

Spruce Beetle Epidemic Aspen Decline Management Response (SBEADMR) Annual Meeting Update on Socio-Economic Monitoring Results

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SBEADMR Science Team

Colorado Forest Restoration Institute – April 6th, 2023

Principal Investigator: Tony Cheng



COLORADO FOREST
RESTORATION INSTITUTE
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Colorado Forest Restoration Institute



• Authorized by Congress, 2004 (P.L. 108-317)
Mission: Serve as a bridge between researchers, managers, and stakeholders working to restore and enhance the resilience of forest ecosystems to wildfires in Colorado, the Southern Rocky Mountains, and the Intermountain West.

CFRI:

- 25 full time staff
- seasonal staff
- Lots of partners!!



Colorado Forest Restoration Institute

- SBEADMR Science Team- gathering socioeconomic data
- Data entry into the monitoring matrix
- Informing the adaptive implementation process



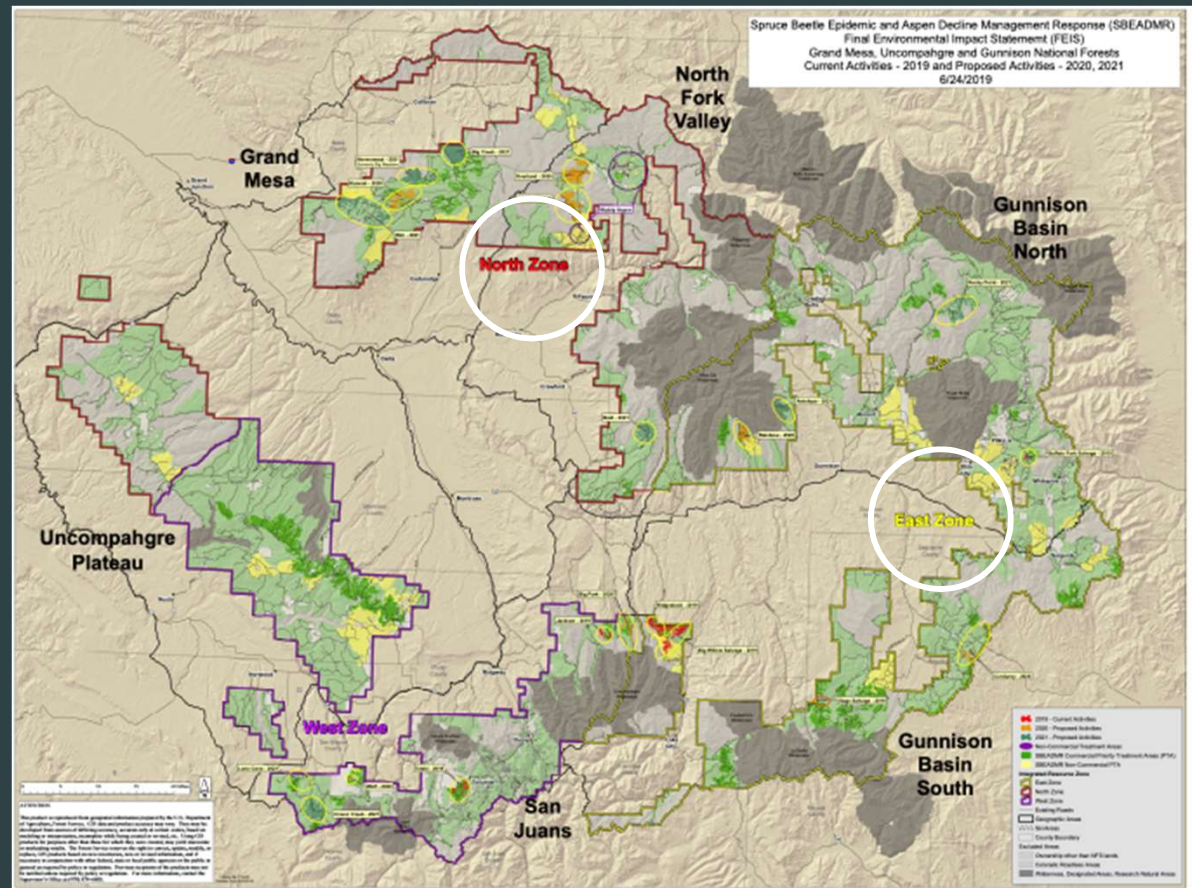
Monitoring Matrix Questions:

- To what extent do USFS administrative costs change over the SBEADMR project timeframe? What issues affect costs?
- To what extent does timber output and revenue change over the SBEADMR project timeframe?
- In what ways does the SBEADMR project contribute wood volume to the wood products industry?
- What are direct non-government employment impacts on wood producers from SBEADMR project implementation?



To what extent do USFS administrative costs change over the SBEADMR project timeframe?

- 2020 Administrative costs East Zone.
- 2022 Administrative costs North Zone.



Monitoring Matrix Questions:

To what extent do USFS administrative costs change over the SBEADMR project timeframe? What issues affect costs?

Methods: Process Study

- Gathered data on time spent on SBEADMR administrative processes multiplied by pay rate for personnel.
- Compare resiliency costs versus salvage costs and longitudinal cost information.
- Limitations: Data not available for pre-treatment layout for comparison to 2020 analysis; small sample size.

Follow up question:

- How do admin costs differ with other forest treatments (i.e. rx fire)?



Monitoring Matrix Questions:

To what extent do USFS administrative costs change over the SBEADMR project timeframe? What issues affect costs?

East Zone (Salvage: 2020)		
Administrative Cost	Cost per acre treated	Cost per CCF sold
Treatment Implementation - Contract administration	\$58	\$4

North Zone (Resiliency: 2022)		
Administrative Cost	Cost per acre treated	Cost per CCF sold
Treatment Implementation - Contract administration	\$43	\$2

Admin Cost Breakdown North Zone	% of total cost
Contracting officer	11.79%
Sale Administrator	86.17%
Sale Accounting	2.03%



To what extent does timber output and revenue change over the SBEADMR project timeframe?

Methods: Gathered data from accounting office of USFS for updating receipts for all SBEADMR projects.

- Data is reported on acres accomplishments, timber volume, and commercial revenue per volume (\$/CCF)
- Receipts are collected over time as work is accomplished
- No bid sales reported



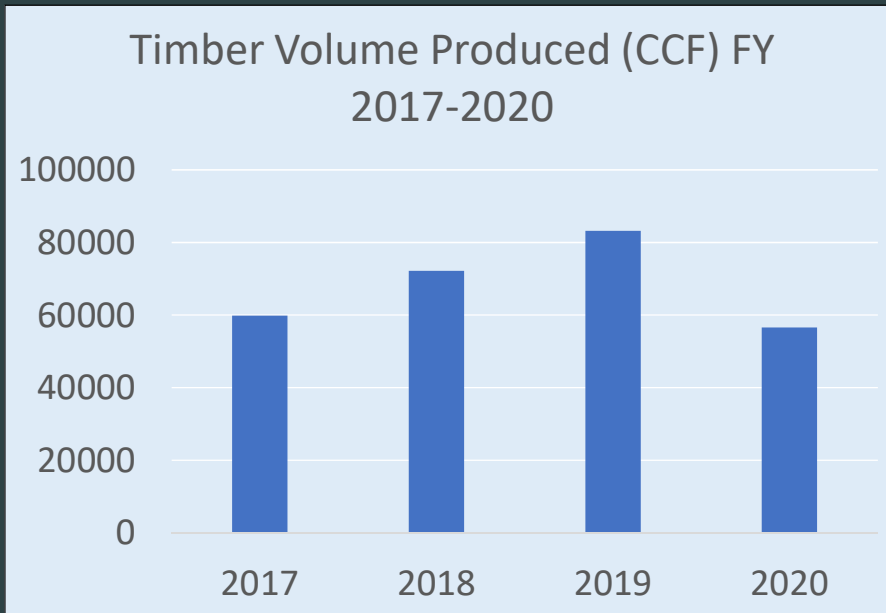
To what extent does timber output and revenue change over the SBEADMR project timeframe?

Methods: Gathered data from accounting office of USFS for updating receipts for all SBEADMR projects.

- Commercial Revenue: Total Collections = Stumpage Collected+ Brush Disposal+ Surface Rock Deposits + Road Maintenance Deposits + DRES Deposits



To what extent does timber output and revenue change over the SBEADMR project timeframe?



Year	Timber Revenues
2017	\$551,008
2018	\$1,338,810
2019	\$321,862
2020	\$400,641

Year	\$ Revenue/CCF
2017	\$9
2018	\$19
2019	\$4
2020	\$7



Monitoring Matrix Questions:

In what ways does the SBEADMR project contribute wood volume to the wood products industry?

Wood Products		
Fiscal Year	Timber Volume Produced (CCF)	% Studs from Timber Volume
2017	59,818	97%
2018	72,131	100%

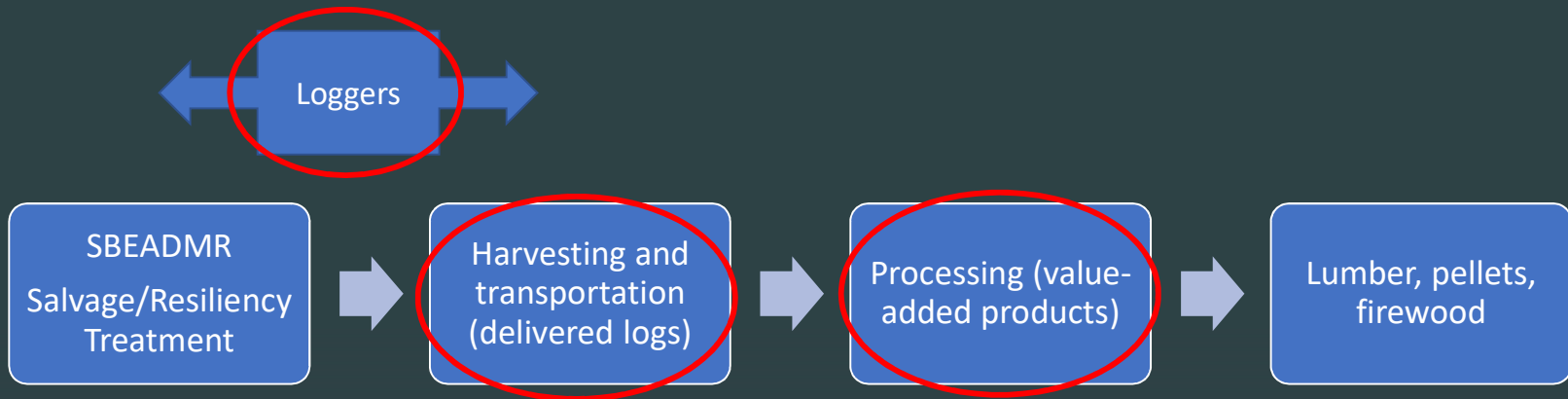
- Majority of products produced from sub-alpine fir and Engelmann Spruce
- 2x4" and 2x6" studs
- Other products: firewood



Monitoring Matrix Questions:

What are direct non-government employment impacts on wood producers from SBEADMR project implementation?

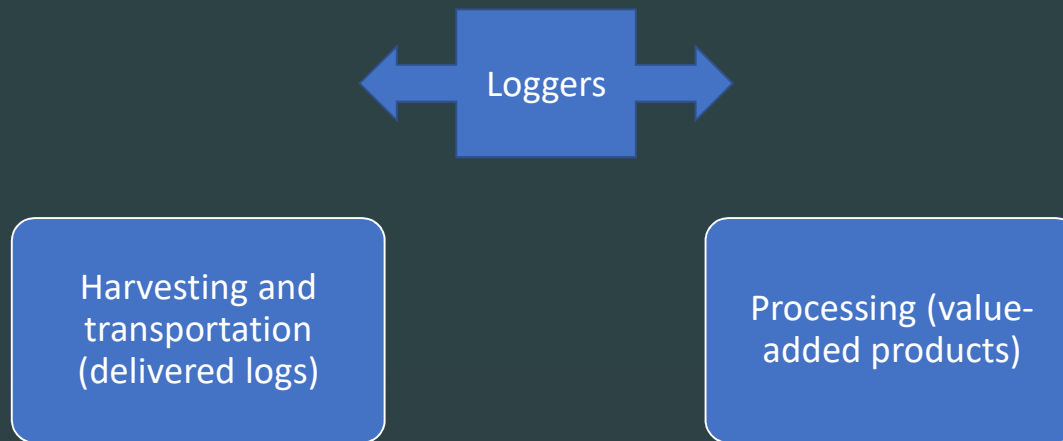
- Methods:
- Gathered employment data for logging companies completing SBEADMR projects, trucking companies, and processing facilities.
 - Estimate jobs supported by SBEADMR work in the timber economy.



Monitoring Matrix Questions:

What are direct non-government employment impacts on wood producers from SBEADMR project implementation?

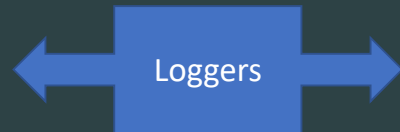
- Methods:
- Gathered data from processors, loggers, CSFS, USFS
 - Estimate jobs supported by SBEADMR work in the timber supply chain.



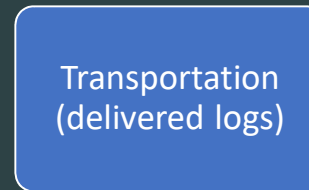
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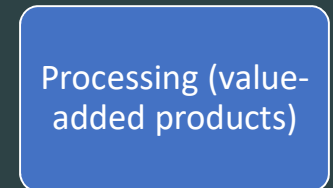
Results:



Year	# Logging Companies	Combined Employees
2017	5	40
2018	5	35
2019	1	12
2020	3	16



# Trucking Companies	3
Combined Employees	12



Montrose Forest Products Employees	92
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Other Socioeconomic Questions:

Methods: Questionnaire to loggers who have completed SBEADMR projects

Questions

1. Have you hired any new workers as a direct response to SBEADMR present or future projects? How many?
2. Have you purchased new equipment as a response to SBEADMR implementation?
3. Where is the timber going? What is the final product?
4. Are your costs in line with what you originally bid?
5. Has local industry been impacted by the lumber in timber prices?



Other Socioeconomic Questions:

Results: Response Rate (2/8; 25%)

Have you hired any new workers as a direct response to SBEADMR present or future projects? How many? 100%- No

Have you purchased new equipment as a response to SBEADMR implementation? 50% no; 50% yes, 3 machines.

Where is the timber going? What is the final product? 100%- Montrose Forest Products (Studs)

Are your costs in line with what you originally bid? 100%-No

Has local industry been impacted by the spike in lumber prices? 100%- No



Other Socioeconomic Questions: qualitative results

Factors driving costs

- Mismatch in silvicultural prescription and logistics of logging operations. Time problem solving added cost.
- Increasing equipment costs.
- Stumpage costs too high versus cost of doing business.



Other SBEADMR Research

Case study on SBEADMR and Conditions-based Management (CBM)

- Documenting the collaborative processes of the EIS and implementation.
- CBM components of the EIS.
- How treatments have changed from the adaptive implementation process.





Questions?

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