

# TIMBER SUSTAINABILITY ON THE BLACK HILLS NATIONAL FOREST

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# ENGAGING PARTNERS AND STAKEHOLDERS

- Working together in an inclusive process through Shared Stewardship.
- We have engaged with Stakeholders and Local Government through several meetings and are committed to continuing this dialogue.
- “Shared Stewardship is about working together in an integrated way to make decisions and take actions on the land.”
  - USDA Forest Service Chief Vicki Christiansen
- [Shared Stewardship Video](#)
- Through a transparent and open process the Forest Service has made all the data available to the public and all stakeholders
- In 2017 through a Collaborative Agreement the Forest Service convened a working group that identified five questions about forest condition.

# FOREST INFORMATION

- 1997 Forest plan-standing volume estimate 13 million CCF
- 2006 Amended (Phase II) added Structural Stage Objectives
- National Forest System lands = 1,242,713 acres
- Suitable timber lands = 824,240 acres (2016)
- Wildfires since 1997 - 219,380 acres
  - (Jasper/Myrtle and more)
- MPB Mortality - 225,000 acres
  - (affected acres 450,000 acres)
- Timber harvest average last ten years – 203,137 CCF/Yr
- Current FIA standing volume estimate 5.9 million CCF

# **SUSTAINABILITY- FS LAW, POLICY, AND REGULATION**

- The Multiple-Use Sustained Yield Act (MUSYA) of 1960 authorizes and directs national forests to be managed under principles of multiple use and to produce a sustained yield of products and services.
- The National Forest Management Act (NFMA) of 1976 limits the sale of timber from each national forest lands to a quantity equal to or less than a quantity which can be removed in perpetuity on a sustained-yield basis.

# WHAT IS THE CURRENT FOREST RESOURCE CONDITION? 5 QUESTIONS FOR FIA ANALYSIS

1. What is the standing live volume estimate for Black Hills NF?
  - How much volume is currently on the Black Hills total.
2. What is the annual gross growth estimate for Black Hills NF?
  - Gross growth is simply how much does the forest grow/year.
3. What is the annual net growth estimate for Black Hills NF?
  - Net growth = gross growth minus mortality
    - Mortality is defined as natural causes i.e. weather, bark beetles, fire
4. What is the net growth to removal ratio on Black Hills NF?
  - Net growth must be  $\geq$  removal to be sustainable.
5. What is the ability to produce an available sustained yield on the Forest (timberlands/suitable base) for the next decade?
  - General Technical Report (GTR)

# Forest Inventory and Analysis

## We are the Nation's Forest Census

The Forest Inventory and Analysis (FIA) Program of the U.S. Forest Service provides the information needed to assess America's forests.

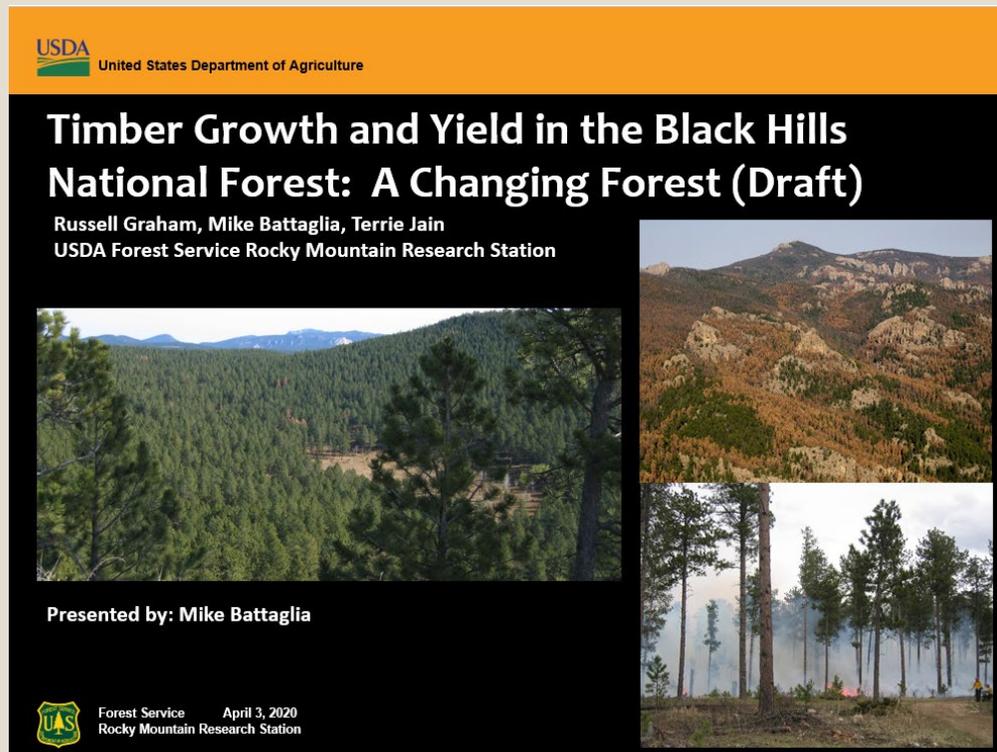
The long history of scientifically credible FIA data provides critical status and trend information to resource managers, policy makers, investors, and the public through a system of annual resource inventory that covers both public and private forest lands across the United States.

FIA reports on status and trends in forest area and location; in the species, size, and health of trees; in total tree growth, mortality, and removals by harvest; in wood production and utilization rates by various products; and in forest land ownership.

# FIA DATA SUMMARY

Species & Diameter Limit	Inventory CCF	Net Growth CCF	Harvest Levels CCF	% Net Growth of Inventory	% Removal of Inventory	% Change in Inventory
Within the suitable base						
Ponderosa pine ≥ 5 inches dbh	7,958,314	-59,654	183,592	-0.7%	2.3%	-3.1%
Ponderosa pine ≥ 9 inches dbh	5,995,428	-27,715	153,534	-0.5%	2.6%	-3.0%

# DRAFT GENERAL TECHNICAL REPORT (GTR)



- Typical audience: Resource managers, scientists, and general forestry public
- If a document is considered “Influential,” meaning the scientific, financial, or statistical information will have a clear and substantial impact on the resolution of one or more key issues in an economically significant rulemaking, then it is subject to the Data Quality Act.

# DRAFT GTR KEY POINTS/HIGHLIGHTS

- All scenarios model sawtimber volume 9+ inches Diameter at Breast Height (D.B.H)
  - D.B.H. = diameter 4.5 feet above ground
- Dependent on estimates of standing live volume, tree growth and mortality rates.
- Future conditions can only be inferred from past conditions.
- Scenarios estimate different outputs based a range of variables
- Probable growth and mortality estimates suggest a saw timber program on the BHNF with an annual harvest of 70,000 to 115,000 CCF
- Over 200 public comments were received in response to GTR
- Estimated publish date for Final GTR is August, 2020

## Existing Estimate of Structural Stages within the suitable timber base

SS	Obj	Current
1	5	8.2%
2	5	5.8%
3a	10	8.7%
3b	15	5.1%
3c	5	2.9%
4a	25	38.8%
4b	25	19.8%
4c	5	10.1%
5	5	0.6%

Red = not meeting objective

Green = at or above objective

## **STRUCTURAL STAGE 1**



**grass**

## **STRUCTURAL STAGE 2**



**seedlings <1"**

**STRUCTURAL STAGE 3A**



**Size  
1" to 8.9"**



**STRUCTURAL STAGE 3B**



**STRUCTURAL STAGE 3C**

**STRUCTURAL STAGE 4A**



**Size  
9" +**

**STRUCTURAL STAGE 4C**



**STRUCTURAL STAGE 4B**



# STRUCTURAL STAGE 5



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# NEXT STEPS AND TAKE HOME MESSAGE

- GTR is not a decision document, it provides the best available science to inform the decision making process
  - Black Hills National Forest has not committed to a decision by a set date, through Shared Stewardship BKNF is still seeking input from many stakeholder groups as we are doing tonight.
  - National Forest Advisory Board recommendations
  - Final GTR will be published in August.
- Black Hills National Forest values continuing our 120 year partnership with timber industry. The FS and USDA have a commitment to sustaining rural economies.
  - Forest health is important to our communities and timber industry is an important partner in forest management.



### Relative Size at Age 45

3' x 3'   7' x 7'   12' x 12'   17' x 17'

Spacing



Thinning early  
alters the growth  
and mortality  
trajectory

# ADDITIONAL INFORMATION

<https://www.fs.usda.gov/detail/blackhills/landmanagement/resourcemanagement/?cid=fseprd731012>

