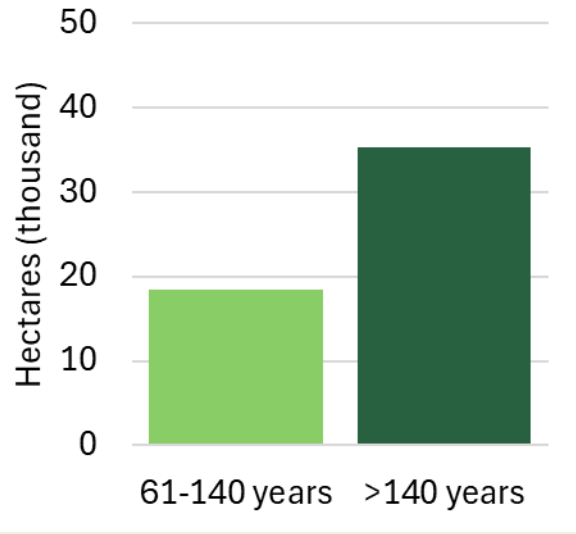
Climate Adaptability

Continuous forest landscapes help ecosystems adjust to shifting climate conditions over time.

Connectivity

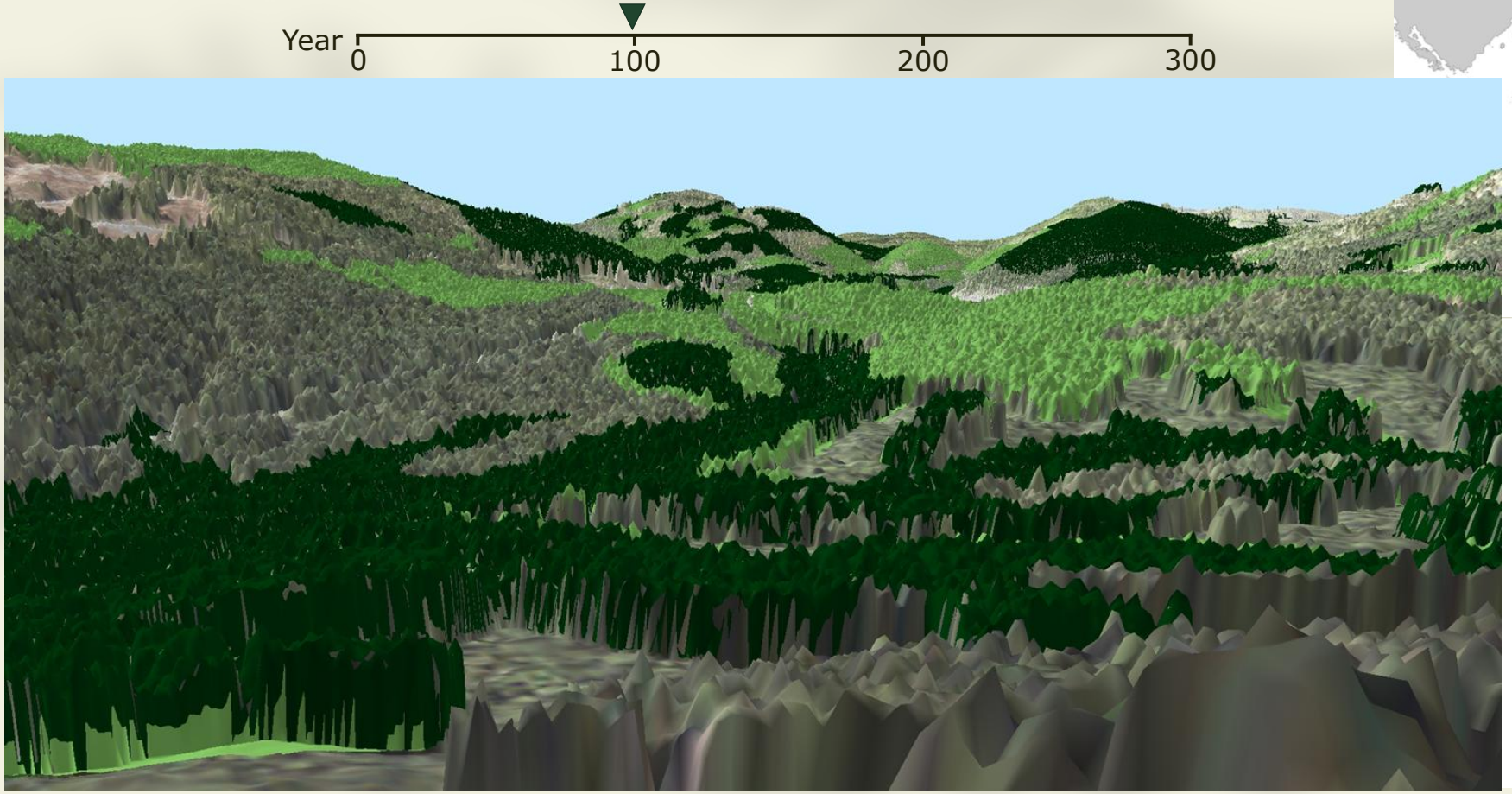


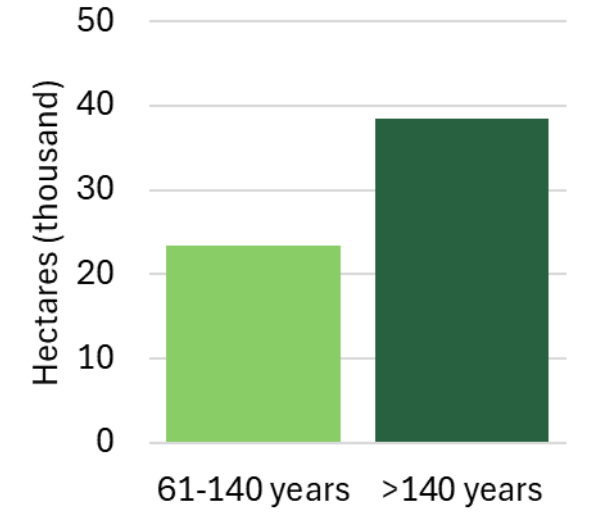




Connectivity



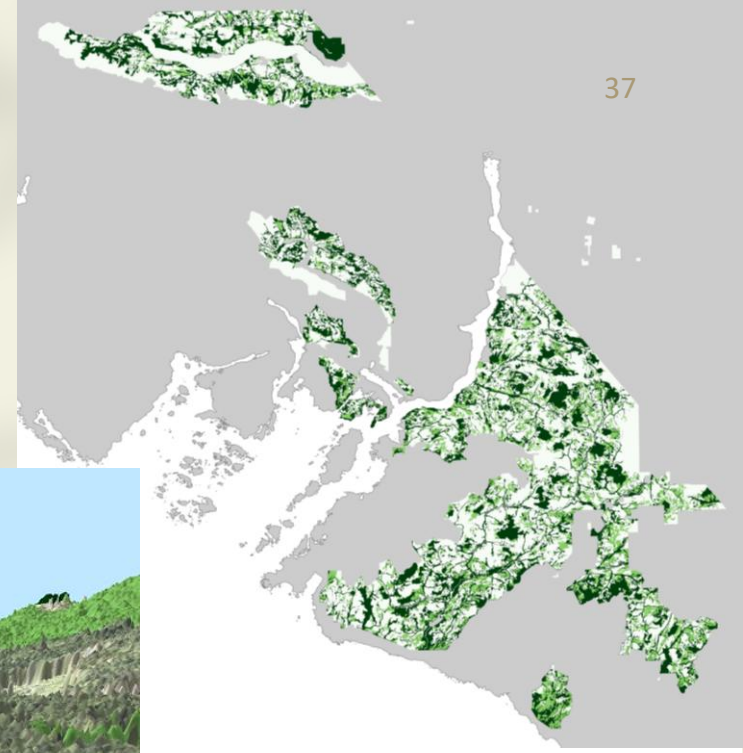


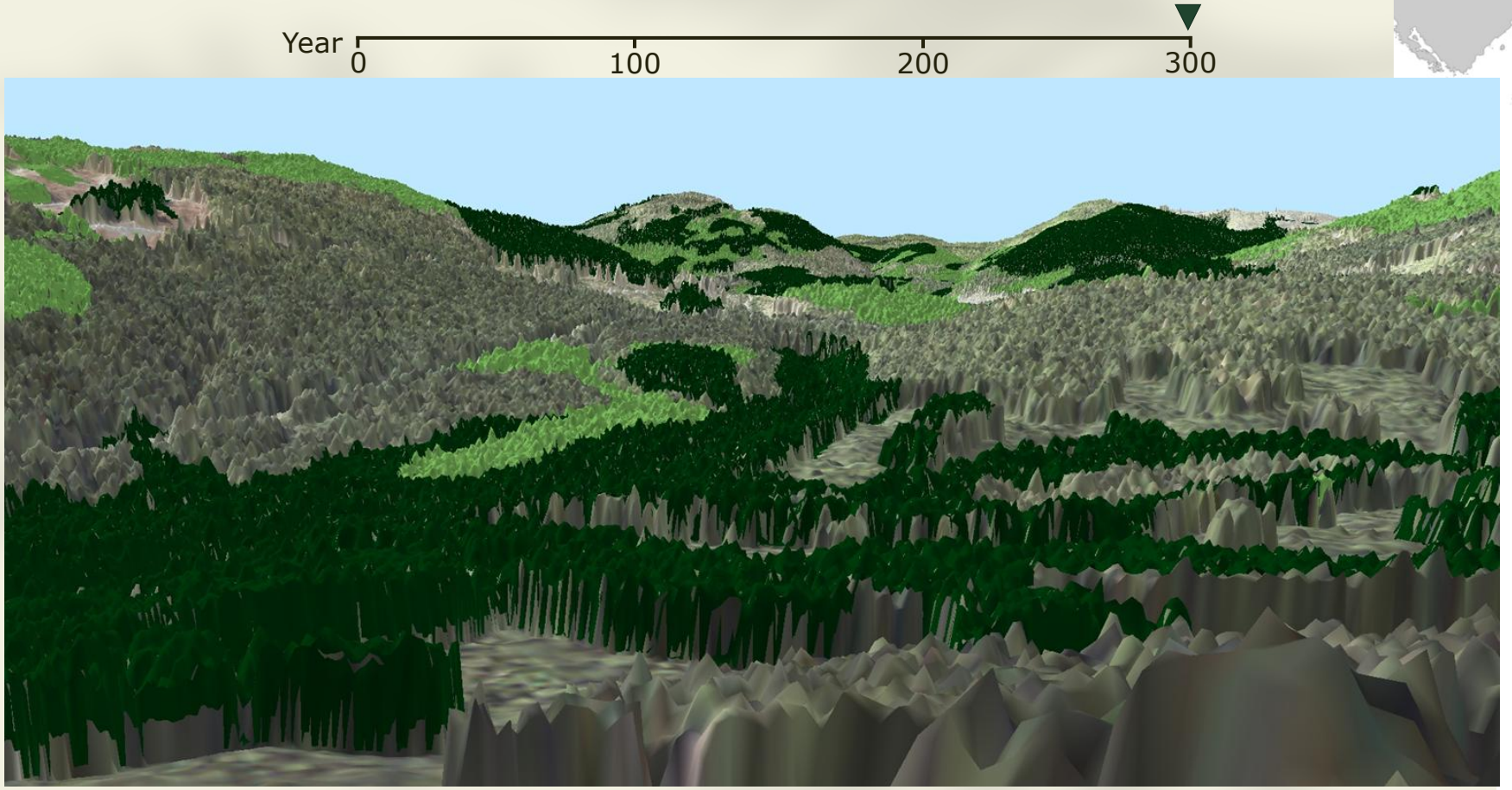


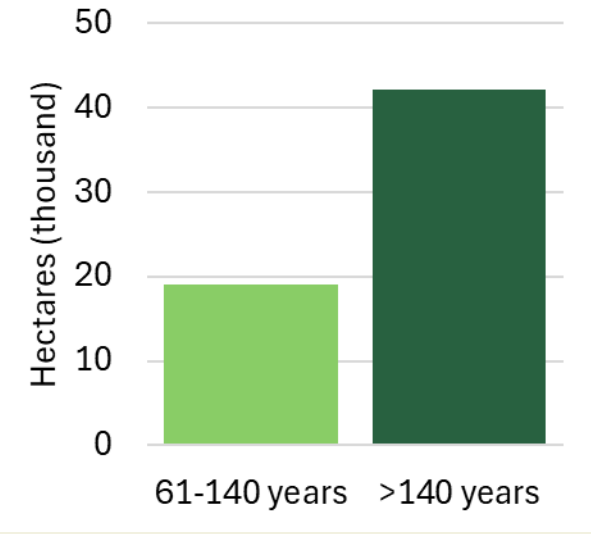
61-140 >140

Age of connected forest

Connectivity



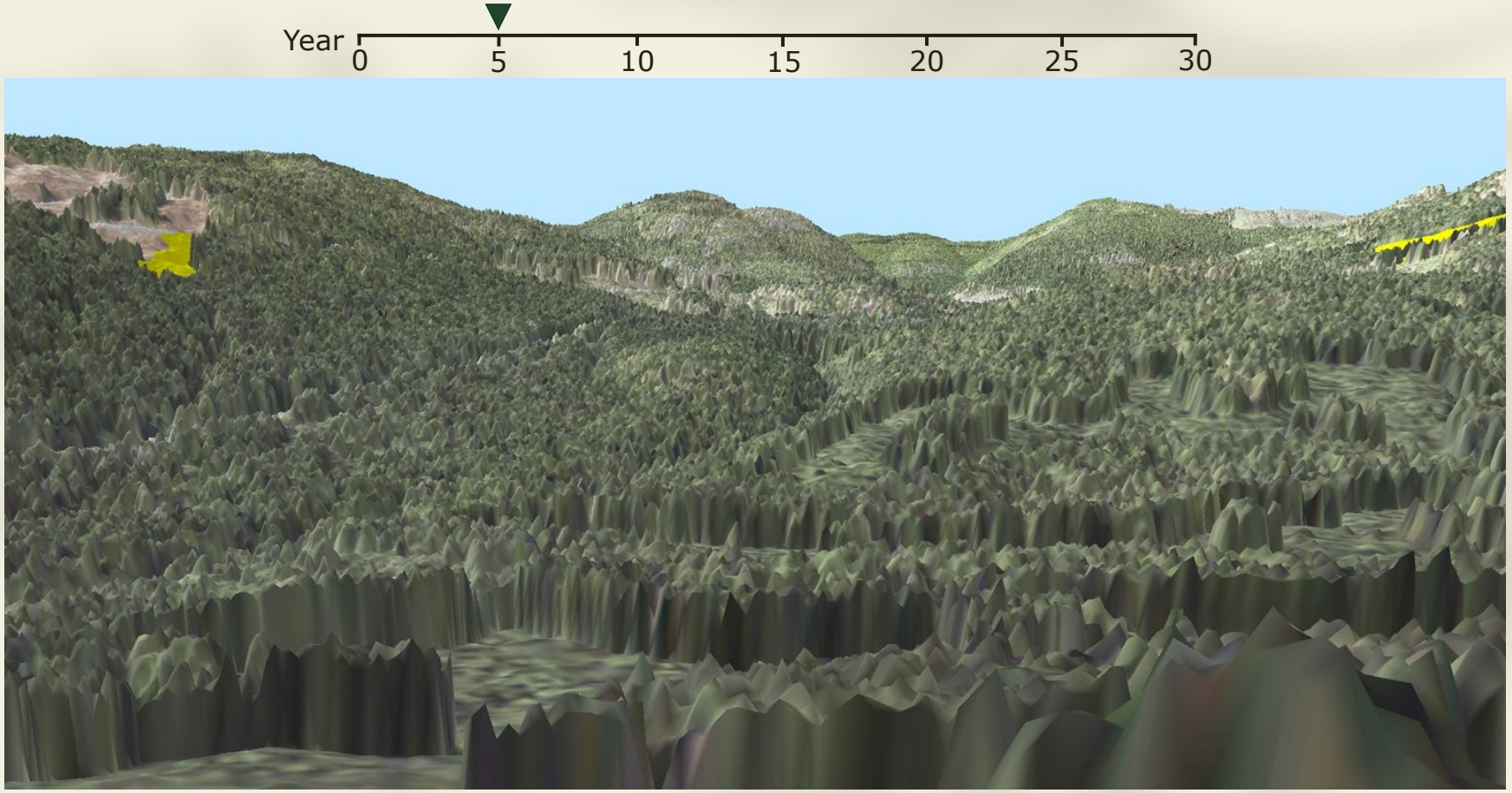




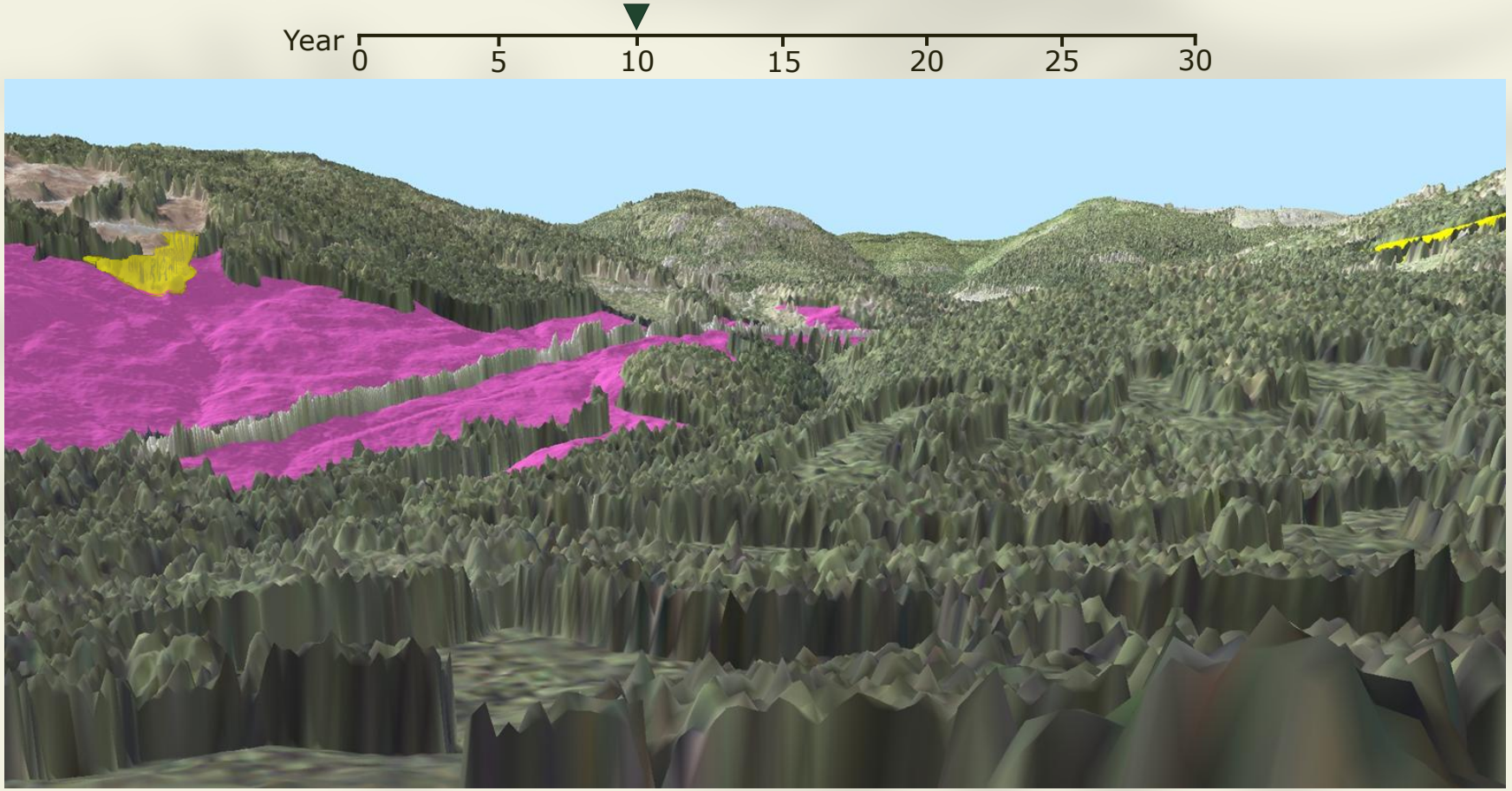
61-140 >140

Age of connected forest

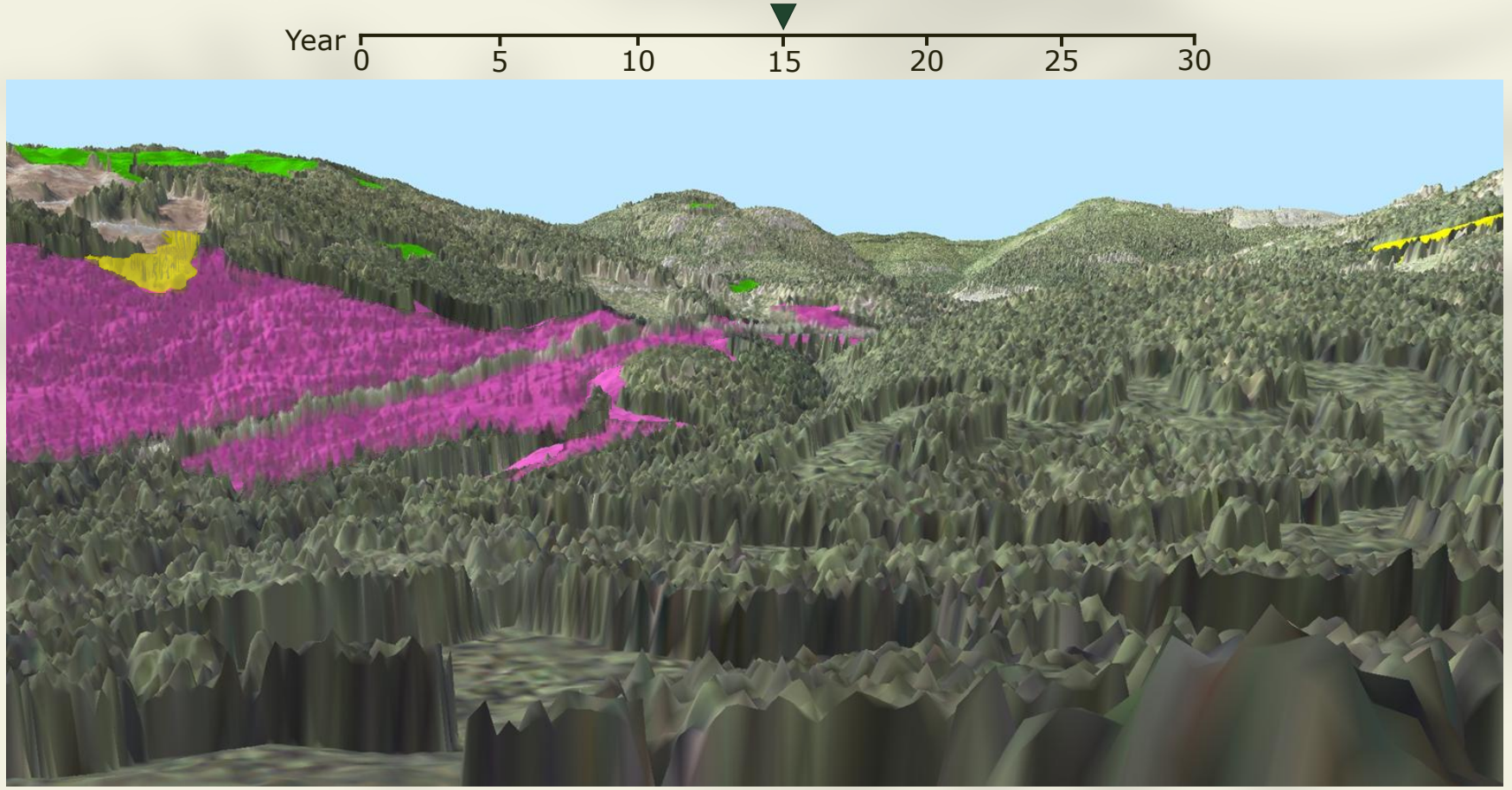
Harvest Pattern



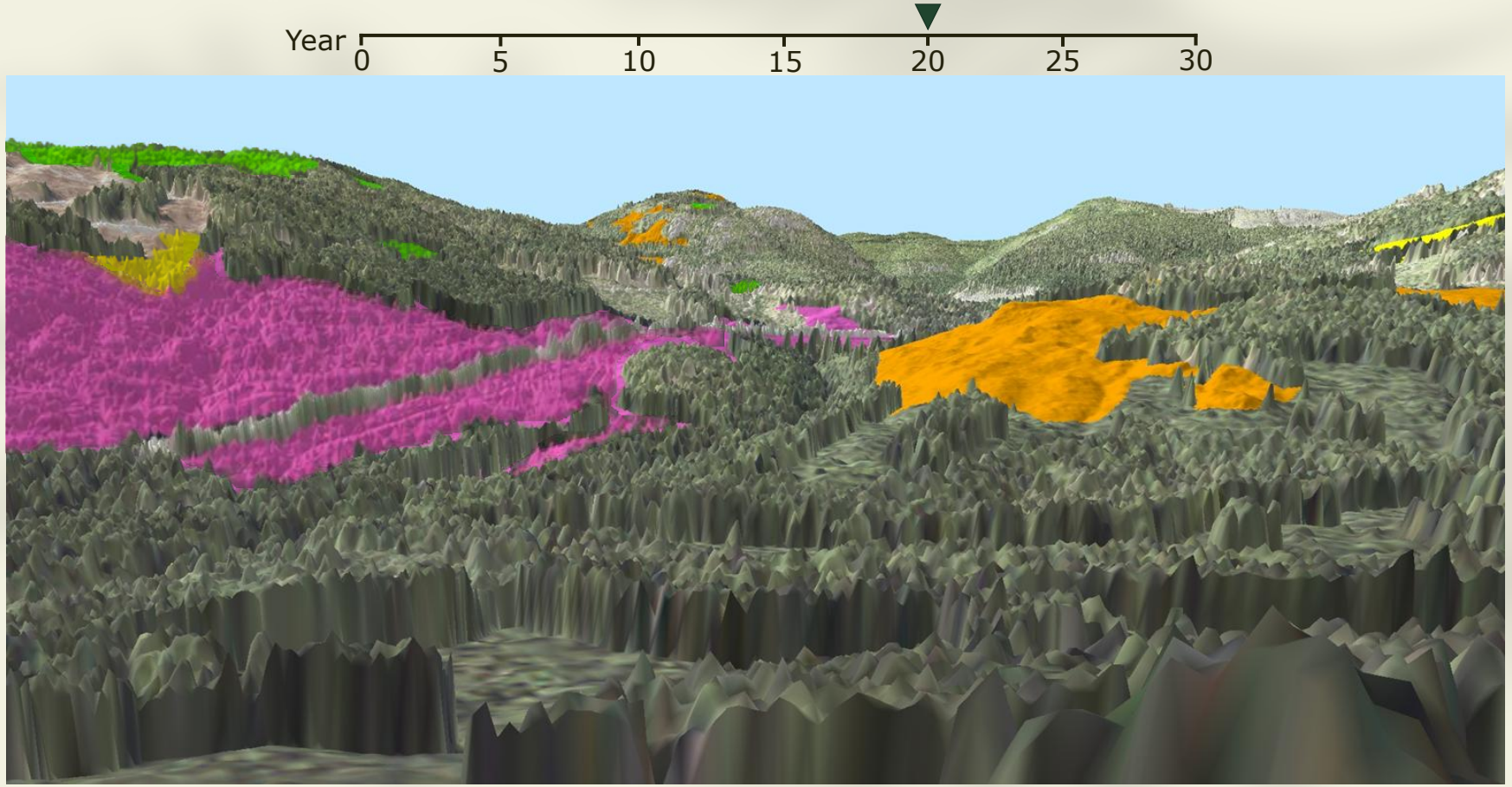
Harvest Pattern



Harvest Pattern



Harvest Pattern



Multi-Scale Planning

- Multi-scale planning allows the Technical Team to evaluate numerous outcomes spatially and temporally under various proposed scenarios.
- Other outcomes include:
  - Wildlife habitat types
  - Interior forest habitat
  - Riparian forest condition
  - Area for cultural use
  - Age class of rare ecosystems



Multi-Scale Planning

- Can evaluate impacts at any scale (e.g. TFL, territory, watershed)
- The harvest and road pattern flows directly from the model
- Ensures that it is consistent with other outcomes
- Greatly simplifies operational planning and development of the Forest Operations Plan



Next Steps - Public Engagement

- Open House
- Online Survey