



BUTTE COUNTY FOREST ADVISORY COMMITTEE

November 25, 2019— Meeting Minutes

ITEM NO.

- 1.00 Call to order – Butte County Public Works Facility, 44 Bellarmine Ct, Chico, CA
- 2.00 Pledge of allegiance to the Flag of the United States of America
- 2.01 Roll Call – **Members:** Thad Walker, Teri Faulkner, Dan Taverner, Trish Puterbaugh, Peggy Moak
Alternates: Vance Severin, Bob Gage, Frank Stewart, Carolyn Denero
Guests: Dr. Lynn Huntsinger (UC Berkeley); Greg Williams (Sierra Buttes Trail Stewardship); Deb Bumpus, (LNF Forest Supervisor); Russell Nickerson, (District Ranger, Almanor Ranger District, Lassen National Forest); Clay Davis (NEPA Planner, FRRD); Brett Sanders (Congressman LaMalfa’s Representative); Dennis Schmidt, Director of Public Works, Jesse O’Rourke/Bill Kelso/Zach Adkins (Hillsliders) and Mike Maloney (Butte Meadows Jonesville Community Association)
Public: Kevin Wright, Doug Laurie, Abigail Whittaker, Dave Steindorf, Rich Faulkner, Wolfy Rougle, Tyler Schrock, Jim Earley, Michael August, Travis T.
- 2.02 Self-introduction of Forest Advisory Committee Members, Alternates, Guests, and Public – 5 Min.

3.00 Consent Agenda

- 3.01 Minutes of 10-28-19 were approved. M: Taverner, 2nd: Faulkner Approved 5-0

4.00 Agenda

- 4.01 Dr. Lynn Huntsinger, UC Berkeley: Grazing as Fuel Reduction and Hazard Mitigation (presentation attached)
- 4.02 Thad Walker provided an update on the Colby Mountain recreational enhancement proposals and an overview of the collaborative process between local groups and Sierra Buttes Trail Stewardship (SBTS) and the Connected Communities planning. With the inclusion of Colby as part of the larger vision, SBTS and our project team would like to work to unify additional support of the plan from Butte County. Currently Chico Velo and Chico State -Center for Economic Development have provided letters of support for the plan.
- 4.03 Greg Williams of Sierra Buttes Trail Stewardship presented on the history of the Connected Communities program - Trails Masterplan vision, including plans for the Colby Mountain area (presentation, attached)

MOTION: Authorize Thad Walker to work with the Coordinating Committee to arrange a Board presentation to request the Board approve issuance of a letter of support for the Sierra Trails Master Plan.

M: Walker 2nd: Severin Approved 5-0

- 4.04 Deb Bumpus, Forest Supervisor for the Lassen National Forest, shared her background and vision for the LNF. Deb previously worked on the Plumas National Forest and is familiar with our area. Staffing levels remain a huge concern, affecting capacity.
- 4.05 Lassen NF Almanor Ranger District, Russell Nickerson: Report and Q & A on pending, proposed and modified projects, SOPA and Non-SOPA and Collaborator’s Meeting Update:
- The West Shore Lake Almanor and Robbers Creek Projects are moving forward with an anticipated completion date of July 2020

- Storrie Fire Projects: aquatic organism passages with culverts continues – three are done. The Chips Creek Bridge is being constructed offsite and will be flown in to its location sometime this winter.
- The LNF is assessing 40-50 meadows for restoration. Colby area has five meadows that are higher priority.
- Upcoming: Mineral/Guernsey 100 acres with private land partners, and possibly Ponderosa Way and the Ishi Wilderness

4.06 Plumas NF Feather River Ranger District, Clay Davis: Report and Q & A on pending, proposed and modified projects, SOPA and Non-SOPA and Collaborator's Meeting Update:

- Clay reviewed past and current efforts of the Collaborative Meetings: Motor Vehicle Use Maps, Forest Service Road 24N04 and a potential SPI land swap, the Granite Basin project with Butte County Public Works and the Butte County Resource Conservation District. Clay asked for any suggestions for a field trip. Next meeting scheduled for December 11 at 5:00 in Oroville (Update: meeting will begin at 4:00).
- Several Projects for hazard tree removal were reviewed: Strawberry (400 acres), Big Bar (800 acres – 75% completed), Concow and Magalia Salvage are completed. The Mooreville CE decision is anticipated by February 2020.
- French Creek surveys are done but archeological surveys may still be going on. Spring is the estimated time for review and decision.

4.07 New Business – Considerations for upcoming meetings. Next meeting is December 16, 2019 - Chico, 5:00 PM

- CA Mechatronics Center FRoomba!! (Nick R.)
- Access to evacuation routes, traffic studies, in the event of wildfire (CalFire, PW, BCFSC, Nick R.)
- South Feather Water & Sewer District - Recreation and Water Projects
- Fish & Wildlife
- BLM: Mining Claims and how it all works

4.08 Public Comment: Questions on Garamendi's bill targeting funding for evacuation routes – what is the status? (THE COMMITTEE IS PROHIBITED BY STATE LAW FROM TAKING ACTION ON ANY ITEM PRESENTED IF IT IS NOT LISTED ON THE AGENDA.)

Meeting Adjourned at 7:00 PM



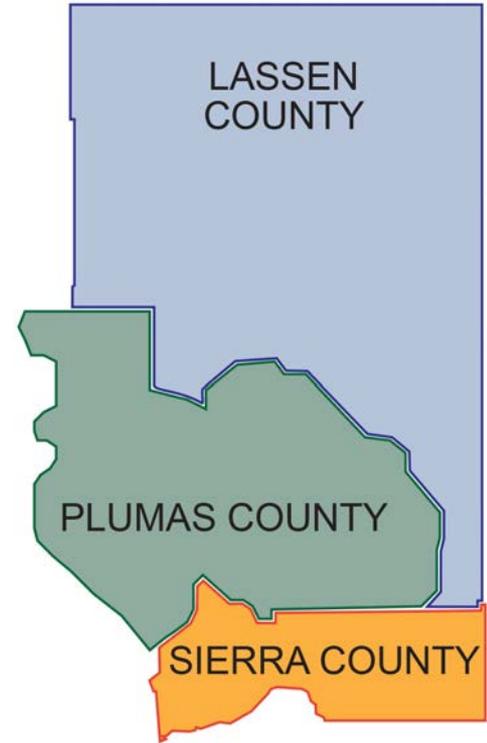


Established 2003

SBTS mission: *Building sustainable recreation-based communities through stewardship, job creation and world-class events. Providing quality outdoor experiences through trail construction and maintenance in the Lost Sierra.*



www.SierraTrails.org





www.SierraTrails.org

Land Managers we work with:

- National Forests
- California State Parks
- Land Trusts

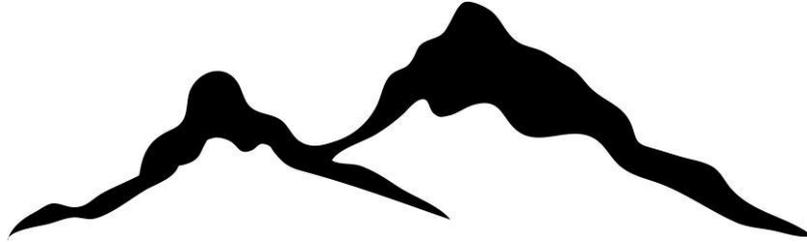
Types of Trails we work on:

- Motorized OHV
- Multiple-use
- Learning Landscape
- ADA Accessible
- Pacific Crest Trail

Land Designations we work in:

- Wilderness Area
- Roadless Area
- Recreation Area
- Timberland Producing Zone





2019 SBTS IMPACT

Contributions to our community, economy and public lands



www.SierraTrails.org

SBTS Economic Impact in 2019 -

- **Gross Income \$1.9 million** (projected)
- **37 Employees** (14 High School students)
- **Payroll \$730k** (projected)
 - 2018 - Payroll \$754,798 / Gross Income \$1,849,591
 - 2017 – Payroll \$665,781 / Gross Income \$1,675,913
 - 2016 - Payroll \$566,454 / Gross Income \$1,447,203
 - 2015 - Payroll \$562,422 / Gross Income \$1,432,129





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SBTS Trails Impact in 2019 -

- Miles Maintained: **219 miles** (141 miles in 2018)
- Miles Built: **8.1 miles** (3.4 miles in 2018)
- Miles Planned (NEPA/CEQA): **57.79 miles**

Since 2003 -

- **113 Trail Projects Completed**
- **92.5 miles of NEW Trail Built**
- **1,163 miles of Trail Maintained to Specification**
- **89,800 Volunteer Labor Hours Contributed**



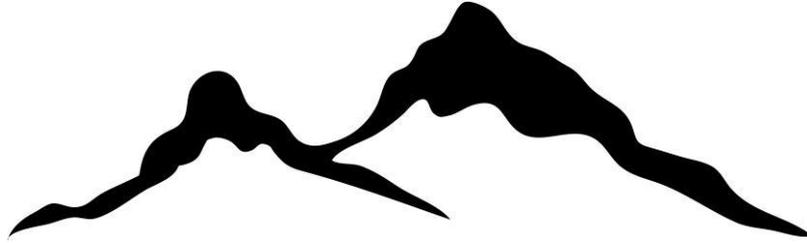


SBTS Trails Impact in 2019 -

- Professional Trail Crew Employed - 8
- High School Student Trail Crew Employed- 14
- 49+ Volunteer Trail Work Days
- 2019 - 1,383+ Volunteers (567 under age 18)
 - 2018 - 1,342 Volunteers
 - 2017 - 949 Volunteers
 - 2016 - 724 Volunteers
 - 2015 - 711 Volunteers

www.SierraTrails.org





PARTNERSHIPS

Making Dirt Magic happen on public lands with shoestring budgets

Working Partnerships -

SBTS has expertise in forming partnerships with Land Managers and utilizing Grants and Agreements in order to Maintain and Build Trails on Public Lands



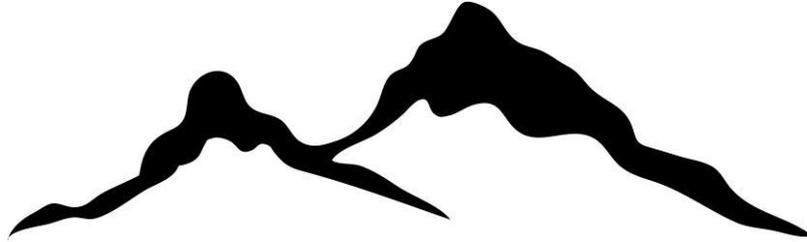
Land Management and Non-Profit Partnerships



These businesses and organizations have pledged their philanthropic support to SBTS and Lost Sierra trails!

We encourage you to pay it back and buy from these fine people or support their organizations. If you want to support our non-profit or one of our race events, contact Teal at teal@sierratrails.org.





FUNDRAISING

Attracting funds and engaging the public through outdoor experiences

Fundraising - Events

(Operating under USFS Special-Use Permits)

With net proceeds benefiting SBTS Trail Program



JUNE 6, 2020

LOST & FOUND GRAVEL GRINDER

2019: 1,500 Participants/ 1,500 Spectators
SOLD OUT

JULY 30 - AUGUST 2, 2020

DOWNIEVILLE CLASSIC

SINCE 1995

2019: 1,150 Participants/ 3,000 Spectators
SOLD OUT

SEPTEMBER 25 - 27, 2020

Mountains to Meadows

"A Celebration of Outdoor Recreation"

Quincy, Fairgrounds

Featuring:

'Gravelation' - Gravel Enduro

'Hellfire' - CX Short Track

'Meet Your Maker' Handbuilt Bicycle Show

Camping - Live Music & DJs- Food Trucks

Trail Shuttles - Beverage Gardens - Good Times

NEW venue to replace Grinduro

2019: 1,000 Participants/ 1,500 Spectators
SOLD OUT

Fundraising - Outfitter

(Operating under USFS Special-Use Permits)

With net proceeds benefiting SBTS Trail Program



YUBA



**BIKE SHOP & SHUTTLE / GUIDE & OUTFITTER
DOWNIEVILLE AND QUINCY**

2018 season: 7435 Shuttle Rides. 725 Bikes Rented. 15,000 DV Visitors



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USFS SPECIAL-USE PERMIT FEES PAID BY SBTS

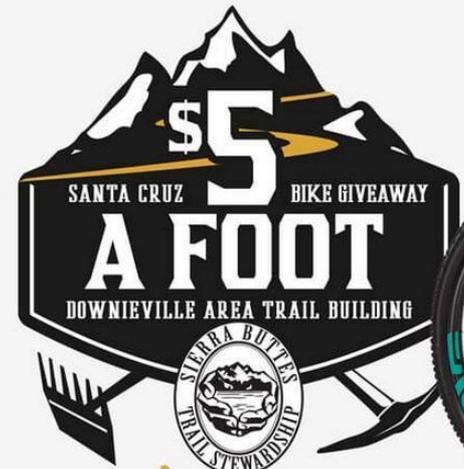
Lost & Found	PRE-PAY	FINAL PAY	TOTAL PAY
2018	\$1,368.66	\$8,117.29	\$9,485.95
2017	\$1,000.00	\$4,469.15	\$5,469.15
2016	\$1,612.20	\$3,098.00	\$4,710.20
2015 - including eagle study	\$3,678.00	\$2,198.09	\$5,876.09
			\$25,541.39
Downieville Classic			
2018	\$1,400.88	\$1,273.66	\$2,674.54
2017	\$1,400.88	\$1,358.90	\$2,759.78
2016	\$60.91	\$2,625.59	\$2,686.50
2015	\$1,071.30	\$2,045.49	\$3,116.79
			\$11,237.61
Grinduro			
2018	\$5,000.00	\$2,898.24	\$7,898.24
2017	\$5,000.00	\$1,475.79	\$6,475.79
2016	\$3,538.57		\$3,538.57
2015	\$2,291.79		\$2,291.79
			\$20,204.39
Yuba Expeditions			
2018	\$771.00	\$5,905.26	\$6,676.26
2017	\$771.00	\$3,191.21	\$3,962.21
2016	\$771.00	\$3,569.16	\$4,340.16
2015	\$771.00	\$3,050.43	\$3,821.43
			\$18,800.06
Total Fees Paid			\$75,783.45



**** Fees collected by National Forests through Special Use Permits for Events and Outfitting are tracked in separate accounts by each Forest District and can be used to complete community benefit projects within the same region the fees were generated.***

Fundraising - Campaigns

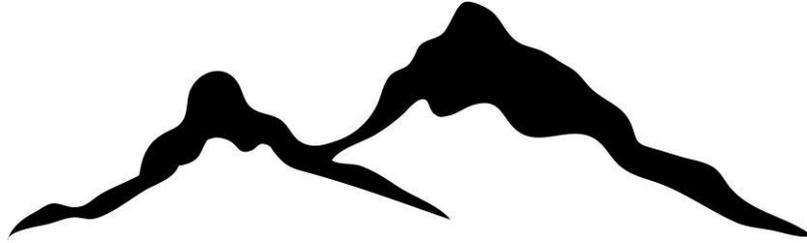
With net proceeds benefiting SBTS Trail Program



WIN THE DREAM
SANTA CRUZ
OF YOUR CHOICE!

DOWNIEVILLE TRAILS FUNDRAISER
>>>ENTER HERE

5 BUCKS A FOOT Campaigns have raised over \$500k for trails located on our National Forests



CONNECTED COMMUNITIES

Trails as a Tool for Reviving Mountain Communities

Connected Communities

- The Sierra Buttes Trail Stewardship is proposing to develop a regional **Connected Communities - Trails Master Plan** that will plan, construct and maintain a multiple use trail system to connect the northern Sierra communities of: City of Loyalton, Sierraville, Sierra City, Downieville, Quincy, Graeagle, City of Portola, Taylorsville, Greenville, Chester, Westwood and City of Susanville, Truckee and Reno
- The **Trails Master Plan** will provide a basis for *severely disadvantaged communities to collaboratively envision, create and maintain a vibrant outdoor recreation economy through world-class multiple use trail opportunities on public



Connected Communities

- 70% of the land in Plumas and Sierra Counties is National Forest, and in Lassen County 58% of the land is National Forest. The National average is 8%.
- Plumas, Sierra and Lassen Counties were amongst the richest counties in California - once during the Gold Rush and again during the Timber Boom.
- Jobs in these rural counties have historically come from extractive industries that utilized resources on public lands.
- Due to government and environmental regulations, those jobs are gone and Plumas, Sierra and Lassen are now among California's poorest counties.



Severely Disadvantaged County

Lassen County

- Population **31,163**
- Employed Residents **12,962**



From 2000 to 2017-

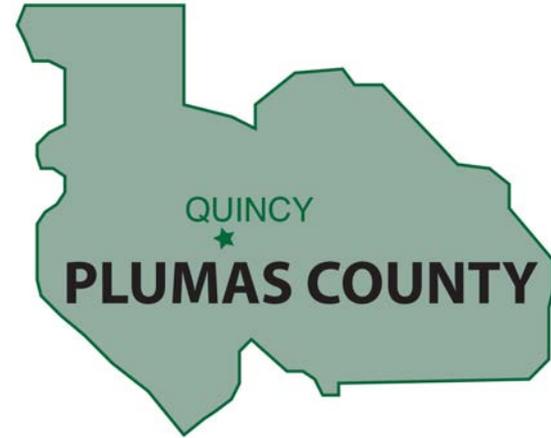
- **Population** shrank by 2,947 people, a **9% decrease**
 - *Migration from County contributed to 76% of population decline*
- **Employment and Wages have increased 20% primarily through State and Federal jobs** (primarily prison industry)

Data Sources: U.S. Department of Commerce. 2016. Severely disadvantaged communities (less than 60% of the State's median household income)

Severely Disadvantaged County

Plumas County

- Population **18,742**
- Employed Residents **9,638**



From 2000 to 2015-

- **Population** shrank by 2,355 people, a **11% decrease**
 - *Migration from County contributed to 56% of population decline*
- **Lost 802 jobs**, a **7.7% decrease**
- **Wage & Salary disbursements have decreased 15%**

Data Sources: U.S. Department of Commerce. 2016. Severely disadvantaged communities (less than 60% of the State's median household income)

Severely Disadvantaged County

Sierra County

- Population **2,999**
- Employed Residents **1,102**



From 2000 to 2015-

- **Population** shrank by 607 people, a **18% decrease**
 - *Migration from County contributed to 63% of population decline*
- **Lost 411 jobs**, a **27.2% decrease**
- **Wage & Salary disbursements have decreased 48%**

Data Sources: U.S. Department of Commerce. 2016. Severely disadvantaged communities (less than 60% of the State's median household income)

Connected Communities

- The **Trails Master Plan** will identify areas within communities where trail access would create additional benefit. Areas such as schools, neighborhoods, campgrounds, parks, retail centers and trailheads (new and existing) will be identified
- Trail systems are often most frequently used by residents as part of daily routines and can attract talented individuals and families looking for a lifestyle tied to the outdoors. Having these trail systems connected to "Main Street" is ideal, as it brings visitors into town for restaurants, accommodations and services.



Connected Communities

- **Timing of the Trails Master Plan is critical -**
 - The Plumas, Tahoe and Lassen National Forests are in the process of updating their Forest Land & Resource Management Plans.
 - The U.S. Forest Service, National Strategy for Sustainable Trail Systems identifies the need to inventory, plan, maintain and construct trails with partnerships.
 - The U.S. Forest Service, 10-Year Sustainable Trail Stewardship Challenge specifically identifies the need to complete Trail Master Plans on each forest.



Connected Communities

Phase 1 - Inventory, Planning and Mapping

- Community Outreach, Land Manager Agreements, Develop MOU's
- Inventory National Forest "System" and "Non-System" trails
- Plan Community Trail Systems and Trailhead locations
- Flag and GIS Map Connected Community motorized routes (250 miles)
 - **Phase 1 Cost: \$360,000** (projected)



Connected Communities

Phase 2 - NEPA/CEQA (environmental studies)

- Work performed on National Forests utilizing Challenge Cost Share and Voluntary Services Agreements
- Using approved local contractors with land manager oversight
- Surveys - Heritage, Wildlife, Botany, Hydrology, Recreation
 - **Phase 2 Cost: \$660,000** (projected)
 - NEPA/CEQA \$.50 p/ft
 - 1,320,000 ft (250 miles) of new trail



Connected Communities

Phase 3 - Construction

- Work performed on National Forests utilizing Challenge Cost Share and Voluntary Services Agreements
- Using locally hired Trail Crews and Volunteers with land manager oversight
 - **Phase 3 Cost: \$6,600,000** (projected)
 - Construction \$5.00 p/ft
 - 1,320,000 ft (250 miles) of new trail



Connected Communities

Phase 4 - Annual Maintenance

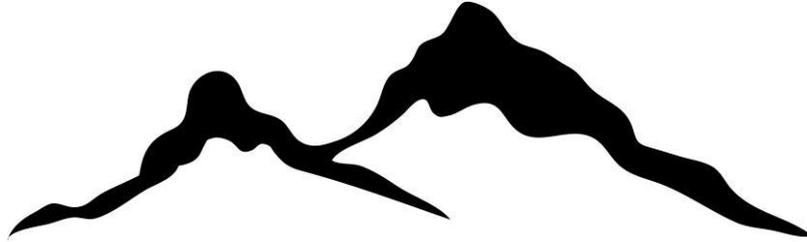
- Work performed on National Forests utilizing Challenge Cost Share and Voluntary Services Agreements
- Local Trail Crew(s) and Volunteers operating with land manager oversight
 - **Phase 4 Cost: \$660,000 annual** (projected)
 - Maintenance performed to meet land manager specification \$.50 p/ft
 - 1,320,000 ft (250 miles) of trail



Connected Communities

Project Partners (to date 11.14.2019)

- US Forest Service, Pacific Southwest Region 5
- Tahoe National Forest
- Lassen National Forest
- Plumas National Forest
- Plumas County Board of Supervisors
- Plumas County Dept. Public Works
- City of Portola
- Sierra County Board of Supervisors
- City of Loyalton
- Lassen County Board of Supervisors
- City of Susanville
- Sierra County Land Trust
- Feather River Land Trust
- Lost Sierra Chamber of Commerce
- Center for Economic Development, California State University, Chico
- State of Nevada, Off-Highway Vehicle Program
- Nevada County Woods Riders
- Truckee Dirt Riders
- 707 Trail Riders
- International Mountain Bicycling Association
- Chico Velo
- Susanville Area Bicycle Association
- Pacific Crest Trail Association



RECREATION ECONOMY

Recreation as an economic engine for rural communities

Connected Communities

- Recreation on public lands currently represents the greatest economic and cultural opportunity for our rural communities.
- In the United States, **Outdoor Recreation is a \$887 billion industry** with Trail Sports accounting for \$201 billion annually.
- Trails on public lands are proven to create local employment, attract visitors and new businesses, and improve the health and economy of mountain communities.
- High-quality trail systems support tourism-related businesses and provide long-term support by attracting new residents who may be business owners, entrepreneurs or workers.





NATIONAL

Outdoor recreation is an economic powerhouse in the United States

2016
THE OUTDOOR RECREATION
ECONOMY GENERATES

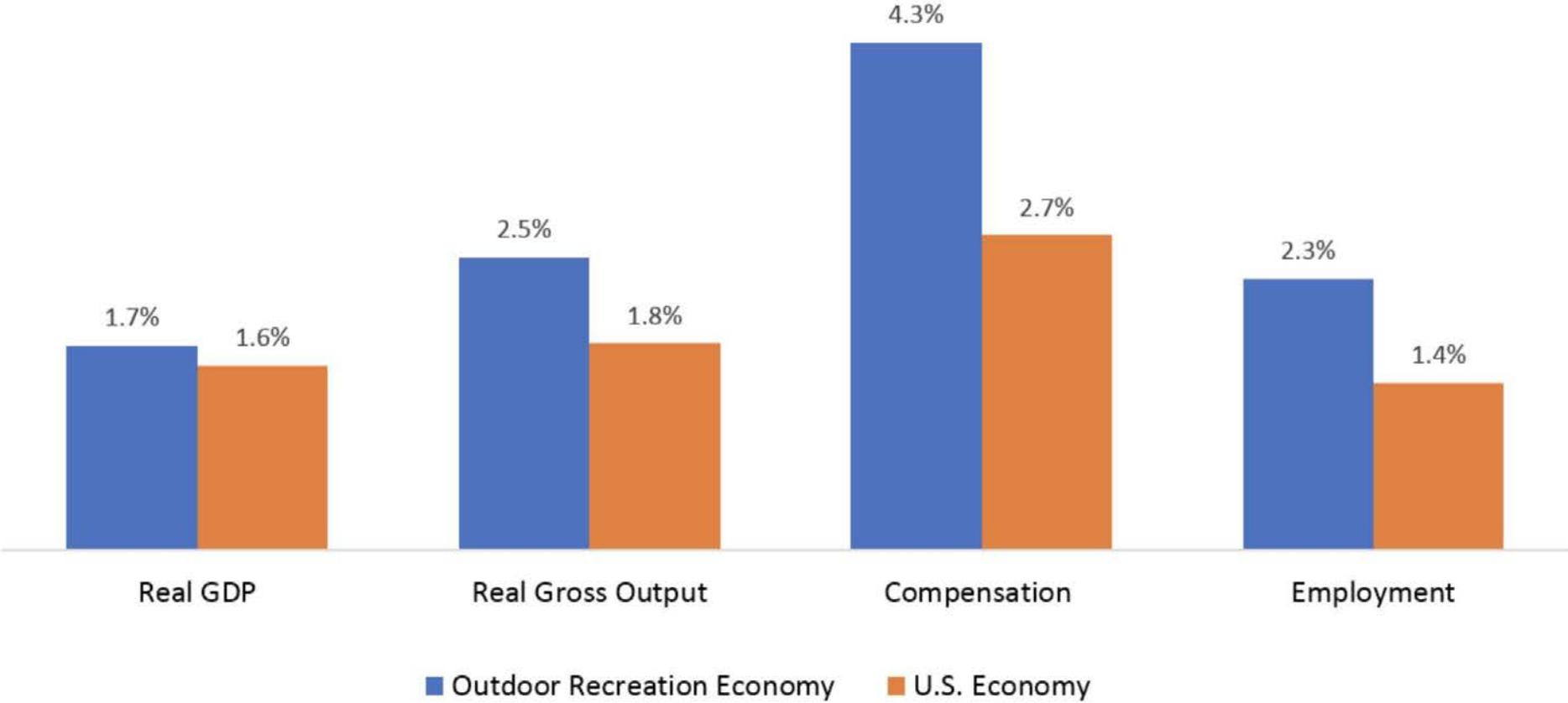
\$887 BILLION
In Consumer Spending

7.6 MILLION
Direct Jobs

\$65.3 BILLION
In Federal Tax Revenue

\$52.9 BILLION
In State And Local Tax Revenue

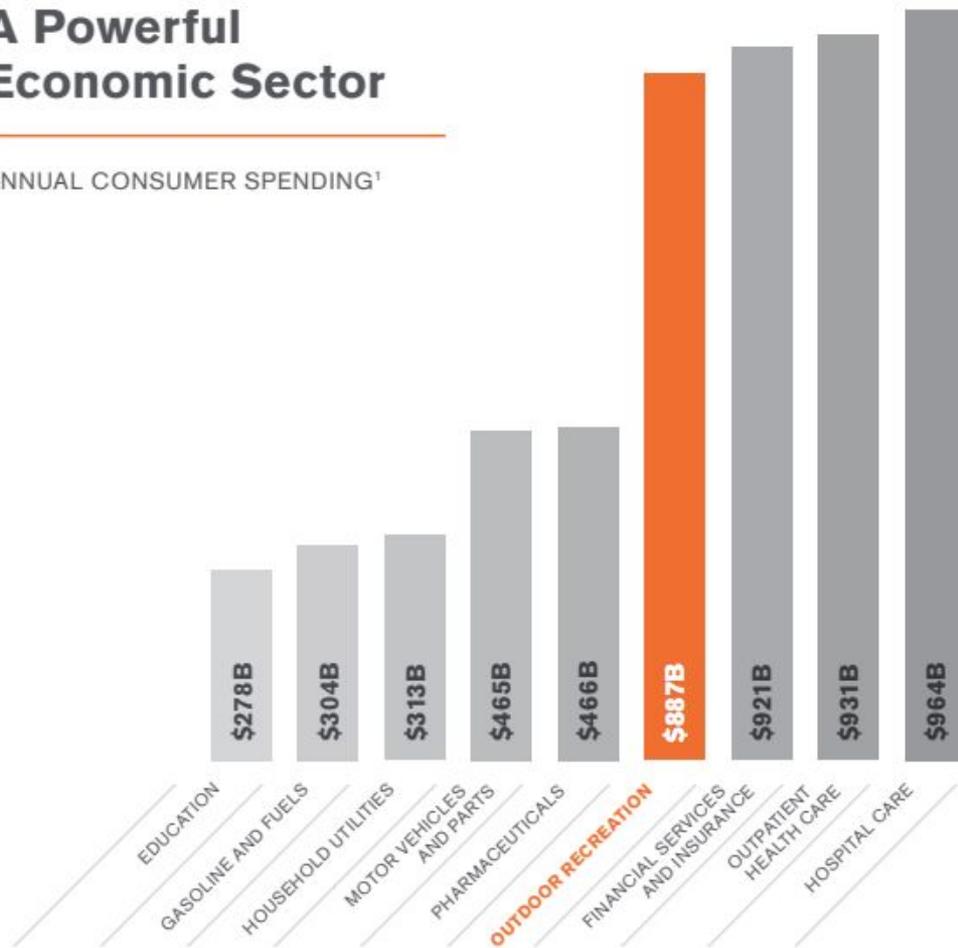
Growth in Outdoor Recreation Compared to Growth in the U.S. Economy, 2015-2016



**Bureau of Economic Analysis*

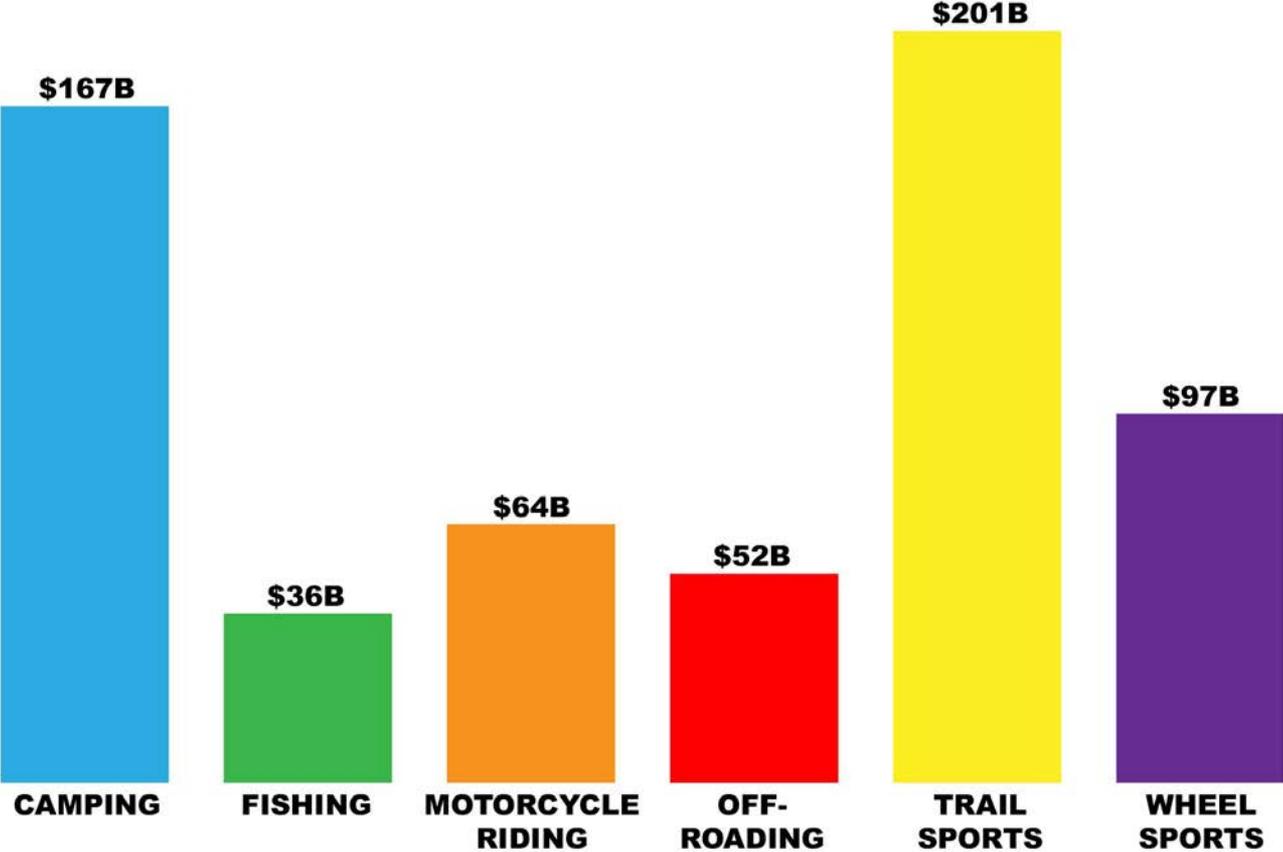
A Powerful Economic Sector

ANNUAL CONSUMER SPENDING¹



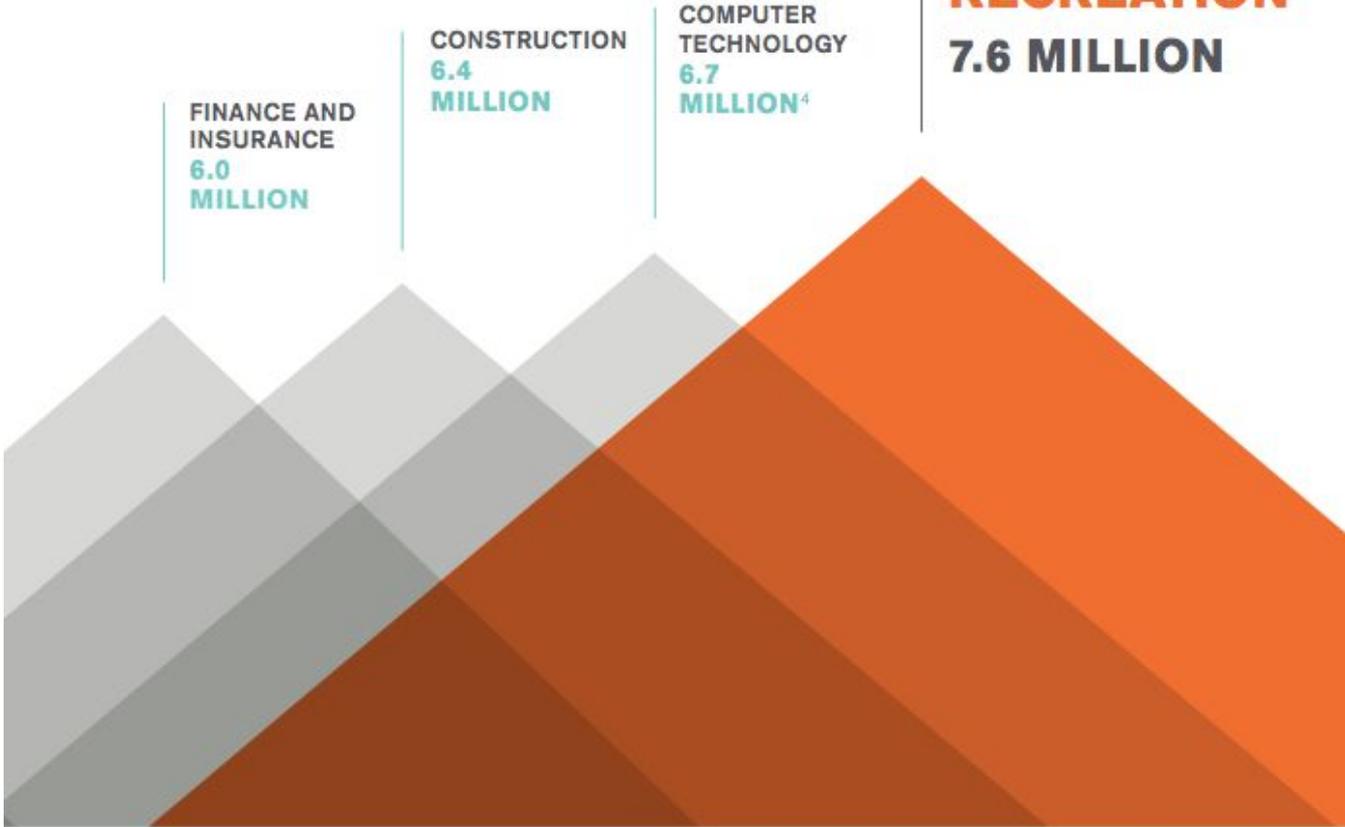
¹ Bureau of Economic Analysis, Personal Consumption Expenditures by Type of Product

Direct Impact of the Outdoor Recreation Economy (in billions of dollars)



*Outdoor Industry Association

JOBS CREATED NATIONALLY



³ Bureau of Labor Statistics.

⁴ Computing Technology Industry Association (CompTIA).

In 2017, the **California Travel Industry** grew for the 8th consecutive year and generated –

- **S**pending = \$132.4 billion
 - (4.8% increase over 2016)
- **E**mployment = 1.14 million jobs
 - (3.1% increase over 2016)
- **S**tate and Local Tax Revenue = \$10.9 billion
 - (2.8% over 2016)
- **G**ross Domestic Product = \$74.9 billion
 - (2.5% total State GDP)

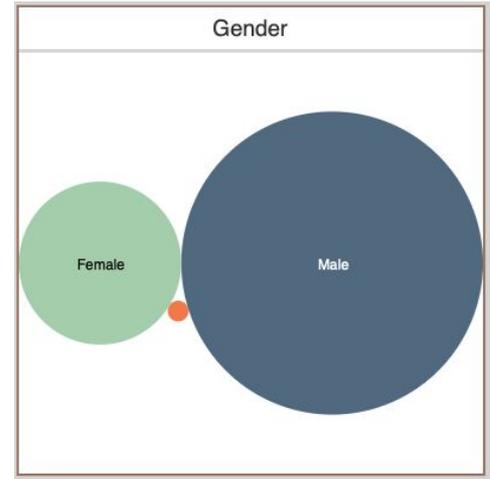
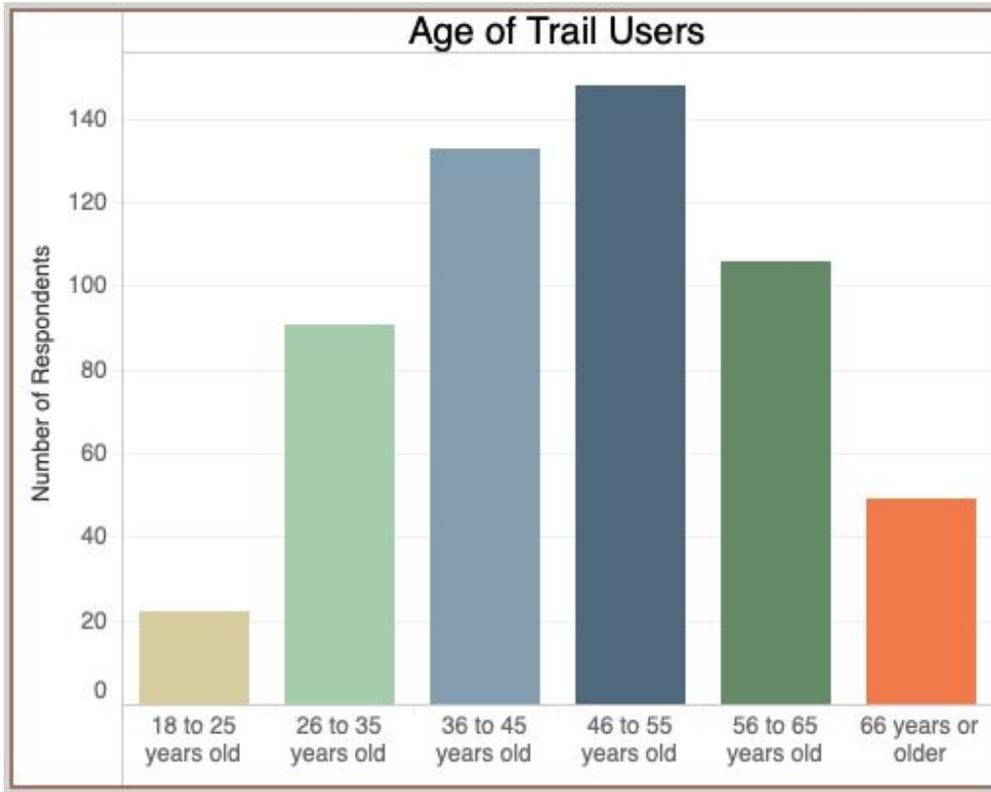


Trail Survey Intro

- Voluntary survey of recreation use and expenses of trail users in the Lost Sierra Region
- May-Oct 2019
- 604 surveys collected
- Goal: collect demographic data, spending patterns of food, lodging, equipment, frequency and type of trail use in order to assess the perceived benefits and economic impact of the trails.

*This data was analyzed and prepared by Center for Economic Development, CSU, Chico





Annual Household Income

Income Range	Total	Percent
Under \$15,000	9	1%
\$15,000 to 24,999	15	2%
\$25,000 to 34,999	25	4%
\$35,000 to 49,999	30	5%
\$50,000 to 74,999	67	11%
\$75,000 to 99,999	53	9%
\$100,000 to 149,999	130	22%
\$150,000 to 199,999	77	13%
\$200,000 or more	128	21%
No Responses	70	12%

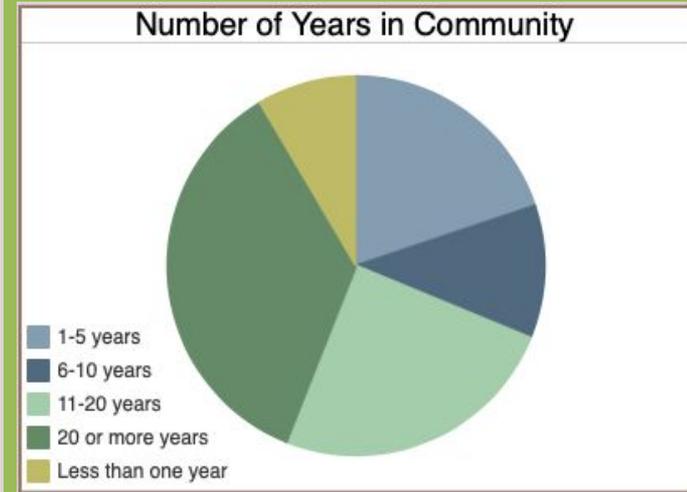
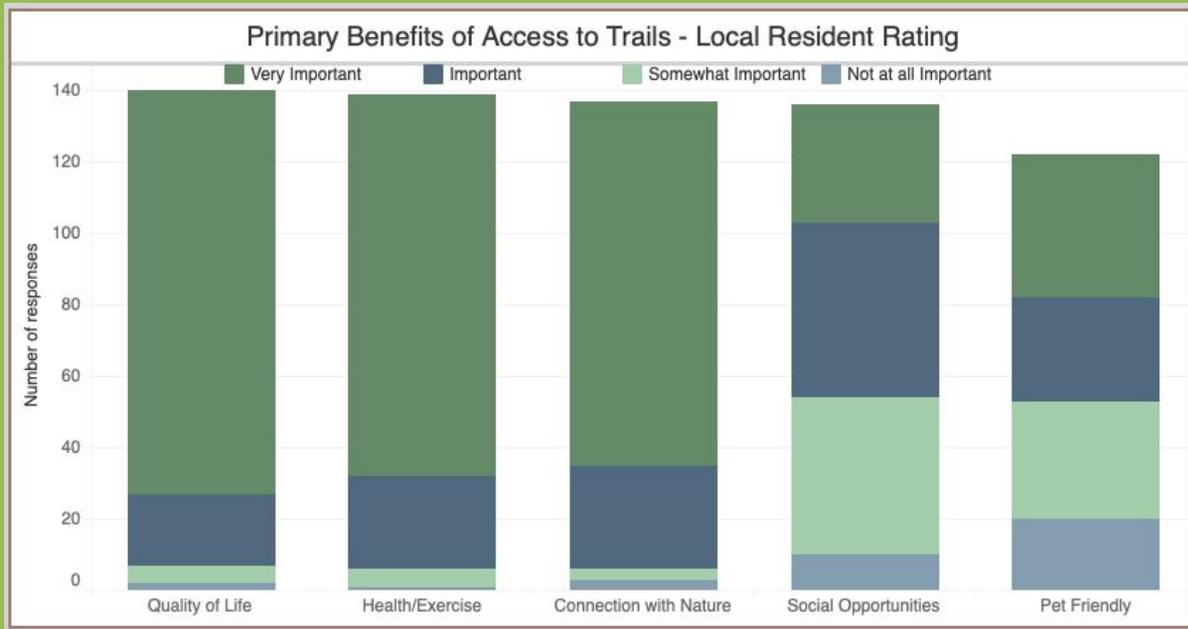
Demographic Info:

77% of respondents were male, between the ages of 36-55, with 56% reporting an annual household income of \$100,000 or more

Local Residents

141 respondents live in Plumas, Sierra or Lassen Counties, 60% of those respondents have lived in the area for 11 or more years

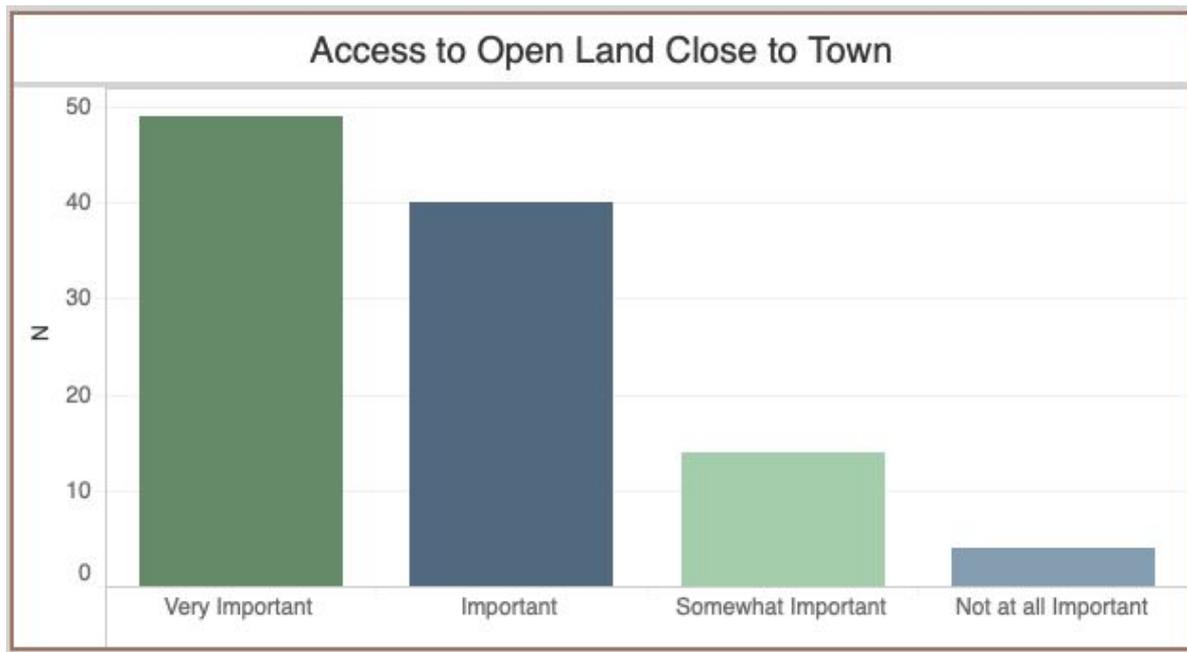
Overwhelmingly respondents indicated that quality of life, health/exercise and connection with nature are “very important” benefits of having access to trails



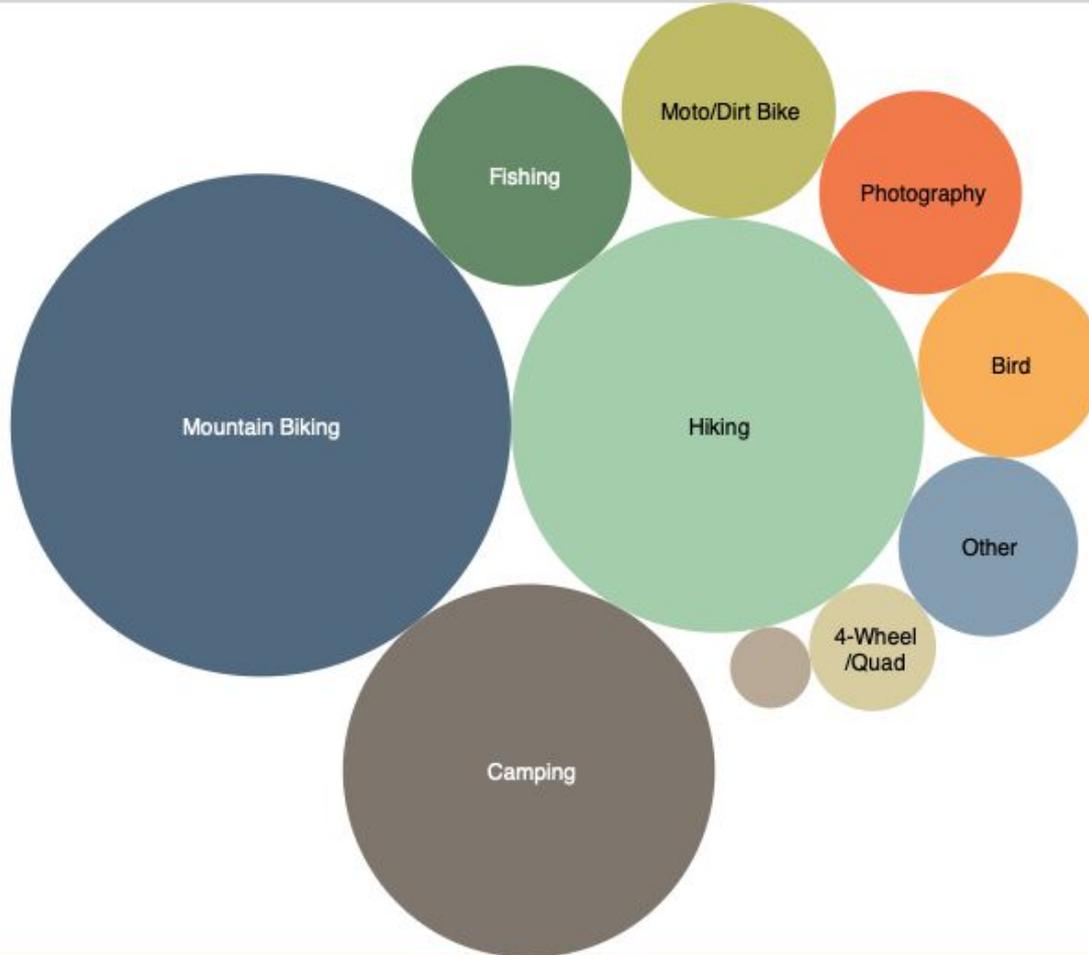
Trail Influences on Local Residents

Trail Influences on Local Residents

A vast majority of the local residents reported that they engage in outdoor activity "more often" (78%) because of the access to the trail systems of the Lost Sierra. Residents indicated that access to local trail systems (66%) and summer recreation opportunities (65%), community character (58%), and access to open land (46%) are quality of life factors they deemed "very important" influences on their reason to stay or move into the community.



Activities the Brought Visitors to the Lost Sierra



Recreational Opportunities

Overall respondents indicated that mountain biking (32%), hiking (22%) and camping (18%) were the top three activities that brought visitors to the Lost Sierra.

Lodging Expenses - Most Recent Trip to Lost Sierra

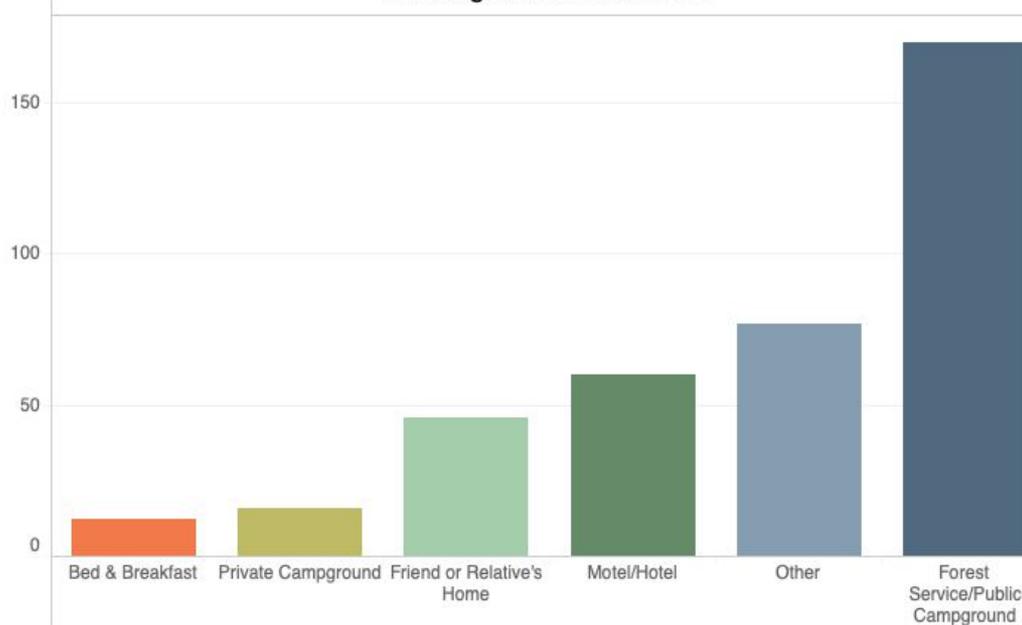
Survey

To assess contemporary economic impacts of visitor spending, the Trail Use Survey included questions regarding expenses for lodging as well as the number of nights visitors stayed in the area along with the type of overnight accommodations.

Lodging Expenses

The majority (65%) of trail users reported staying 2-3 nights, nearly half (45%) stayed at Forest Service/Public Campgrounds and 42% reportedly spent anywhere between \$100-500 on lodging expenses during their most recent trip to the Lost Sierra area.

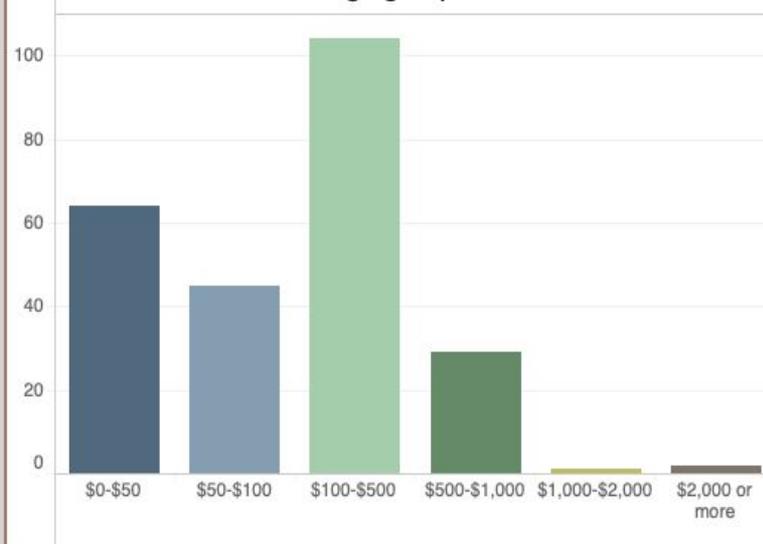
Overnight Accommodations



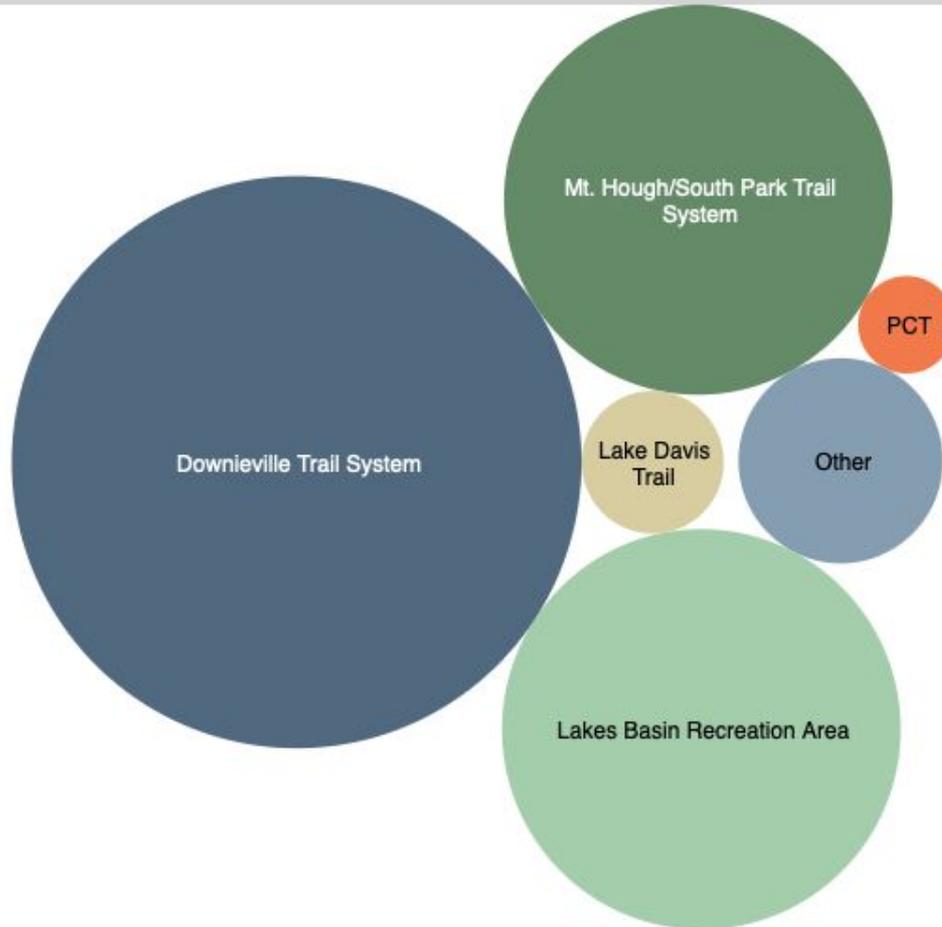
Number of Nights Stayed



Lodging Expenses



Primary Trail Systems by Percent Used

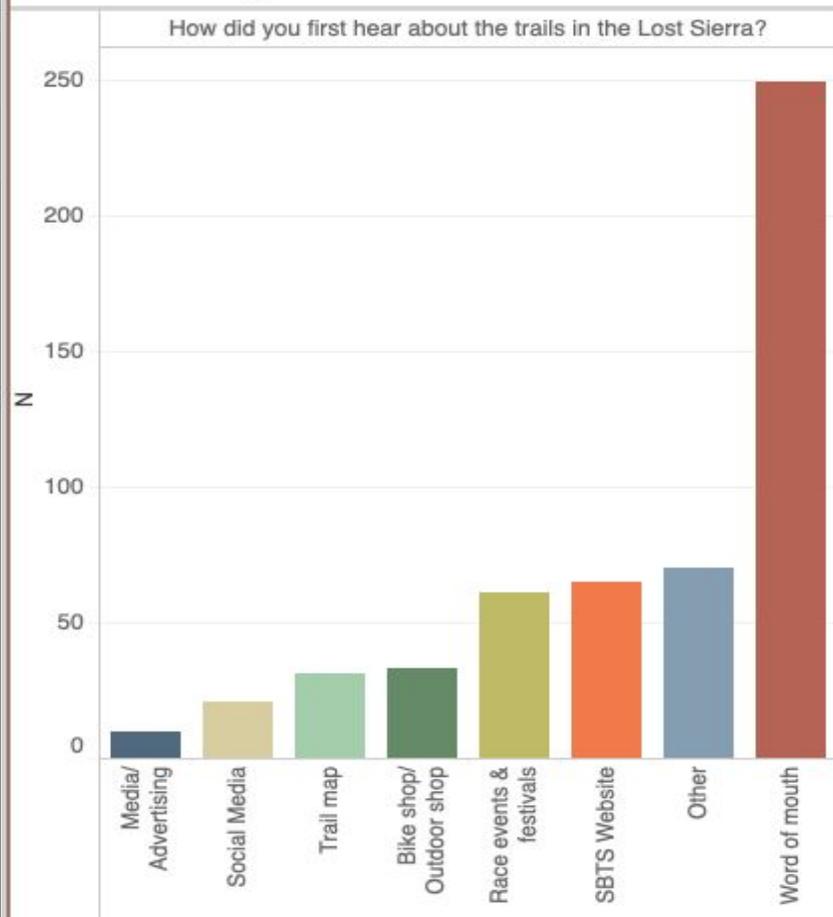


The Downieville Trail System was the most popular (46%) among respondents, followed by Lakes Basin Recreation Area (23%), Mount Hough/South Park Trail System (21%).

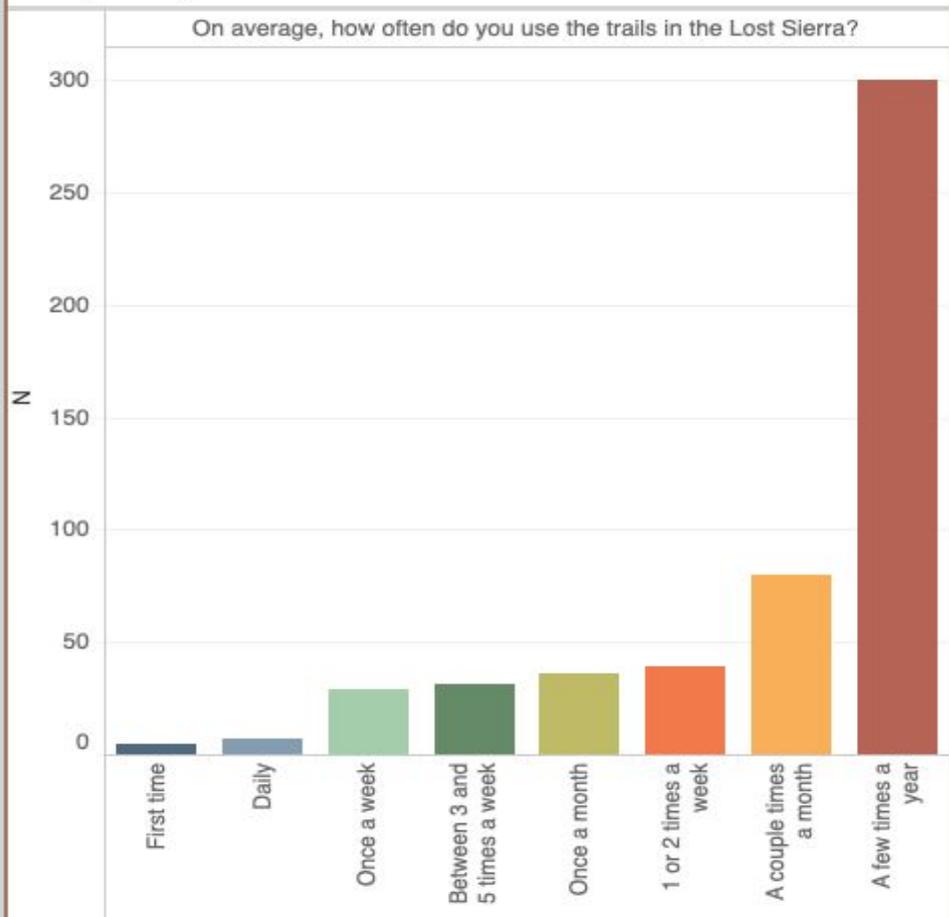
Primary activities:

- 372 - Mountain Biking
- 102 - Hiking
- 49 - Moto/Dirt Biking
- 19 - Other
- 4 - Camping
- 3 - Bird/Wildlife Viewing
- 2 - Photography
- 2 - Horseback Riding

Trail Knowledge



Frequency of Use



Qualities and Barriers of Trail System Use

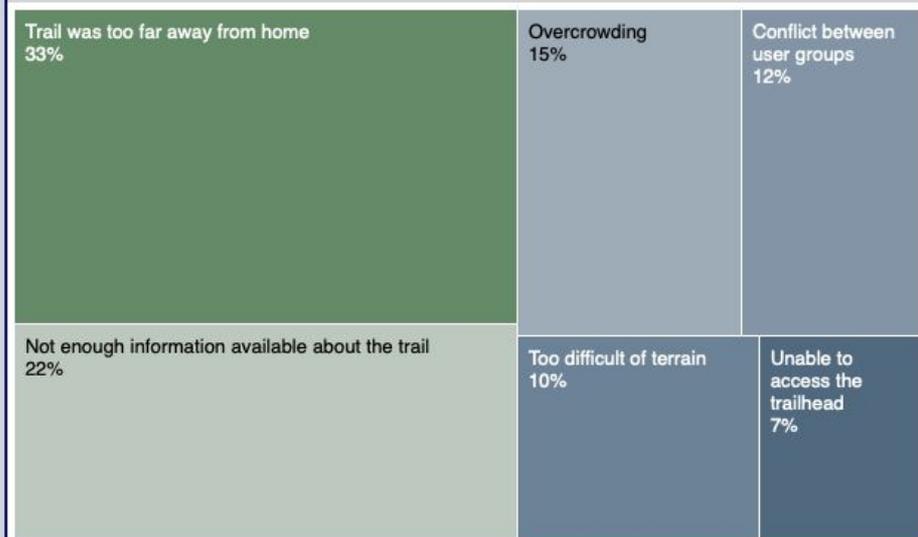
Survey

Sierra Butte Trail Stewardship wanted to assess both the most desired qualities and any barriers of the Lost Sierra Trail System.

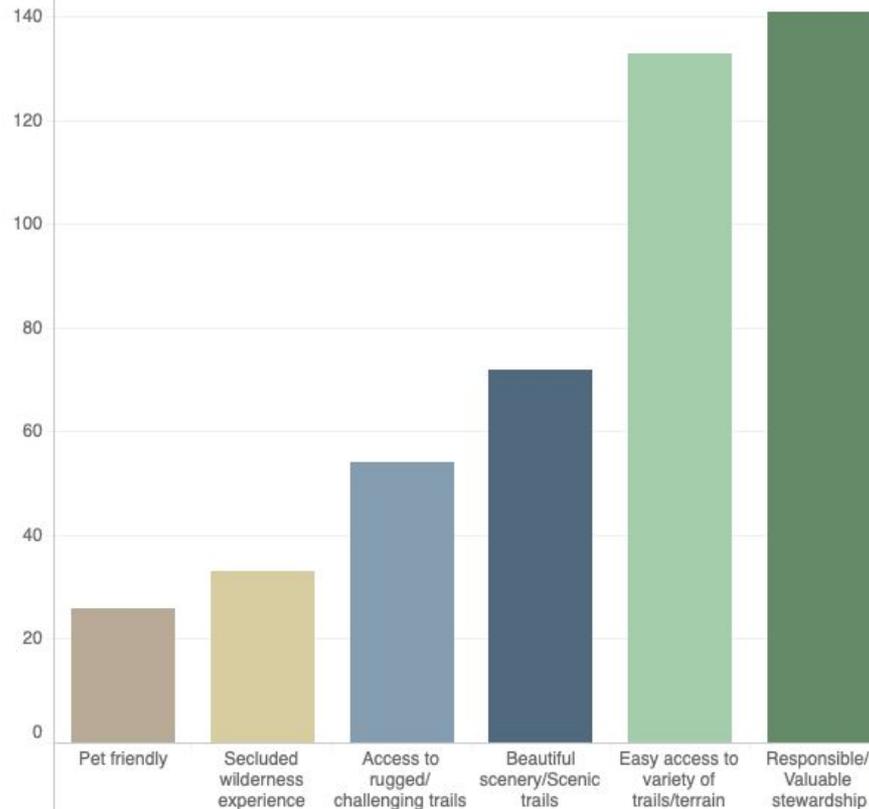
Qualities of the Trails

The reported barriers for the trail system were varied with 33% reporting that the trail was too far from home and 22% stating that there was not enough information available about the trail system. The most desired qualities of the trial system were "responsible/valuable stewardship" (i.e., well maintained and clean trail systems) along with easy access to a variety of trails/terrain (range of trail types and level of difficulty). Respondents also cited "conflict between user groups" as a barrier; however, no additional information was provided regarding the type of conflict.

Reported Barriers for Trail System Use



Most Desired Qualities of the Trails of the Lost Sierra





HELP US MAKE DIRT MAGIC

Volunteer - Adopt a Trail - Sponsor an Event

Donate - Fund a Project - Support a Program

www.SierraTrails.org

Current Legislation

MORE OPTIONS

[Home](#) > [Legislation](#) > [116th Congress](#) > H.R.2838

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H.R.2838 - Enhancing the Strength and Capacity of America's Primary Evacuation routes Act

116th Congress (2019-2020) | [Get alerts](#)

BILL

Hide Overview

Sponsor: [Rep. Garamendi, John \[D-CA-3\]](#) (Introduced 05/20/2019)**Committees:** House - Transportation and Infrastructure**Latest Action:** House - 05/21/2019 Referred to the Subcommittee on Economic Development, Public Buildings, and Emergency Management. ([All Actions](#))**Tracker:**

Introduced

Passed House

Passed Senate

To President

Became Law

More on This Bill[Constitutional Authority Statement](#)[CBO Cost Estimates \[0\]](#)**Subject — Policy Area:**

Transportation and Public Works

[View subjects](#)

Summary (1)

Text (1)

Actions (4)

Titles (3)

Amendments (0)

Cosponsors (4)

Committees (1)

Related Bills (2)

Text: H.R.2838 — 116th Congress (2019-2020)

[All Information](#) (Except Text)

There is one version of the bill.

Text available as: XML/HTML | [XML/HTML \(new window\)](#) | [TXT](#) | [PDF](#) (PDF provides a complete and accurate display of this text.)[?]**Shown Here:****Introduced in House (05/20/2019)**116TH CONGRESS
1ST SESSION

H. R. 2838

To direct the Secretary of Transportation to establish a grant program for projects to strengthen and protect vulnerable infrastructure used during mass evacuations, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

MAY 20, 2019

Mr. GARAMENDI (for himself and Mr. KEATING) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

A BILL

To direct the Secretary of Transportation to establish a grant program for projects to strengthen and protect vulnerable infrastructure used during mass evacuations, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Enhancing the Strength and Capacity of America's Primary Evacuation routes Act” or the “ESCAPE Act”.

SEC. 2. EVACUATION ROUTE PROGRAM.

(a) DEFINITIONS.—In this section:

(1) EVACUATION ROUTE.—The term “evacuation route” means a route that—

(A) is owned, operated, or maintained by a Federal, State, Tribal, or local government or a private entity;

(B) is used—

(i) to transport the public away from an emergency event (as defined in section 667.3 of title 23, Code of Federal Regulations (or successor regulations)) that is anticipated, reasonably likely, ongoing, or past; or

(ii) to transport emergency responders and recovery resources;

(C) is designated by the State in which the route is located (or in the case of a federally owned route, the head of the Federal agency with jurisdiction over the route) for the purposes described in subparagraph (B); and

(D) meets the criteria for a mass evacuation route pursuant to subsection (b)(1).

(2) PROGRAM.—The term “program” means the competitive grant program established under subsection (c)(1).

(3) RESILIENCE PROJECT.—The term “resilience project” means a project—

(A) with the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions; and

(B) designed and built to address current and future vulnerabilities to an evacuation route due to—

(i) future occurrence or recurrence of emergency events (as defined in section 667.3 of title 23, Code of Federal Regulations (or successor regulations)) that are likely to occur in the geographic area in which the evacuation route is located; or

(ii) projected changes in development patterns, demographics, or extreme events based on the best available evidence and analysis.

(4) SECRETARY.—The term “Secretary” means the Secretary of Transportation.

(b) ESTABLISHMENT OF MASS EVACUATION ROUTE CRITERIA.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Administrator of the Federal Emergency Management Agency, State departments of transportation, metropolitan

planning organizations, and other stakeholders, shall establish criteria for eligible entities described in subsection (f) to identify mass evacuation routes.

(2) REQUIREMENTS.—In carrying out paragraph (1), the Secretary shall—

(A) provide a period of not less than 90 days for State departments of transportation, metropolitan planning organizations, other stakeholders, and the public to comment on the criteria proposed by the Secretary under that paragraph; and

(B) take into consideration any comments received pursuant to subparagraph (A).

(c) ESTABLISHMENT OF PROGRAM.—

(1) IN GENERAL.—The Secretary (in consultation with the Administrator of the Federal Emergency Management Agency for the purposes described in paragraph (2)) shall establish a competitive grant program to provide grants for resilience projects that strengthen and protect evacuation routes that are essential for providing and supporting mass evacuations caused by emergency events (as defined in section 667.3 of title 23, Code of Federal Regulations (or successor regulations)).

(2) CONSULTATION.—In carrying out the program, the Secretary shall consult with the Administrator of the Federal Emergency Management Agency for the purpose of providing technical assistance to the Secretary and to applicants.

(d) ELIGIBLE RESILIENCE PROJECTS.—The Secretary shall provide grants under this section to resilience projects—

(1) described in subsection (e); and

(2) that—

(A) ensure the ability of the evacuation route to provide safe passage during a mass evacuation and reduce the risk of damage to evacuation routes as a result of future emergency events (as defined in section 667.3 of title 23, Code of Federal Regulations (or successor regulations)), including—

(i) restoring or replacing existing mass evacuation routes that are classified as being in poor condition or do not meet current geometric standards;

(ii) protecting, elevating, or relocating assets that are located in a base floodplain;

(iii) protecting assets vulnerable to high winds;

(iv) installing mitigation measures that prevent the intrusion of floodwaters into transportation systems;

(v) strengthening systems that remove rainwater from transportation facilities or services; or

(vi) other resilience projects that address identified vulnerabilities;

(B) if the Secretary determines that existing evacuation routes are not sufficient to adequately facilitate mass evacuations, expand the capacity of evacuation routes to swiftly and safely accommodate mass evacuations and provide mobility for emergency responders and recovery resources, including installation of—

(i) communications and intelligent transportation system equipment and infrastructure;

(ii) counterflow measures; or

(iii) shoulders;

(C) are for the construction of—

(i) new or redundant evacuation routes, if the Secretary determines that existing evacuation routes are not sufficient to adequately facilitate mass evacuations, emergency response, or recovery efforts; or

(ii) sheltering facilities; or

(D) involve planning and acquisition, including—

(i) mass evacuation planning and preparation, such as—

(I) coordination with Federal agencies and departments, agencies and departments within the State, first responders, and other States;

(II) identification of evacuation routes;

(III) evacuation route education and awareness campaigns;

(IV) traffic analysis and monitoring; or

(V) data sharing;

(ii) acquisition of evacuation route and traffic incident management equipment and vehicles;

(iii) evacuation route risk assessment;

(iv) development of enhanced mass evacuation response capabilities;

(v) evacuation route signage; or

(vi) equipment for pedestrian movement.

(e) ELIGIBLE PROJECTS.—The Secretary may make a grant under this section only for a project that is—

(1) an evacuation route;

(2) a project eligible for assistance under title 23, United States Code;

(3) a public transportation facility or service eligible for assistance under [chapter 53](#) of title 49, United States Code;

(4) a facility or service for intercity rail passenger transportation (as defined in section 24102 of title 49, United States Code);

(5) a port facility, including a facility that—

(A) connects a port to other modes of transportation;

(B) improves the efficiency of mass evacuations and disaster relief; or

(C) aids transportation;

(6) a public-use airport (as defined in section 47102 of title 49, United States Code) that is included in the national plan

of integrated airport systems developed by the Federal Aviation Administration under section 47103 of title 49, United States Code; or

(7) a route owned, operated, or maintained by the Corps of Engineers.

(f) ELIGIBLE ENTITIES.—The Secretary may award a grant under this section to any of the following:

(1) A State.

(2) A metropolitan planning organization that serves an urbanized area (as defined by the Bureau of the Census) with a population of more than 200,000 individuals.

(3) A unit of local government.

(4) A political subdivision of a State or local government.

(5) A special purpose district or public authority with a transportation function, including a port authority.

(6) A Federal land management agency that applies jointly with a State or group of States.

(7) A Tribal government or a consortium of Tribal governments.

(8) A multistate or multijurisdictional group of entities described in paragraphs (1) through (7).

(g) APPLICATIONS.—To be eligible to receive a grant under this section, an eligible entity shall submit to the Secretary an application in such form, at such time, and containing such information as the Secretary determines to be necessary.

(h) CRITERIA.—In selecting resilience projects to receive grants under the program, the Secretary shall consider—

(1) the cost of the project compared to the risk of recurring damage and the cost of future repairs, taking into account current and future emergency events (as defined in section 667.3 of title 23, Code of Federal Regulations (or successor regulations)) and extreme events, to the maximum extent practicable;

(2) the extent to which the project reduces the financial risk to the Federal Government; and

(3) such other criteria as the Secretary determines to be appropriate.

(i) ADMINISTRATION OF PROJECTS.—A project that receives a grant under this section—

(1) may be transferred within the Department of Transportation; and

(2) shall be administered in accordance with—

(A) title 23 and title 49, United States Code, as applicable;

(B) title VI of the Civil Rights Act of 1964 ([42 U.S.C. 2000d](#) et seq.);

(C) the National Environmental Policy Act of 1969 ([42 U.S.C. 4321](#) et seq.); and

(D) the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 ([42 U.S.C. 4601](#) et seq.).

(j) FEDERAL COST SHARE.—

(1) **IN GENERAL.**—The Federal share of the cost of a project carried out under the program shall not exceed 80 percent of the total project cost.

(2) **NON-FEDERAL SHARE.**—The eligible entity may use funds provided from other Federal sources to meet the non-Federal cost share requirement for a project under the program.

(k) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this section for each fiscal year \$1,000,000,000, to remain available until expended.



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Forest Grazing Revisited

Lynn Huntsinger, UCB

Forest Grazing Revisited

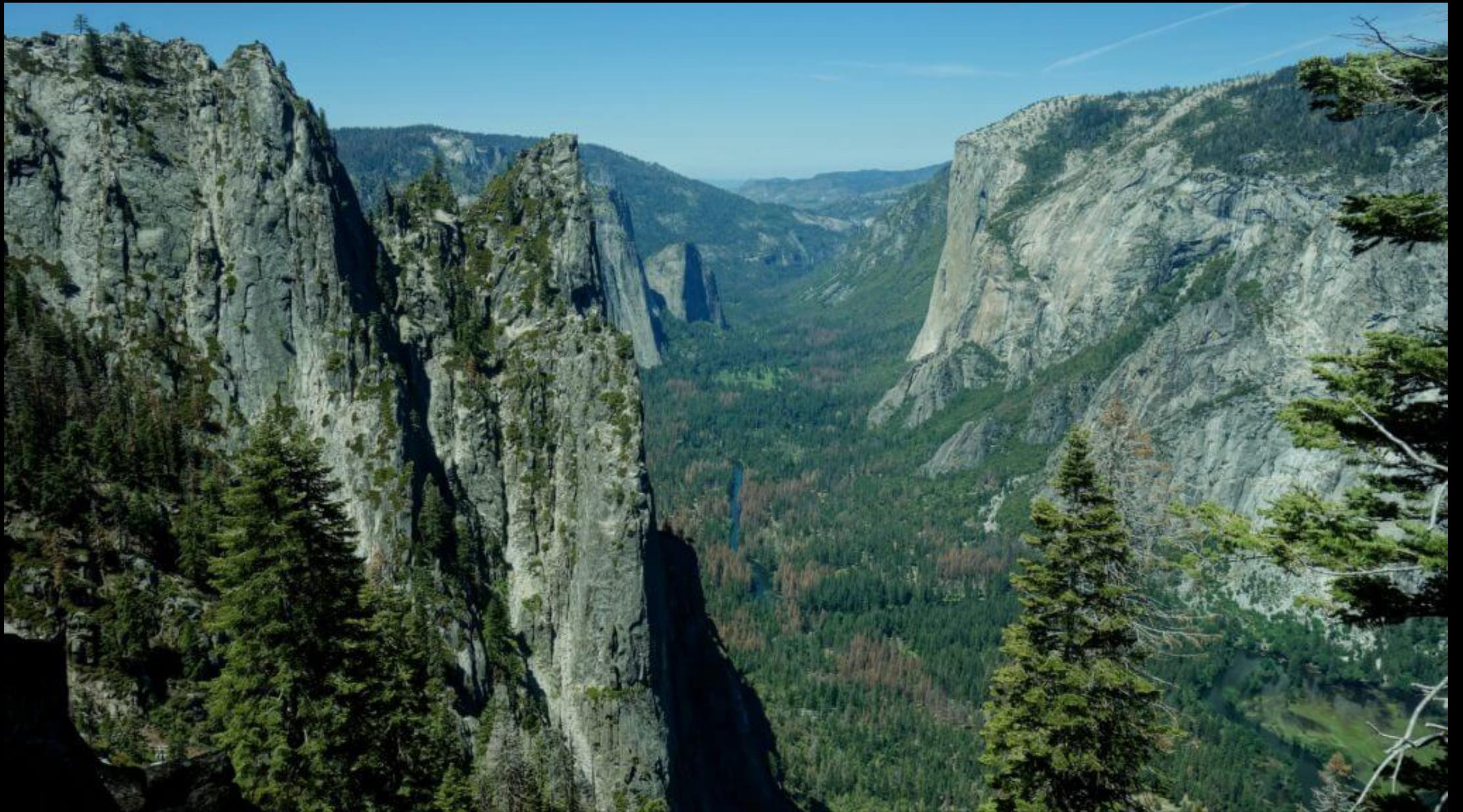
- A brief history of fire suppression
- Forest grazing experiments, 1983-86
- Things learned relevant to fire hazard reduction

1. A brief overview of fire suppression history









Frequent use of fire





No recorded
fire for the past
111 years!

1897

Mean Fire
Return Interval
(MFRI) before
last fire = 15
years

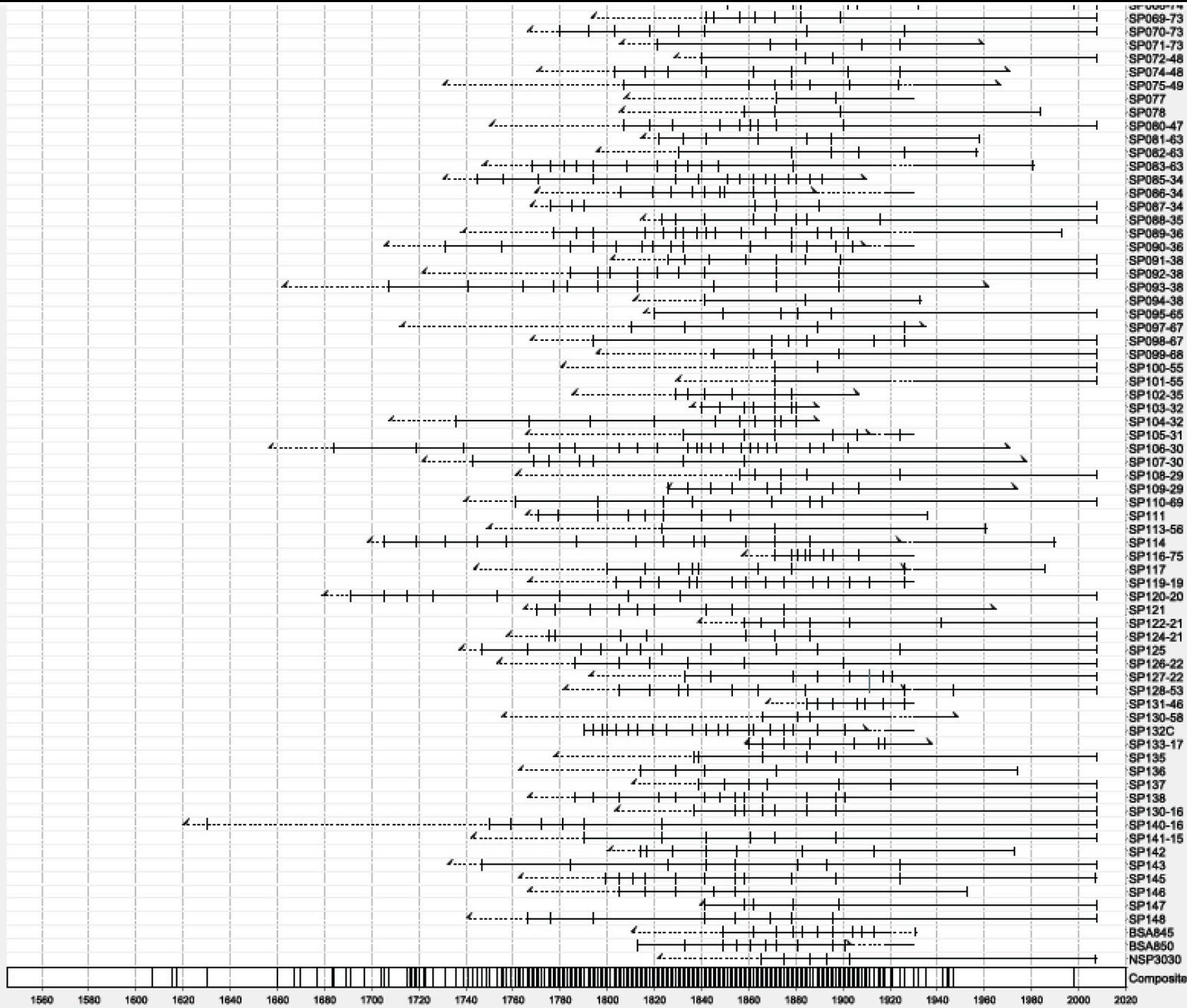
1885

1868

1839

1837

SP 135





High frequency,
low intensity
Native burning
+
burning by
herders,
farmers, hunters

Muir: the “Range of Light”



159402

John Muir, 1890, inspired National Park System



- *“Fire, the ax, and wholesale vandalism, have long threatened the forests of the country with utter destruction.”*
- *“Nature sends down fire from heaven every year in the form of lightning, making the care of man all the more necessary.”*



Gifford Pinchot, first Chief of Forest Service

- *“There is no doubt that forest fires encourage a spirit of lawlessness and a disregard for property rights.”*



USFS started managing forests circa 1905, though federal management started in the 1870's

1890's: Bernhard Fernow: Founded first American forestry school

- *“the whole fire question in the United States is one of bad habits and loose morals”*
- *Trained in Prussian “scientific forestry”*

Letter from Shasta Trinity Forest Supervisor to local stockman during WWI

“Preventable fire is ...a public dereliction.

*At a time like this of emergency ... every means should
be taken to prevent this evil ...*

*...400 men working ...to suppress man-caused fires, ...
needed at the front.*

It is ... the patriotic duty of the stockman to prevent fire.”

(Morrow 1918)



Uncle Sam,
1937

Campaign
kicked off by
President
F.D.
Roosevelt



OUR CARELESSNESS Their Secret Weapon

PREVENT FOREST FIRES

U. S. DEPT. OF AGRICULTURE
FOREST SERVICE

STATE OF WISCONSIN
CONSERVATION DEPARTMENT

During the war, fire associated with enemy attacks

careless matches aid the Axis



PREVENT FOREST FIRES!



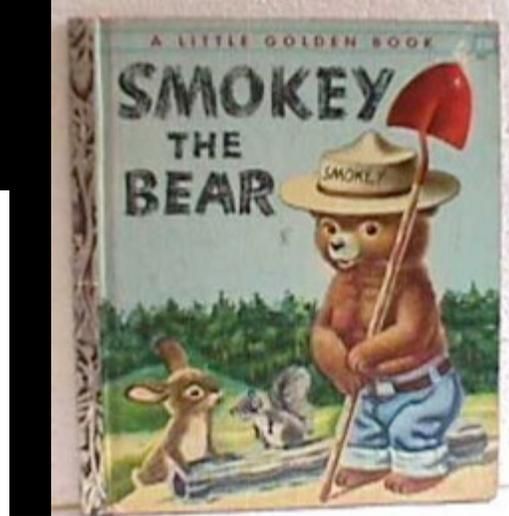


USFS
anti-fire ad
campaign:

Disney
allowed use
of Bambi for
one year in
1944



- Bear cub found in New Mexico in 1950



U.S. fire suppression 1900+

- Fires are set by criminals, immoral, and unpatriotic persons
- Stop natives, farmers, ranchers, hunters from burning the woods
- Eliminate human use from national parks to restore “wilderness”







II. Forest Grazing Dissertation Research



Study Area: Blodgett Forest Research Station



Manager's Goal: to control shrubs to enhance tree growth by suppressing shrubs with cattle grazing

Methods

- 👉 Build exclosures on forest plantations, comparing with and without grazing
(B. Allen-Diaz and J. Bartolome)
- 👉 Fence cows onto pastures and see what they eat at what level of intensity
- 👉 Control timing, intensity, and frequency of grazing with clipping study
- 👉 Build model impact of grazing practices



Exclosure Study (Allen-Diaz and Bartolome)

Forage Value Groups for Primary Understory Plants at Blodgett Research Forest

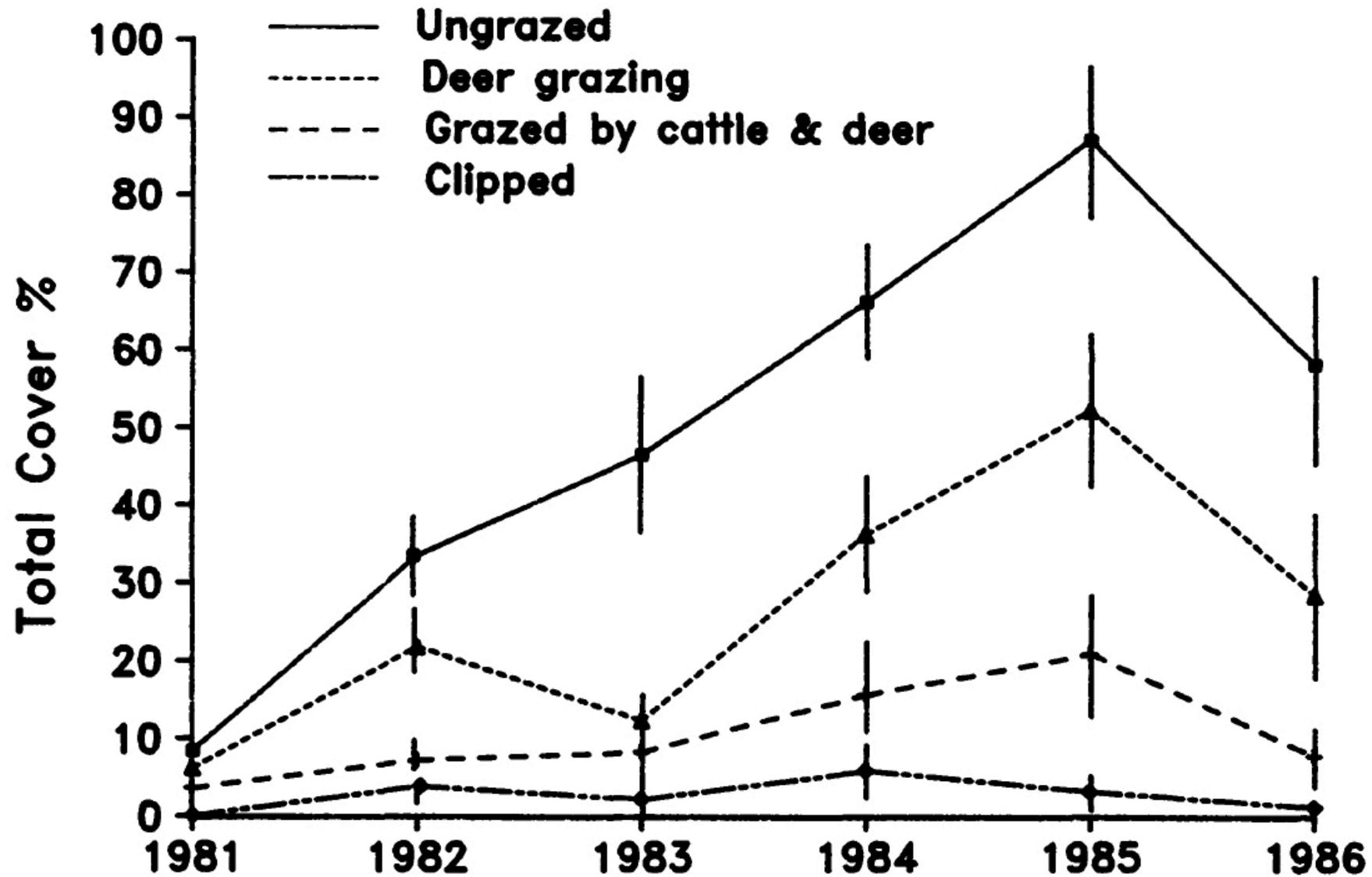
Desirable	Less desirable	Undesirable
1. Deerbrush <i>(Ceanothus integerrimus)</i>	1. Manzanita <i>(Arctostaphylos patula)</i>	1. Chinquapin <i>(Castanopsis chrysophylla)</i>
2. Squaw carpet <i>(Ceanothus prostratus)</i>	2. Mt. whitethorn <i>(Ceanothus cordulatus)</i>	2. Tan-oak <i>(Lithocarpus densiflora)</i>
3. Sedge <i>(Carex sp.)</i>	3. Snowberry <i>(Symphoricarpos acutus)</i>	3. Azalea <i>(Rhododendron occidentale)</i>
4. Bentgrass <i>(Agrostis sp.)</i>	4. Bitter cherry <i>(Prunus emarginata)</i>	4. Mt. misery <i>(Chamaebatia foliolosa)</i>
5. 20 additional grasses		5. Bracken fern <i>(Pteridium aquilinum)</i>



(B. Allen-Diaz)

Shrub and Herbaceous Cover on Clearcut 321e

Blodgett Forest Research Station, California



YEAR

(Allen-Diaz and Bartolome)



Creating a grazing management system

Develop a model for vegetation management:

Deerbrush, *Ceanothus Integerrimus*, edible by cattle and deer.

Competes with regrowing trees

Shelterwood study: Three pastures, grazed one month each



Stocking rates: 1983-- 2 AUMs/acre;
1984-- 2.2 AUMS/acre



Cover reduced each year, but vigorous regrowth



But not as big as outside the
pastures



Cows escape before eating conifers



Lessons learned

- Cattle spent 1 month in each pasture: deerbrush recovered quickly
- Most tree trampling occurred the first year, and was not a problem relative to the number of tree seedlings. Softer soil, more damage (10,404 seedlings per ha to start, ideal around 500)
- Cattle did not eat conifers, deer browsed off most of them

Cattle browsing: Simulate!

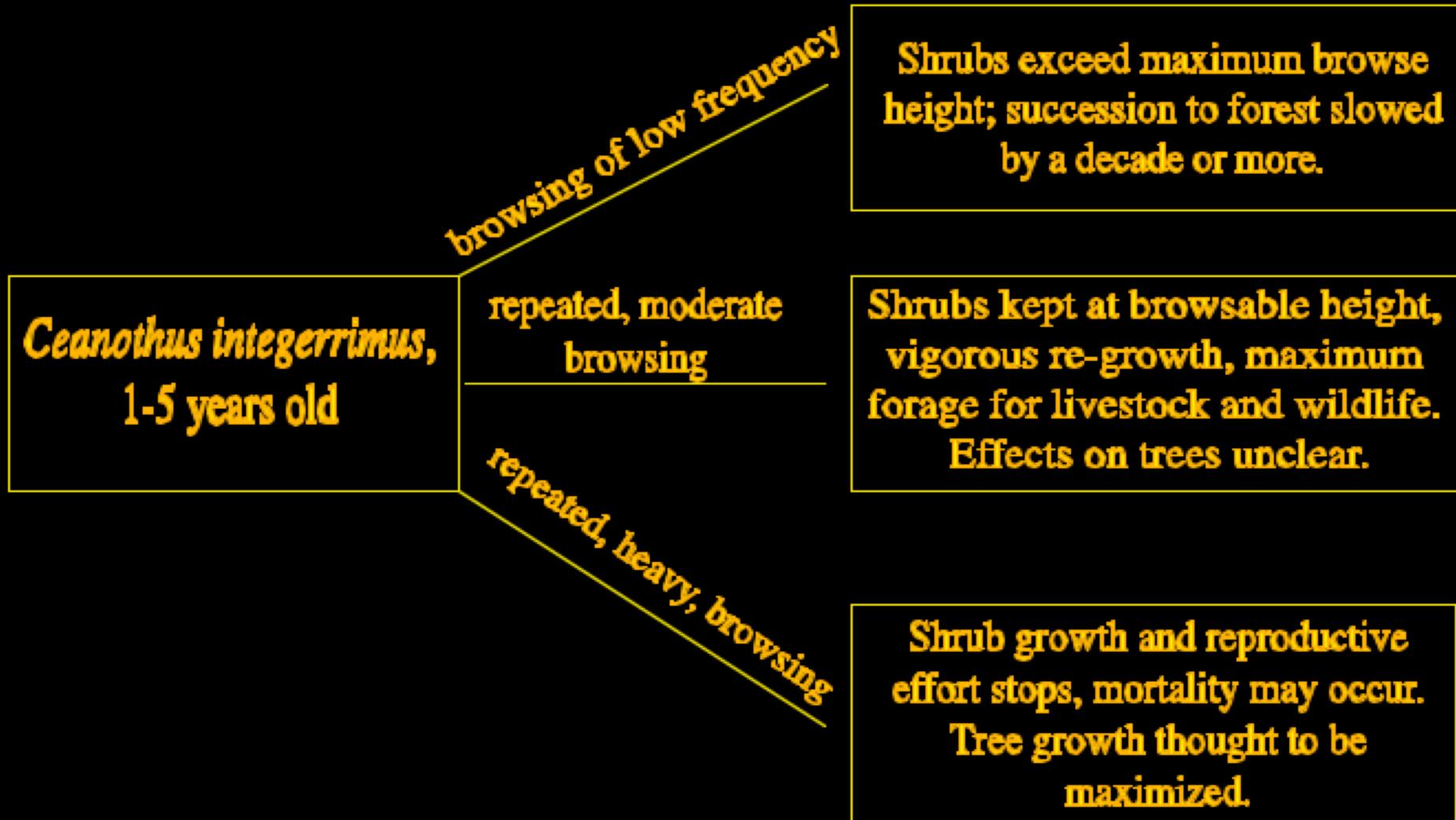


Clipping study

- Clipped deerbrush on two sites once or three times
- Clipped all, half, or no annual growth



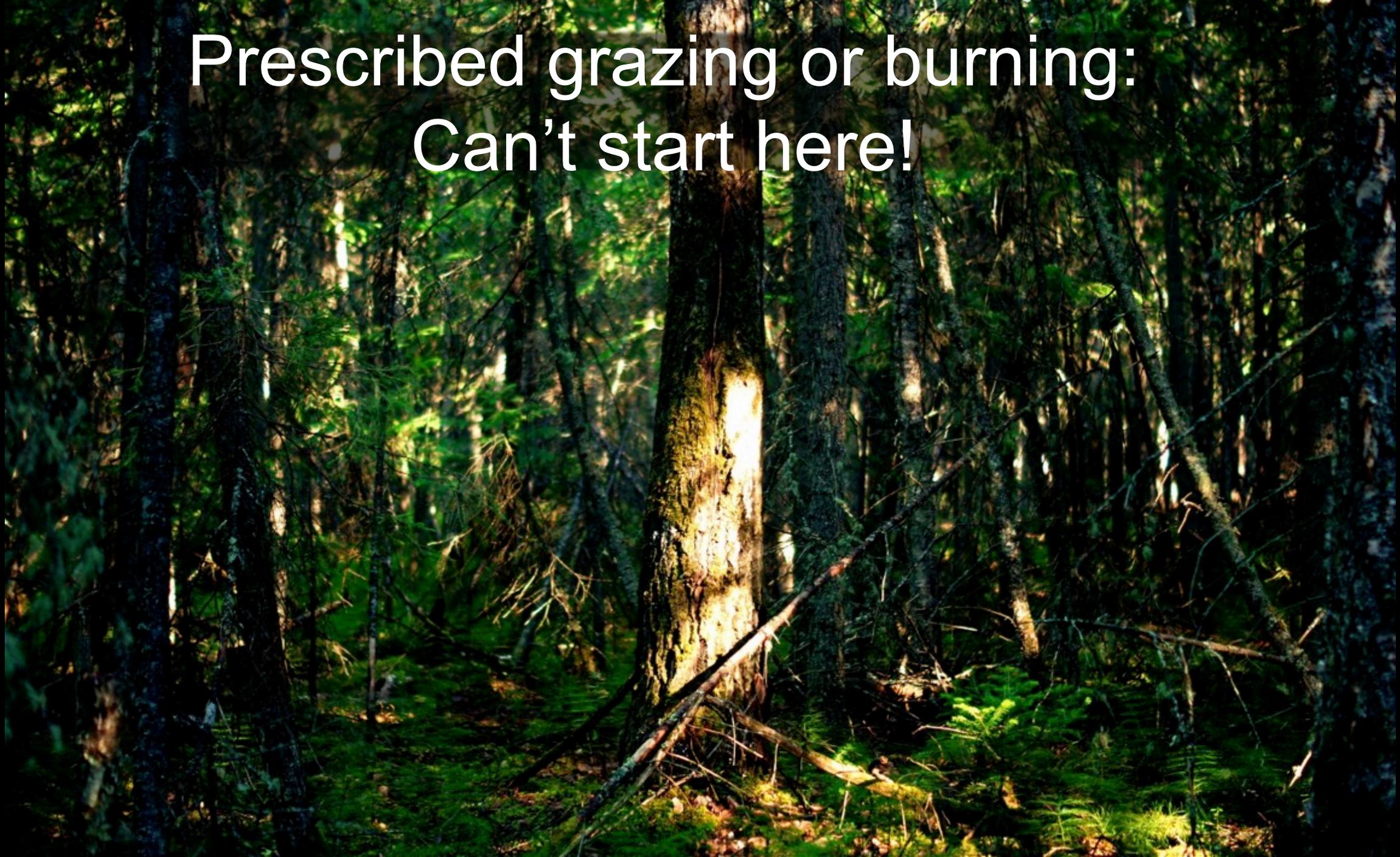
Grazing System Development: a simple model for management

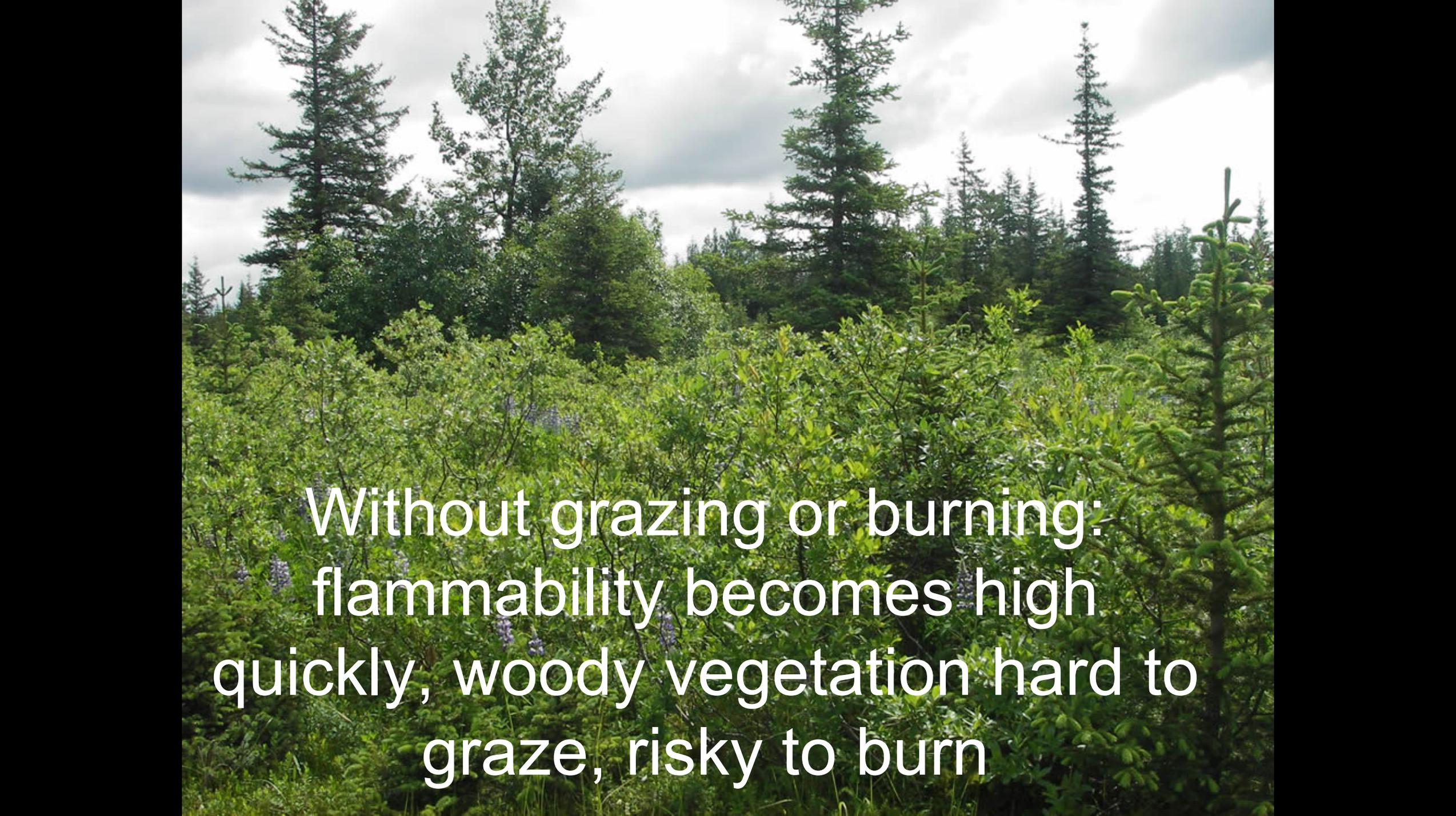


Moderately grazed, grazed repeatedly during the summer: Good for deer, livestock



Prescribed grazing or burning:
Can't start here!



A photograph of a forest landscape. The foreground is dominated by dense, vibrant green shrubs and bushes, some with small purple flowers. In the background, several tall, dark green evergreen trees stand against a sky filled with heavy, grey clouds. The overall scene suggests a forest that has become overgrown and woody.

Without grazing or burning:
flammability becomes high
quickly, woody vegetation hard to
graze, risky to burn

Start as soon as possible



Start when the plants are small





YES!

- Start right away!
- How palatable are the problem plants?
- What do the livestock prefer? (kind, class, history)
- Allow repeated, season long use? Or other system
- Planning: where are important spots for wildfire, potential management issues
- Can combine with other treatments, burning or mechanical.

Berkeley Hills 1900



Berkeley Hills, 1990







Grazing removes biomass, which is also fuel



- Long term: impedes shrub invasion in some systems
- Short term: reduces flammable biomass on rangelands



Choices

- Livestock grazing
- Prescribed fire
- Chemical
- Manual
- Mix

Different grazing industries with different characteristics

- Traditional livestock a backbone industry, fee paying, may be annual over many years, traditionally not focused on fire prevention
- Prescribed grazing businesses may be used to solve an immediate problem or annual, often focused on fire prevention, paid.



Spanish traditional oak
woodland

Plantation forests contribute to global warming in Europe

(Naudts et al. 2016)





The abandonment of agricultural activities has become more intense in mountain areas.

This abandonment increases the combustible material that proliferates without management.

Transform agrarian surfaces into productive firebreaks.

Plantations that are more resilient to fire.

Agriculture as an essential part of an integrated management of natural spaces.

TELL US YOUR IDEA

The abandonment of

Before the mountains

Forestry has been,

“Project Mosaic,” Spain



Before the mountains were clean, because they were the appetite of all kinds of livestock.

The fires are the result of the gradual disappearance of this important partner of the economy and rural culture.

To effectively protect ourselves from fires, we must give cattle the rank of firefighters.



TELL US YOUR IDEA



The abandonment of agricultural activities



Before the mountains were clean



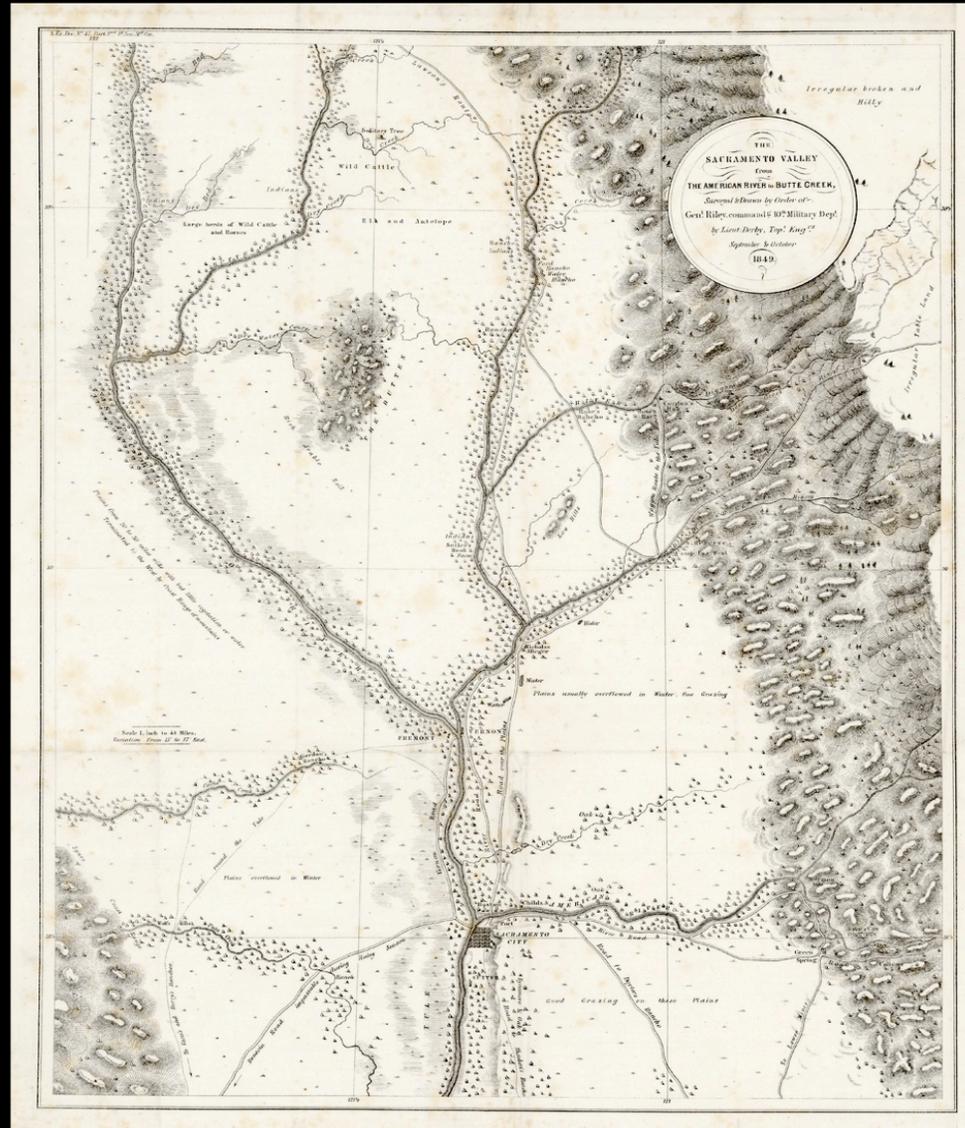
Forestry has been, until now,



Firefighters?

Thank You!





Quasi free-roaming livestock, harvested for hides and tallow



GALIE



Suntus Miles	
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17

Tropicus Capricorni

C. Blanco

P. de S. Iohannis

P. de S. Francisci

Punta de los Reyes

P. de S. Augustini

P. de S. Petri

P. de S. Iohannis



Low cost protection,
biomass reduction