These abbreviated summary minutes and the audio recording will become the official adopted minutes at the next Land Board meeting when the board votes to officially approve them. Until then they are considered a draft.

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MINUTES
REGULAR MEETING OF THE BOARD OF LAND COMMISSIONERS
July 20, 2020, at 9:00 a.m.
State Capitol, Room 303
Helena, MT

Please note: *The Land Board has adopted the audio recording of its meetings as the official record, as allowed by 2-3-212, MCA. These minutes provide an abbreviated summary of the Land Board discussion, public testimony, action taken, and other activities. The time designations listed are approximate and may be used to locate the referenced discussion on the audio recording of this meeting. Access to an electronic copy of these minutes and the audio recording is provided from the Land Board webpage at http://dnrc.mt.gov/LandBoard. The written minutes summary, along with the audio recordings, are listed by meeting date on the Land Board Archive webpage.*

Members Present

Governor Steve Bullock
Attorney General Tim Fox (via phone)
Commissioner of Securities and Insurance Matthew Rosendale
Secretary of State Corey Stapleton (via phone)
Superintendent of Public Instruction Elsie Arntzen (via phone)

Members Absent

None

Testifying Staff

John Tubbs, DNRC, Director
Bill Schenk, FWP, Lands Program Manager
Mimi Wolok, FWP, Land Conservation Specialist
Dan Rogers, DNRC, Forest Management Bureau Chief

Attachments

Related Materials, Attachment 1 – sign-in sheet
Related Materials, Attachment 2 – Summary and Implementation Strategy 2020 Sustainable Yield Calculation

Call to Order

00:00:10 Governor Bullock called the meeting to order.

00:00:32 Commissioner Rosendale moved to approve the June 15, 2020, minutes. The motion was seconded by Superintendent Arntzen and carried unanimously.

Business Considered

0720-1 FWP: GARRITY MOUNTAIN WMA STUMPTOWN ADDITION/ FEE ACQUISITION:

00:00:55 Mr. Tubbs
00:01:03 Governor Bullock
00:01:05 Bill Schenk, FWP, Lands Program Manager gave an overview of the item.
00:01:08 Governor Bullock
00:01:18 Mr. Schenk
00:04:17 Governor Bullock

DRAFT

Public Comment

00:04:31 Chris Marchion, Anaconda Sportsman's Club
00:10:32 Governor Bullock
00:10:40 Mike Mueller, Rocky Mountain Elk Foundation, Senior Lands Program Manager
00:11:37 Governor Bullock
00:11:38 Mr. Mueller
00:14:28 Governor Bullock
00:14:38 Terry Vermeier, Anaconda- Deer Lodge Country Commission, Commission Chair
00:15:15 Governor Bullock
00:15:32 Dave Stone, Anaconda Sportsman's Club, Vice President
00:17:10 Governor Bullock
00:17:23 Mr. Stone
00:18:54 Governor Bullock
00:18:54 Mr. Stone
00:19:20 Governor Bullock
00:19:28 Nick Gevock, Montana Wildlife Federation, Conservation Director
00:20:33 Governor Bullock

00:20:44 Commissioner Rosendale moved to approve item 0720-1. The motion was seconded by Superintendent Arntzen.

Board Discussion/Comments

00:21:05 Governor Bullock

00:21:47 The motion to approve item 0720-1 carried unanimously.

0720-2A FWP: FISHING ACCESS SITE PURCHASE

A. CONFLENTUS CORNER FISHING ACCESS SITE

00:22:04 Mr. Tubbs
00:22:15 Mr. Schenk gave an overview of the item.
00:25:53 Governor Bullock

Public Comment

00:26:01 Gates Watson, The Conservation Fund, Vice President
00:26:57 Governor Bullock
00:27:07 Mr. Gevock
00:27:43 Governor Bullock

00:27:51 Attorney General Fox moved to approve item 0720-2A. The motion was seconded by Commissioner Rosendale.

Board Discussion/Comments

00:28:11 Governor Bullock
00:28:13 Superintendent Arntzen
00:28:21 Governor Bullock
00:28:23 Superintendent Arntzen
00:28:56 Mr. Schenk
00:29:44 Superintendent Arntzen
00:29:48 Governor Bullock
00:29:49 Superintendent Arntzen
00:30:40 Mr. Schenk

DRAFT

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00:30:50 Superintendent Arntzen
00:31:22 Mr. Schenk
00:32:20 Governor Bullock
00:32:21 Mr. Schenk
00:32:34 Mimi Wolock, FWP, Land Agent
00:32:57 Governor Bullock
00:33:03 Superintendent Arntzen
00:33:04 Governor Bullock

00:33:23 The motion to approve item 0720-2A carried unanimously.

0720-2B FWP: FISHING ACCESS SITE PURCHASE
B. C. BEN WHITE MEMORIAL FISHING ACCESS SITE

00:33:44 Mr. Schenk gave an overview of the item.
00:37:14 Governor Bullock
00:37:24 Randy Arnold, FWP, Regional 2 Supervisor
00:40:36 Governor Bullock

Public Comment

00:40:51 Gavin Ricklefs, Bitterroot Land Trust, Executive Director
00:43:40 Governor Bullock
00:43:47 Mr. Gevock
00:44:44 Governor Bullock
00:44:53 Mr. Stone
00:45:36 Governor Bullock

00:45:49 Commissioner Rosendale moved to approve item 0720-2B. The motion was seconded by Secretary Stapleton and carried unanimously.

0720-3 TIMBER SALE: SCHMIDT CREEK SALVAGE

00:47:12 Mr. Tubbs gave an overview of the item.
00:47:54 Governor Bullock

00:48:04 Commissioner Rosendale moved to approve item 0720-3. The motion was seconded by Superintendent Arntzen and carried unanimously.

0720-4 FOREST MANAGEMENT BUREAU: IMPLEMENTING THE 2020 SUSTAINABLE YIELD CALCULATION (SYC)

00:48:40 Mr. Tubbs gave an overview of the item.
00:49:30 Governor Bullock
00:49:37 Dan Rogers, DNRC, Forest Management Bureau Chief
01:04:09 Governor Bullock

01:04:23 Commissioner Rosendale moved to approve item 0720-4. The motion was seconded by Attorney General Fox and carried unanimously.

Board Discussion/Comments

01:04:48 Superintendent Arntzen
01:05:22 Governor Bullock

DRAFT

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0720-5 LAND EXCHANGE: PRELIMINARY APPROVAL FOR MDC BOULDER LAND EXCHANGE

01:06:22 Mr. Tubbs gave an overview of the item.
01:08:16 Governor Bullock

01:08:28 Attorney General Fox moved to approve item 0720-5. The motion was seconded by Secretary Stapleton and carried unanimously.

0720-6 CABIN AND HOME SITES: FINAL APPROVAL FOR SALE

A. CHOUTEAU COUNTY
B. FLATHEAD COUNTY

01:09:05 Mr. Tubbs gave an overview of the item.
01:09:14 Governor Bullock
01:09:20 Mr. Tubbs
01:10:14 Governor Bullock
01:10:21 Mr. Tubbs
01:10:22 Governor Bullock

01:10:35 Commissioner Rosendale moved to approve item 0720-6A, B. The motion was seconded by Attorney General Fox and carried unanimously.

0720- 7 EASEMENTS:

01:11:26 Mr. Tubbs gave an overview of the item.
01:11:59 Governor Bullock

01:12:09 Commissioner Rosendale moved to approve item 0720-7. The motion was seconded by Superintendent Arntzen and carried unanimously.

General Public Comment

01:13:00 Mr. Gevock
01:14:03 Governor Bullock
01:14:10 Mr. Tubbs
01:15:12 Governor Bullock

Adjournment

01:15:27 Adjournment

PRESIDENT

/s/
Steve Bullock, Governor

ATTEST

/s/
John E. Tubbs, DNRC Director

DRAFT

Related Materials Attachment #1

SIGN-IN SHEET
REGULAR MEETING OF THE BOARD OF LAND COMMISSIONERS
July 20, 2020 at 9:00 am

NAME	AFFILIATION	E-MAIL	*Check to be added to the interested parties list.*
DAVID Stone	Area Spt. Club	daustone6@gmail.com	
Tim Spoelma	DNRC	tspoelma@mt.gov	
Bill Schenk	FWP	bschenk@mt.gov	
Randy Arnold	FWP	rarnold@mt.gov	
Mike Mueller	MMEF	mmueller@mmef.org	
Mark Sumson	DNRC	msumson@mt.gov	
Rick Trappan	BLF	RTrappan@HelenaLaw.com	
Nick Gevock	MWF	ngevock@mtwf.org	

Email landboard@mt.gov or indicate on this sign-in sheet if you would like to be placed on the Land Board interested parties list.

This sign-in sheet is a public record under Title 2, Chapter 6 of the Montana Code Annotated, but may not be reproduced or distributed for use as a mailing list without the permission of the named individuals under 2-6-1017, MCA.

Summary & Implementation Strategy 2020 Sustainable Yield Calculation

This document highlights the purpose and need, design, methods, results and discussion of key factors affecting the Montana Department of Natural Resources & Conservation (DNRC) 2020 Sustainable Yield Calculation (SYC) report. It also reflects changes since the Draft report was released in May, 2020.

Purpose and need for the Sustainable Yield Calculation

The Trust Land Management Division of the Montana DNRC manages ~750,000 commercial forest acres (FIGURE 1) for the benefit of the Common Schools and other endowed institutions. Management activities on those lands focus on providing a consistent and long-term revenue source for the trust beneficiaries, which is generated by selling a consistent annual timber volume. The amount of timber sold annually is determined through a sustainable yield calculation.

MCA 77-5-221 defines **sustainable yield** as "the quantity of timber that can be harvested from forested state lands each year in accordance with all applicable state and federal laws, including but not limited to the laws pertaining to wildlife, recreation, and maintenance of watersheds, and in compliance with water quality standards that protect fisheries and aquatic life and that are adopted under the provisions of Title 75, chapter 5, taking into account the ability of state forests to generate replacement tree growth."

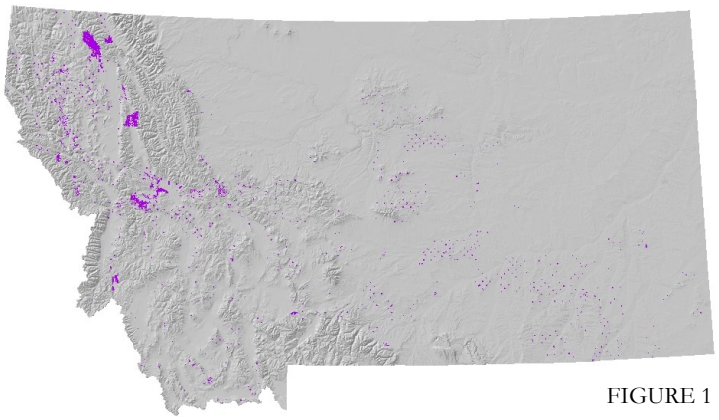


FIGURE 1

State law requires the DNRC to calculate the annual sustainable yield at least once every 10 years in order to incorporate changes in forest conditions, the manageable land base, management intensity, management objectives, or new laws and regulations.

DNRC has performed five sustainable yield calculations prior to 2020. The last calculation was done in 2015 in conjunction with the DNRC's acquisition of over 67,000 acres, and set a sustainable harvest level of 56.9 million board feet (MMBF) annually.

Since the last calculation in 2015, DNRC has acquired ±13,000 additional acres of former industry-owned timber land (FIGURE 2). That acquisition as well as strong encouragement from stakeholders was the catalyst for DNRC to conduct a new calculation, albeit on a smaller scale than the previous 2015 SYC. State law requires that an independent third party conduct a sustainable yield calculation at least once every 10 years.

DNRC SUSTAINABLE YIELD CALCULATIONS

YEARS	CALCULATION (MMBF)	ANNUAL TARGET (MMBF)	MANAGED ACRES
1983	50.0	50.0	399,700
1996	42.2	42.2	363,769
2004	53.2	53.2	430,784
2011	57.6	57.6	469,159
2015	56.9	56.9	570,511
2020	68.3*	60.0*	583,889

*See Qualifications & Recommendations Section

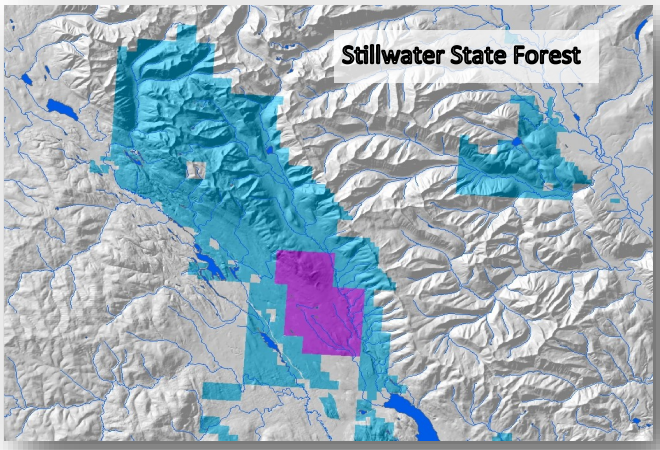


FIGURE 2

In this case, DNRC contracted with Mason, Bruce & Girard, Inc (MB&G) to perform the calculation.

Methods

The data used for the calculation includes descriptions of the different types of forests growing on trust lands, wildlife habitat and water resource data, operability data, and spatial data.

The forest data used for the calculation came from plot data collected by the DNRC on over 6,000 plots on trust lands in the Northwestern, Southwestern, and Central Land Offices and was used to develop descriptions of forests in those areas. U.S. Forest Service Forest Inventory and Analysis data and was used to develop descriptions of forests in DNRC's east-side Land Offices. All of the forest data was summarized by timber type, size, and stocking for each Land Office.

Wildlife habitat data used in the calculation included information regarding habitat for the following animals: grizzly bear (visual screening buffers and security zones), Canada lynx (lynx management areas, potential suitable habitat), and bald eagle (nest sites). Water resource data included the locations of sensitive watersheds and streamside management zones (SMZ) and riparian management zones (RMZ).

Operability data included stands identified as deferred from management, areas suitable only for harvesting using helicopters or skyline (cable) logging systems, areas managed under conservation agreements or easements, and Federal wild and scenic river corridors.

The Forest Vegetation Simulator (FVS) growth and yield model was used to determine estimates of expected forest growth. This model has two variants that apply to forests in Montana: the Inland Empire (IE) variant was used for the Northwestern and Southwestern Land Offices, and the Eastern Montana (EM) variant was used for the Central and east-side Land Offices. For the 2020 SYC, DNRC selected calibrations for FVS developed by outside sources. For the Inland Empire variant, DNRC used a series of FVS keyword files designed to simulate varying levels of western root diseases on forest growth and yield that were developed by the U.S. Forest Service. For the EM variant, DNRC used an FVS calibration developed by MB&G for the Custer-Gallatin National Forest.

Following calibration of the FVS model, simulations were made of DNRC's types of management actions implemented on forested trust lands. These simulations determined the expected growth associated with management activities over time and the harvest volumes associated with those activities for use in the optimization model.

An optimization model was used to apply the management constraints and determine the annual sustainable yield. Constraints are limitations placed on the model that restrict when, where, which, and how often harvesting treatments may be applied. The constraints were determined by laws, administrative rules, and management plans applicable to DNRC's forest management. These included constraints related to operability, harvest and silviculture, wildlife habitat, and water resources.

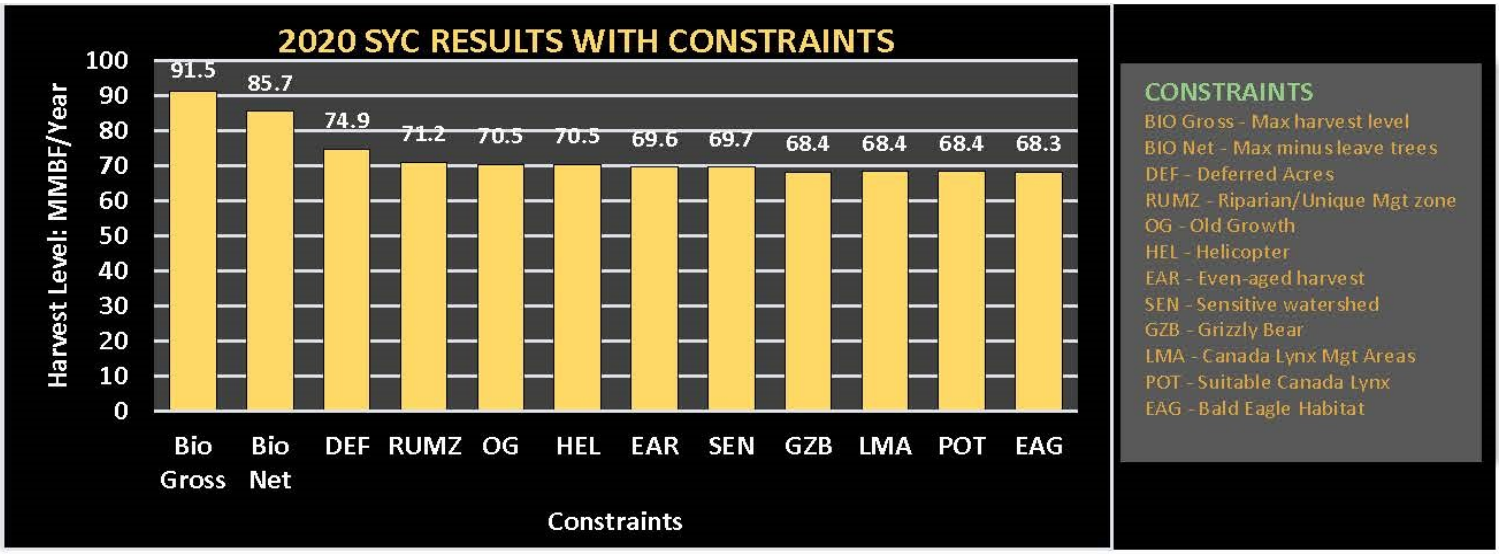
How is the calculation done?

The process of determining the annual SYC involves three steps:

1. Gathering, preparing, and summarizing data to provide a detailed description of the land base

2. Developing estimates of expected forest growth

3. Applying management constraints using an optimization model in order to determine the annual sustainable yield.



Results of the 2020 SYC

For this calculation, two scenarios were evaluated at the Land Office level. Each scenario evaluated a planning horizon of 200 years.

The first scenario incorporated all of DNRC's commercial timber acres, including newly acquired lands, and all of DNRC's programmatic and operational management constraints. The resulting annual sustainable harvest level was 68.3 MMBF, with 583,889 acres contributing to the solution. 163,857 acres were not considered in the solution and received no management--these areas are primarily stands deferred from management and riparian areas.

The second scenario was designed to determine the impact of the ±13,000 recently acquired acres on the sustainable yield. For that scenario, the acquired lands were withdrawn from the model developed for the first scenario where all commercial forest acres were available for management, resulting in an annual sustainable harvest level of 66.8 MMBF and inferring that the addition of those lands contributes 1.5 MMBF to the annual sustainable yield.

For both scenarios, acres identified as suitable only for helicopter logging did not contribute to the annual sustainable yield and were considered to provide an opportunistic amount of volume above and beyond the calculated yields when markets permit. When market conditions are feasible for helicopter logging, those lands could contribute an additional 1.4 MMBF to the annual sustainable yield.

What factors most affected the results?

The results of this calculation show an increase of approximately 20 percent in the annual sustainable harvest volume compared to the previous calculation from 2015 (68.3 MMBF vs. 56.9 MMBF). There are several important factors that distinguish this effort from the prior effort and that provide a significant contribution to these results.

DNRC carefully examined its inventory data and associated cruise plot data used for growth and yield modeling. To improve the correlation of inventory and cruise data and therefore the accuracy of the calculation, DNRC re-stratified both its inventory data and plot data into new species groups and stocking classes for this calculation. This resulted in a significant reduction in the number of timber strata compared to the 2015 calculation, and also necessitated the development of a new set of yield tables for growth and yield modeling.

DNRC re-evaluated the calibration used for the FVS growth and yield model in the 2015 sustainable yield calculation, and for the 2020 calculation used western root disease model calibrations for the IE variant of FVS developed by the U.S. Forest Service, and a calibration developed by MB&G for the Custer-Gallatin National Forest for the EM variant of FVS. These calibrations resulted in increased growth rates across all Land Offices compared to 2015 and that are in line with published growth rates for Montana as well as anecdotal growth rates from industrial private forest landowners in Montana.

DNRC also re-evaluated acres deferred from management in the 2015 calculation and made many acres, particularly in the Central and Eastern areas, available for harvest.

The SYC provides a predictable supply of timber to Montana's wood products industry. DNRC manages <5% of the state's timberland, but annually contributes 15-20% of the statewide harvest volume.

Finally, DNRC evaluated and adjusted the leave tree lists used for even-aged management regimes (clearcut, seed tree, and shelterwood). This resulted in the inclusion of leave tree requirements in management activities having less of an impact on harvest levels compared to 2015.

Qualifications and Recommendations

The primary objective of this project was to determine at a strategic level the amount of timber that the DNRC can sustainably harvest from forested trust lands; however, it was not intended to determine management direction for individual stands. A range of harvest treatment types used by DNRC were simulated and available for use by the model, and although the model is not deterministic with regards to management of individual stands, the types of management used by the model should be reflected in on-the-ground management.

The 2020 SYC has provided an overall constrained result of 68.3 MMBF volume. It is in our program's best interest to meet the intent of MCA 77-5-(222-223) by determining a discrete annual timber sale requirement for the next 10 years or until another comprehensive SYC is required.

The 68.3 MMBF provides the DNRC Trust Lands Forest Management Program with a realistic target, albeit with several ongoing challenges in place. Variables like data quality, parcel access, mill infrastructure, timber markets, and timber sale development costs all play a key role in affecting future projects. Diminished pine markets across the state, specifically in the eastern half, present the most significant challenge in achieving this target over the next 10 years. The DNRC has experienced several sales that have received no bids in recent years that demonstrate this fact. For that reason, the DNRC is recommending a reduction in our annual target to 60.0 MMBF and the creation of an "Opportunity Wood Classification." The ponderosa pine volume from our eastern area offices is available if market opportunities present.

The Trust Lands Program has a standing track record of excellence in the management of its forested lands. We have survived challenging factors related to market volatility, changing ownership patterns and significant demographic turnover in ranks to name a few, and we feel **60.0 MMBF with 8.3 MMBF opportunity volume achievable**. This opportunity volume is considered unharvested, commercial reserves until such time as markets present.

Our current organizational capacity has been reduced as our annual targets have increased. In 2004 our annual targets was 53.2 MMBF with 55.0 Full-time equivalents (FTE). That compares to a current FY21/22 scenario of 60.0 MMBF with 50.0 FTE available. A 6% increase in the annual target represents a significant workload issue for field staff. Add in the potential increases with eastside opportunity volumes and it becomes evident. Without some additional resources in contracts or FTE, we may not be able to fully realize this new target.

DNRC will be requesting Montana State Land Board approve the **2020 Sustainable Yield Calculation of 68.3 MMBF** (8.3 MMBF as "opportunity volume**).** The remaining **60.0 MMBF will remain as the standing annual target** and will be implemented partially in FY21 (58.4 MMBF) with the remaining increase in FY22 to 60.0 MMBF. This volume increase will be dependent on the Trust Lands Forest Management Program having the necessary resources to implement this goal.

For more SYC info visit:

https://go.usa.gov/xv7dS

Persons with disabilities who need an alternative, accessible format of this document should contact the Montana Department of Natural Resources and Conservation - Trust Lands Division, 2705 Spurgin Road, Missoula, MT 59804-3199. Phone (406) 542-4300 or fax (406) 542-4217. 100 copies of this document were published at a cost of $50.00.

Related Materials Attachement #2

DNRC TRUST LANDS FOREST MANAGEMENT 2020 SUSTAINABLE YIELD CALCULATION

MONTANA BOARD OF LAND COMMISSIONERS MEETING

JULY 20, 2020

PREPARED BY:
TRUST LANDS MANAGEMENT DIVISION
FOREST MANAGEMENT BUREAU

MCA 77-5-221

Montana Code Annotated 2019

TITLE 77. STATE LANDS
CHAPTER 5. TIMBER RESOURCES
Part 2. Timber Sales and Removal

Definition

77-5-221. [illegible] "annual sustainable yield" means the quantity of timber that can be harvested from forested state lands each year in accordance with all applicable state and federal laws, including but not limited to the laws pertaining to wildlife, recreation, and maintenance of watersheds, and in compliance with water quality standards that protect fisheries and aquatic life and that are adopted under the provisions of Title 75, chapter 5, taking into account the ability of state forests to generate replacement tree growth.

History: En. Sec. 1, Ch. 517, L. 1995.

…"annual sustainable yield" means the quantity of timber that can be harvested from forested state lands each year… taking into account the ability of state forests to generate replacement tree growth.

MCA 77-5-222

Determination Of Annual Sustainable Yield

77-5-222. **Determination of annual sustainable yield.** (1) (a) On July 1, 2013, the department, under the direction of the board, shall commission a new study by a qualified independent third party to determine, using scientific principles, the annual sustainable yield on forested state lands. The department shall direct the qualified independent third party to determine the yield under the sustained yield principle and shall follow

(b) A new study may be commissioned by the department, under the direction of the board, at any time during the 10-year period provided for in subsection (2).

(2) A determination of annual sustainable yield under subsection (1) must be reviewed and redetermined by the department, under the direction of the board, at least once every 10 years

History: En. Sec. 9, Ch. 517, L. 1995; amd. Sec. 1, Ch. 440, L. 2003; amd. Sec. 1, Ch. 208, L. 2013.

...under the direction of the board, shall commission a new study by a qualified independent third party to determine, using scientific principles, the annual sustainable yield on forested state lands.

MCA 77-5-223

The annual sustainable yield constitutes the annual timber sale requirement for the state timber sale program administered by the department.

WHY HERE – WHY NOW

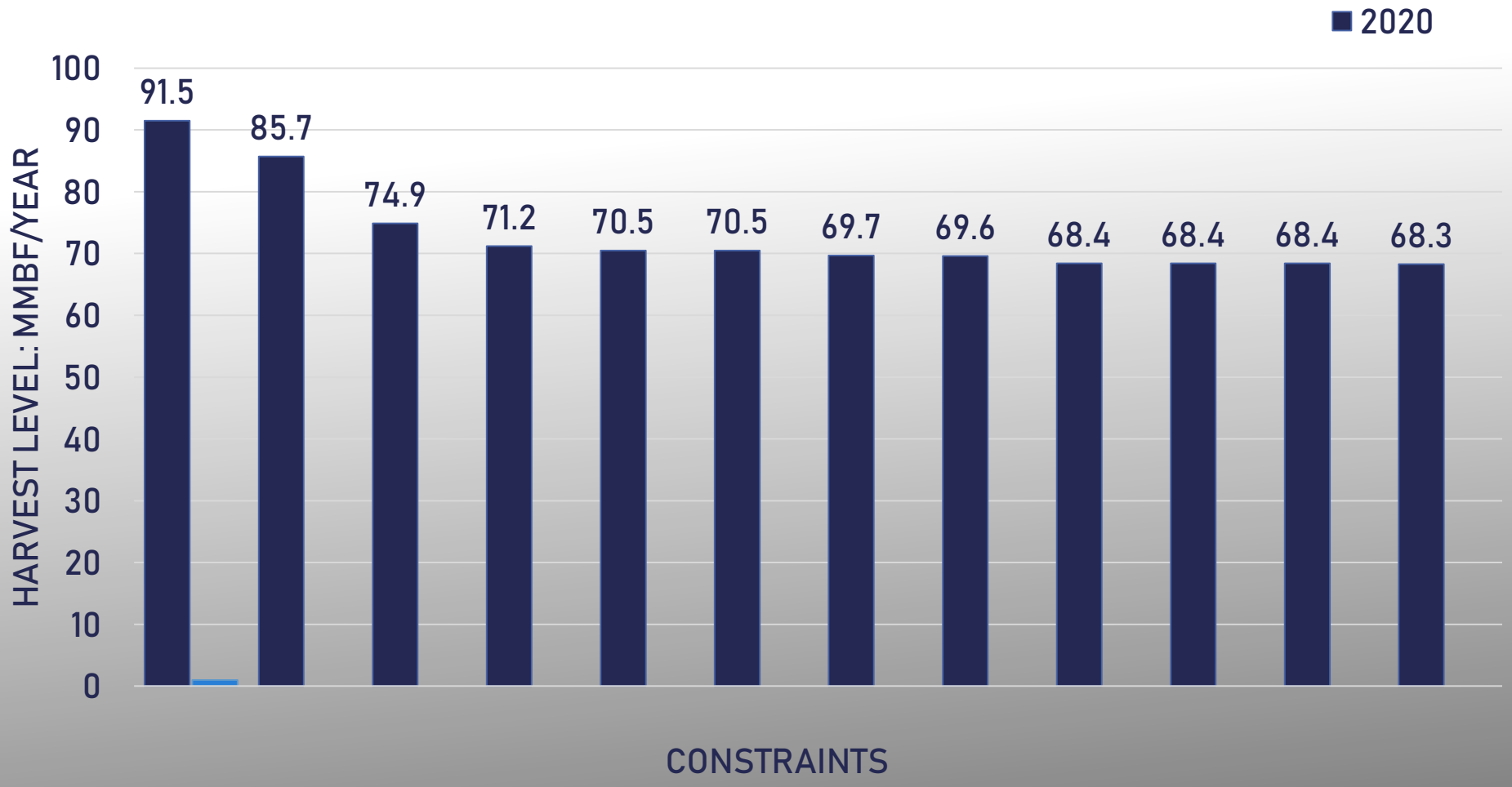
- Acquisition of ~13,000 acres of timberland
- Stakeholder input from 2015

DATA AND METHODS: 2020 VS. 2015

- 90%CI/20% error (2020), 80% CI/20% error (2015)
- Increased consistency between inventory and cruise data
- Revisited deferred acres. ~11,000 acres added to solution 2020
- Addressed operational tendencies within the model ground-based vs cable logging systems
- Revised growth model calibration = increased growth rates

Statewide: fully constrained rate 123 BF/AC/YEAR

EFFECT OF CONSTRAINTS



2020 SYC RESULTS

- Fully Constrained Model: 68.3 MMBF ~17% increase

- Implementation: 60.0 MMBF ~5% increase
- Market-driven "opportunity" volume

SYC RESULTS

Year	Sustainable Yield (MMBF)	Managed Acres
1983	50.0	399,700
1996	42.2	363,769
2004	53.2	430,784
2011	57.6	469,159
2015	56.9	570,510
2020	68.3 (8.3 Opportunity)	583,889

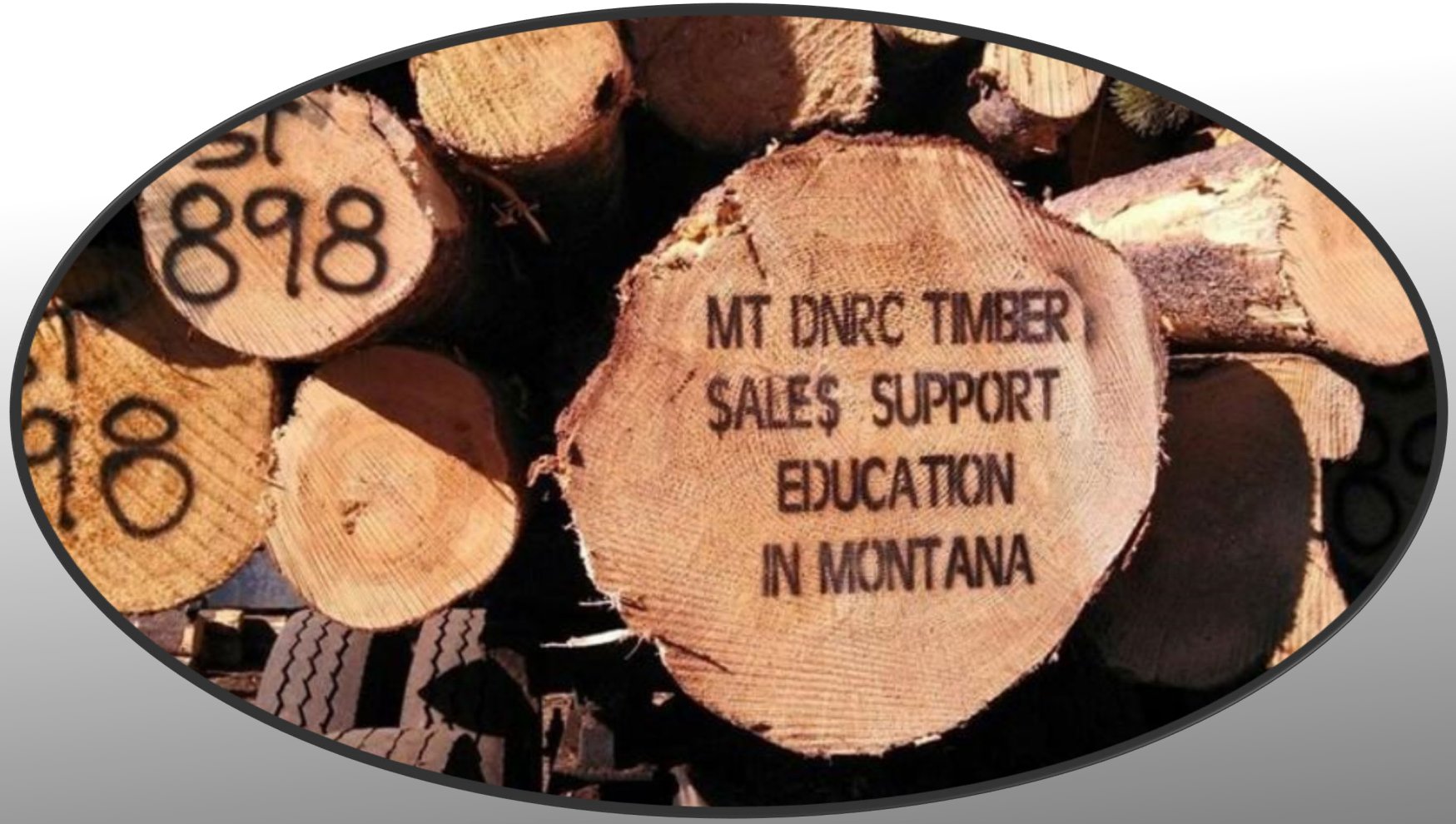
PUBLIC PARTICIPATION

- Draft Report
  - Released May 11, 30-day comment period ending June 11
- Meetings
  - Montana Wood Products Association
- Comments
  - F.H. Stoltze Land and Lumber
  - Friends of the Wild Swan
  - Idaho Forest Group
  - Pyramid Mountain Lumber
  - Sun Mountain Lumber
  - Weyerhaeuser

PROPOSED IMPLEMENTATION

	Model Results (MMBF)	Proposed Implementation (MMBF)	Opportunity Classification (MMBF)
Total	68.3	60.0	8.3

CONCLUSIONS

- 2020 SYC utilizes the **best science/data** to date.
- DNRC will continue to **refine/improve inventory**.
- DNRC will **monitor management practices** – develop **opportunities**.
- **Mid point review** vs. **Full Sustainable Yield Calculation**
- Not all DNRC forested lands are "Classified Forest" – **highest/best use**.
- "**Opportunity classification**" is not new.
- DNRC will **intensify disposition of "non-active"** lands.

QUESTIONS