Board of Forestry Subcommittee on Alternative Forest Management Plans

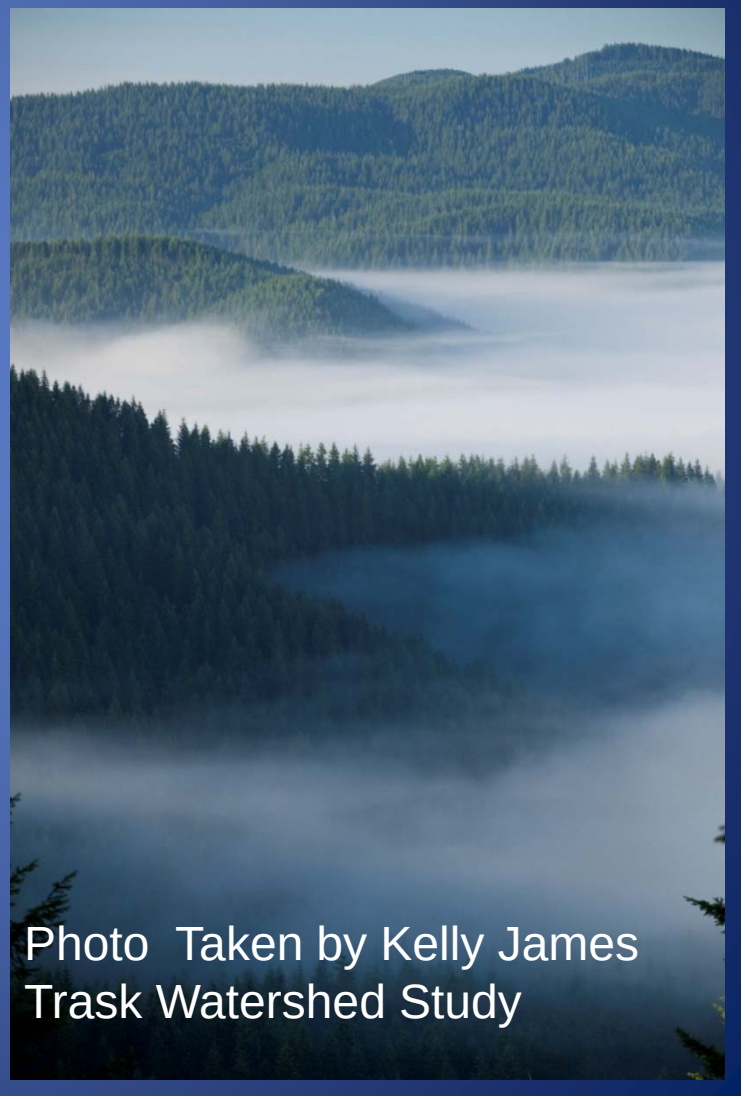
February 17th, 2015

Process Overview

- Products and timelines

Financial Viability, Conservation & Production

Financial Viability Background

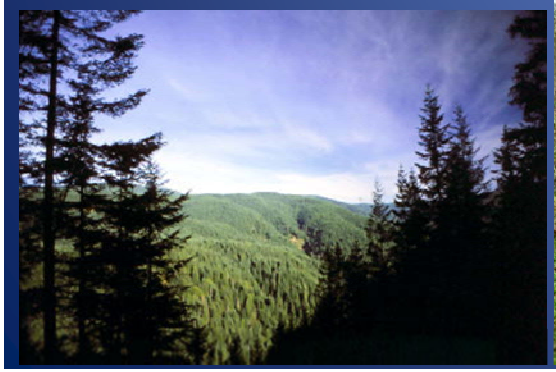
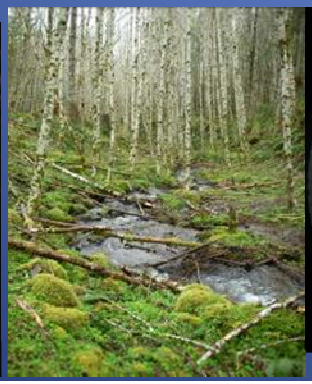
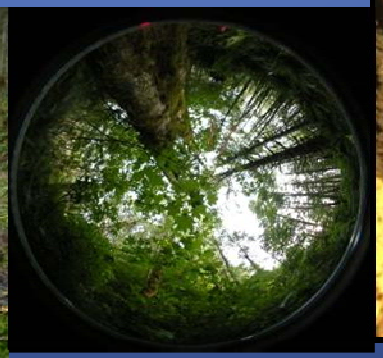


Financial Viability

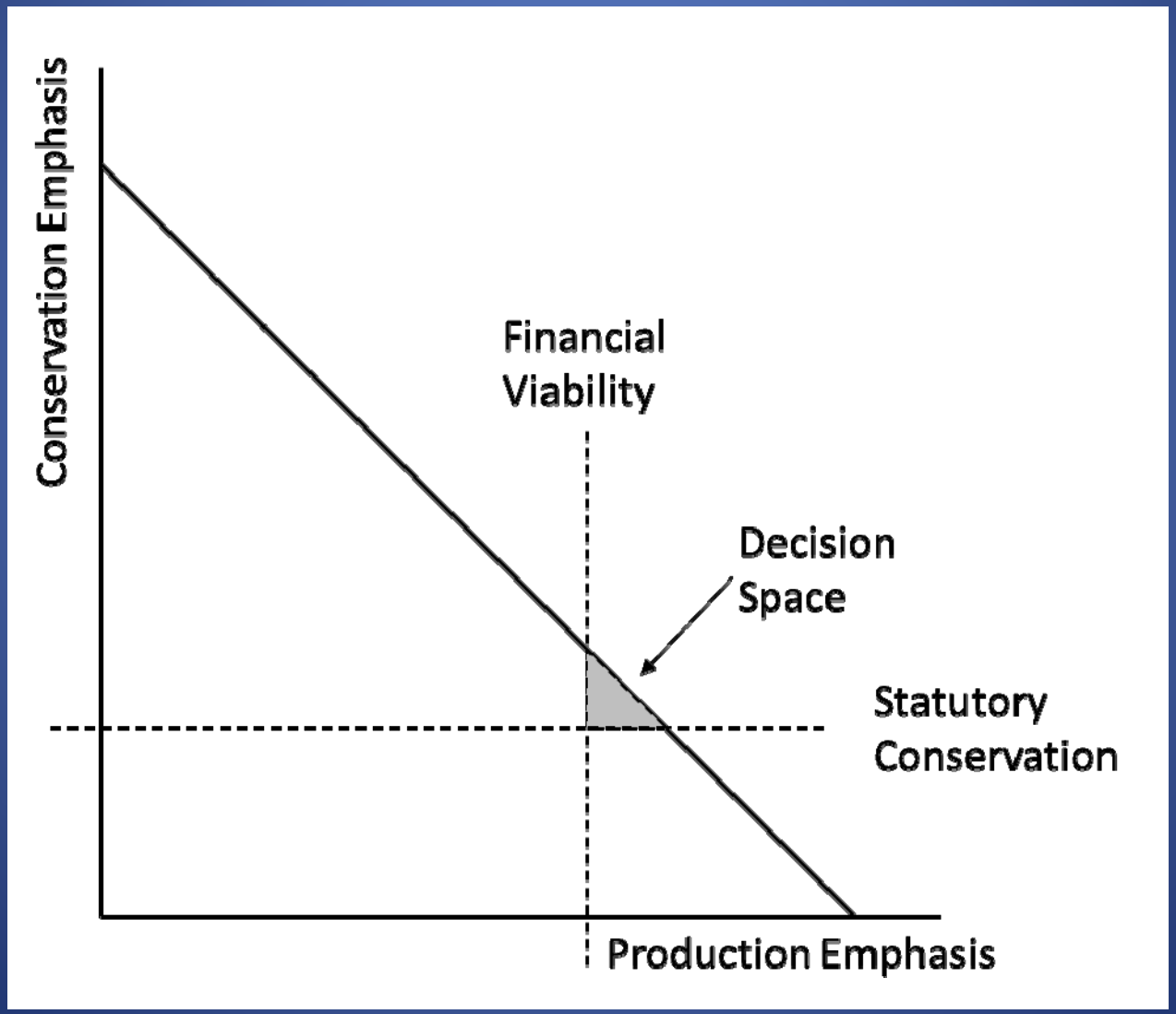
- Definition
  - Sufficient revenue to fully implement approved forest management plans
  - While providing the desired balance of environmental, social, and economic benefits
- Goals
  - Baseline Implementation Draft Estimate = $7 million
  - Full Implementation Draft Estimate = $10 million

Strategies for achieving Financial Viability

- Developing a new forest management plan
  - Land Allocation Approach
- Pursuing other sources of revenue
- Improving business practices


Balancing conservation and production emphasis



Conceptual Definition

- *"Conservation is the maintenance of essential ecological processes, preservation of genetic diversity, and sustainable use of species and ecosystems".*

- Adapted from: International Union for Conservation of Nature and Natural Resources (IUCN). 1980. *World Conservation Strategy*: *Living Resource Conservation for Sustainable Development*. 77pp.

Key Conservation Concepts

- Maintenance essential ecological processes
  - Primary production, decomposition, nutrient flux…
  - Community composition and diversity, food webs…
- Preservation of genetic diversity
  - Essential for species persistence in a dynamic environment
- Sustainable use of species and ecosystems
  - Utilization does not exceed capacity

Conservation Strategy Goals

- Manage for the long-term persistence of the native flora and fauna
- Maintain a diversity of habitats across the landscape over time
- Foster resilience of populations to disturbance at various spatial scales
- Adaptation to Climate Change

Conservation Strategies

- Three levels: forest stand, forest landscape, and aquatic networks
- Suite of management actions over the entire landscape
- Diversity of habitats for species persistence

Conservation-Emphasis Areas

- Areas with High Conservation Value
  - Species of Concern Management Areas
  - Riparian and Wetland Habitats
  - Rare or Fragile Habitats
  - High Scenic or Recreational Value
- Durable Commitment to Conservation
  - Amount and Function over Long-term
  - Responsive to Change (and need for balance)

Conservation-Emphasis Areas: Guiding Principles

- High conservation value
- Maintain ecosystem function
- Passive and active approaches
- Complementary strategies elsewhere
- Responsive and flexible

Implementation

- Multiple spatial scales
- Across emphasis areas
- Likely components:
  - Habitat for species of concern
  - Legacy retention
  - Aquatic and riparian
  - Unstable slopes
  - Others…

Measures of Success: Meeting Conservation Objectives

- Diverse habitats
- Functional habitats
- Late-seral forests
- Mature riparian forests
- Native communities
- Water quality

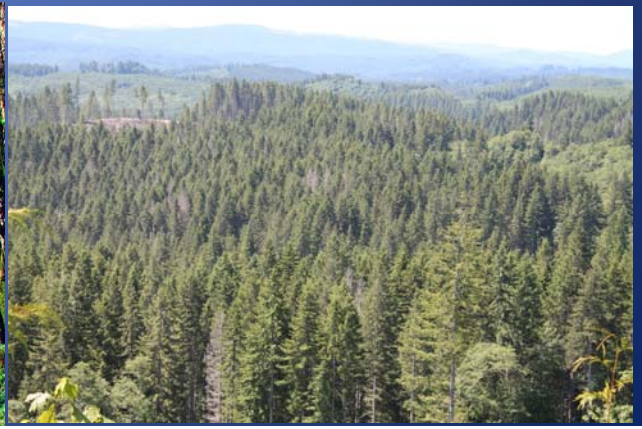
Production Emphasis Areas

Provide environmental, social and economic benefits with primary focus on maximizing volume and value over the planning horizon

Production Emphasis Goals

- Sustainable and predictable timber harvest
- Generate sufficient revenue to support State Forest business operations; counties and local taxing districts; Common School Fund;
- Contribute to Oregon's timber supply;
- Promote the maintenance, growth, and development of forest trees and stands
- Maximize the value of timber products produced
- All of which contribute to social values





Production Emphasis Strategies

- Promote the growth of trees in manner designed to attain desired products;
- Manage risks of future encumbrances
- Manage risk of loss due to insects, disease, fire, and wind throw
- Ensure resilience to uncertainty

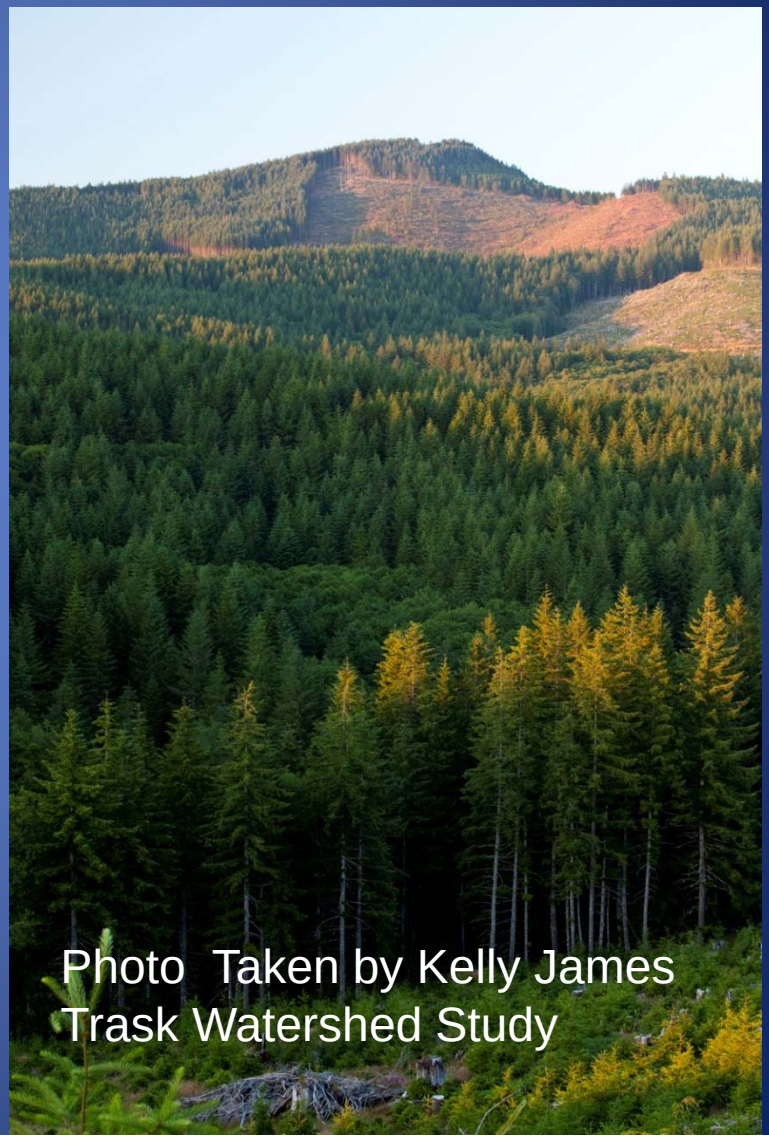
Production Emphasis Vision of Implementation

- Produce trees in a range of diameter (14”-28” dbh) and age classes (40-80 years old)
- Legacy retention
- Riparian buffers



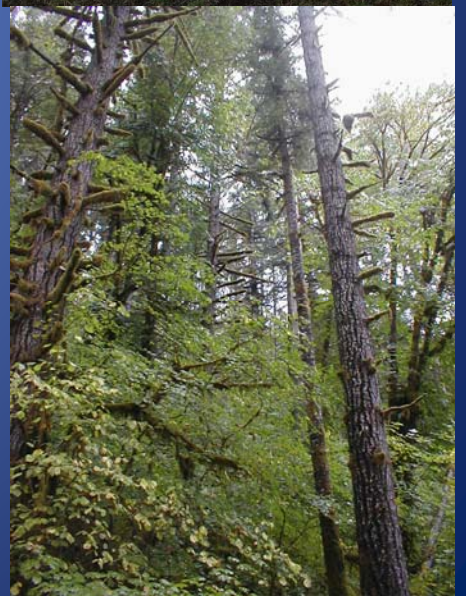
Production Emphasis Example Scenario

- Regeneration harvest
- Mechanical and/or chemical site preparation
- Site appropriate planting densities and species
- Competing vegetation release treatments
- Pre-commercial thinning where necessary
- Evaluate fertilization opportunities where appropriate
- Commercial thinning dependent on stocking, past treatments, stand condition



Production Emphasis Measures of Success

- Achieve and maintain financial viability;
- Achieve and maintain a balance of acres across age and size classes to produce a sustained yield consistent with Implementation Plan(s) acreage ranges;
- Appropriately match site and species composition with silvicultural prescriptions that promote high volume production;
- Regeneration harvests occur as targeted stand age and size are met;
- Improve the productive potential of all the goods and services desired from production-emphasis areas;
- Generate long term sustainable volume that provides product diversity to meet the needs of future markets.



Durability of Conservation-emphasis and Production emphasis

- Plan will maintain specified conservation and production area split

Comment Period

- FTLAC
- Public

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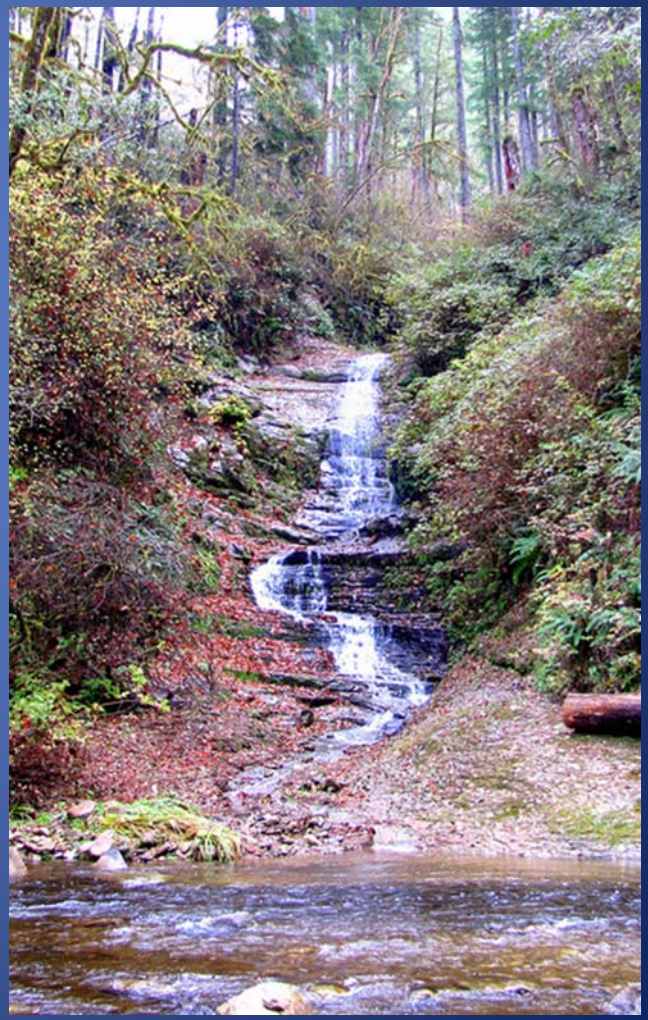
Subcommittee

- Affirm Principles/Definition/ Measures
  - Financial Viability
  - Conservation emphasis
  - Production emphasis
  - Durability
- Subcommittee findings to be delivered to the board



Overview of FMP Development

- Update on writing progress
- Update on Modeling
- Maps

Update on writing progress

- Sections drafted and reviewed:
  - Introduction materials
  - Vision and Guiding Principles drafted and updated to reflect the land allocation approach
  - Monitoring, Research and Adaptive Management section
  - Oregon's Economy
  - Cultural Resources
  - Scenic Resources
  - Asset Management Guidelines
  - Special Forest Products
  - Energy and Mineral Resources
  - Forest Health
  - Air Quality

Update on writing progress cont.

- Drafted and currently in review by districts:
  - Recreation
  - Land Base and Access; Roads
  - Geology, Soils, Slope Stability
  - Terrestrial Resources – wildlife, plants
  - Aquatic Resources – fish, water quality

Update on writing progress cont.

- Drafting supplemental materials
  - Appendices
  - Policy refresh
- Board Interactions
  - Draft FMP to Subcommittee in May
  - Draft FMP to Board in June

Modeling Overview

- Status of the modeling process
- Brief overview of software used
- Model assumptions and future products

Current approach

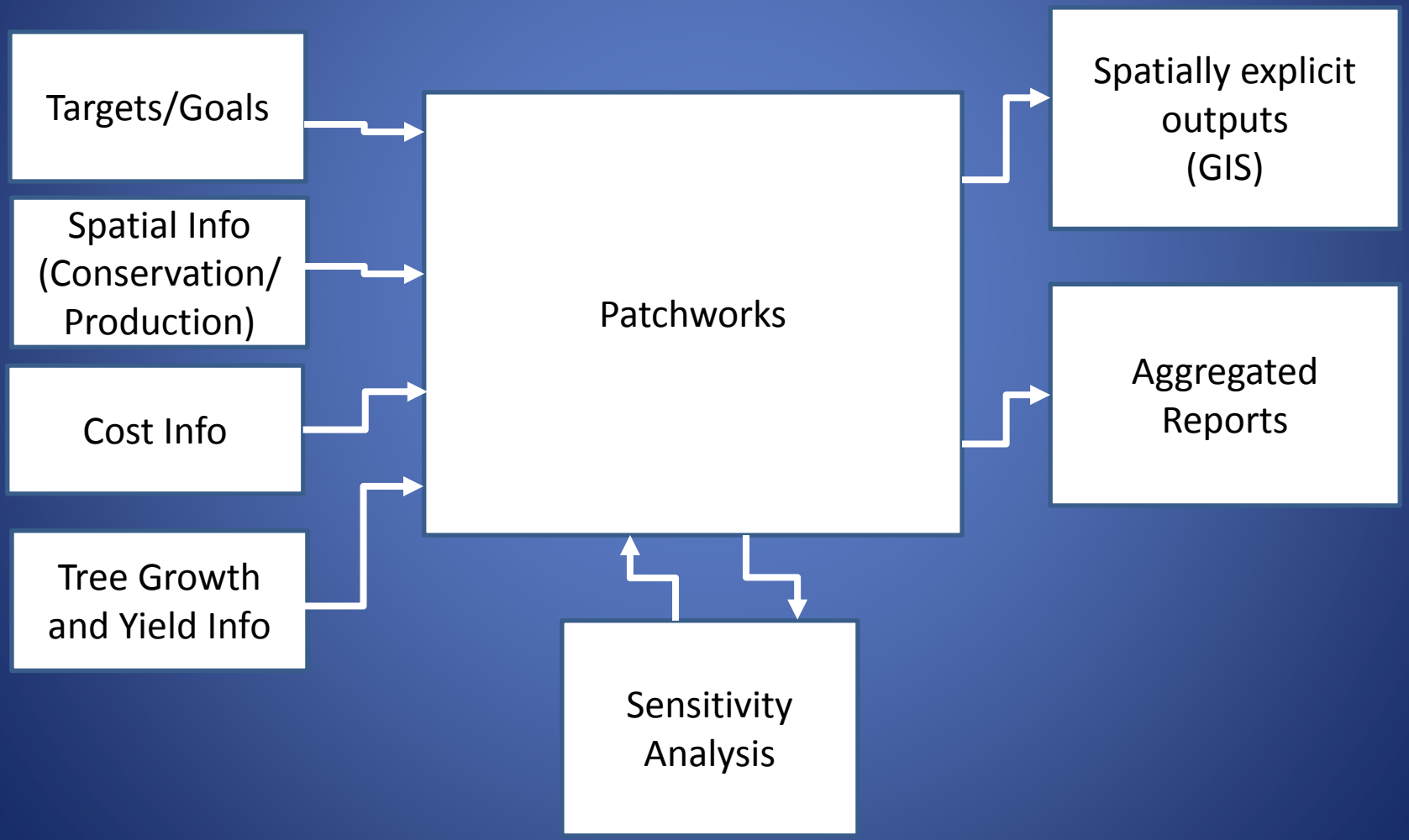
- Validate the model
- Develop framework - transparent and flexible
- Implement a large set of assumptions
- Produce a scenario for field review
- Process the unique set of constraints on State Forest land

Patchworks Features

- Sustainable forest management optimization model
  - Spatially explicit
  - Integrates operational requirements in strategic analysis
- Tracks stand characteristics over long time horizons.
  - Can apply production emphasis or conservation emphasis
- Built-in sophisticated and flexible transportation model.
- Balances strategic goals of production and conservation emphasis areas.

Model Information Flow

Optimize Conservation and Production Goals



Summary

- Current modeling efforts are focused on building a framework that will be used in simulating desired outcomes as directed by policy.
- The model is driven by a combination of policy directives, regulatory requirements and operational feasibility for State Forest.
- The modeling process will be used to find solutions to complex spatial problems and provide decision support.

Timeline & Next Steps

Photo Taken by Kelly James
Trask Watershed Study