



# State of the State Lands Report for Fiscal Years 2020 and 2021



## A Presentation to the Board of Natural Resources

April 5, 2022

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# Agenda



- Overview of State Uplands



- Business assets



- Income statements



- Fund balances



- Expenditures and FTEs (*Full Time Equivalentents*)



- Trust land transactions



- Complementary and supporting programs

Part I

Part II



# Part I





# What are State Lands?

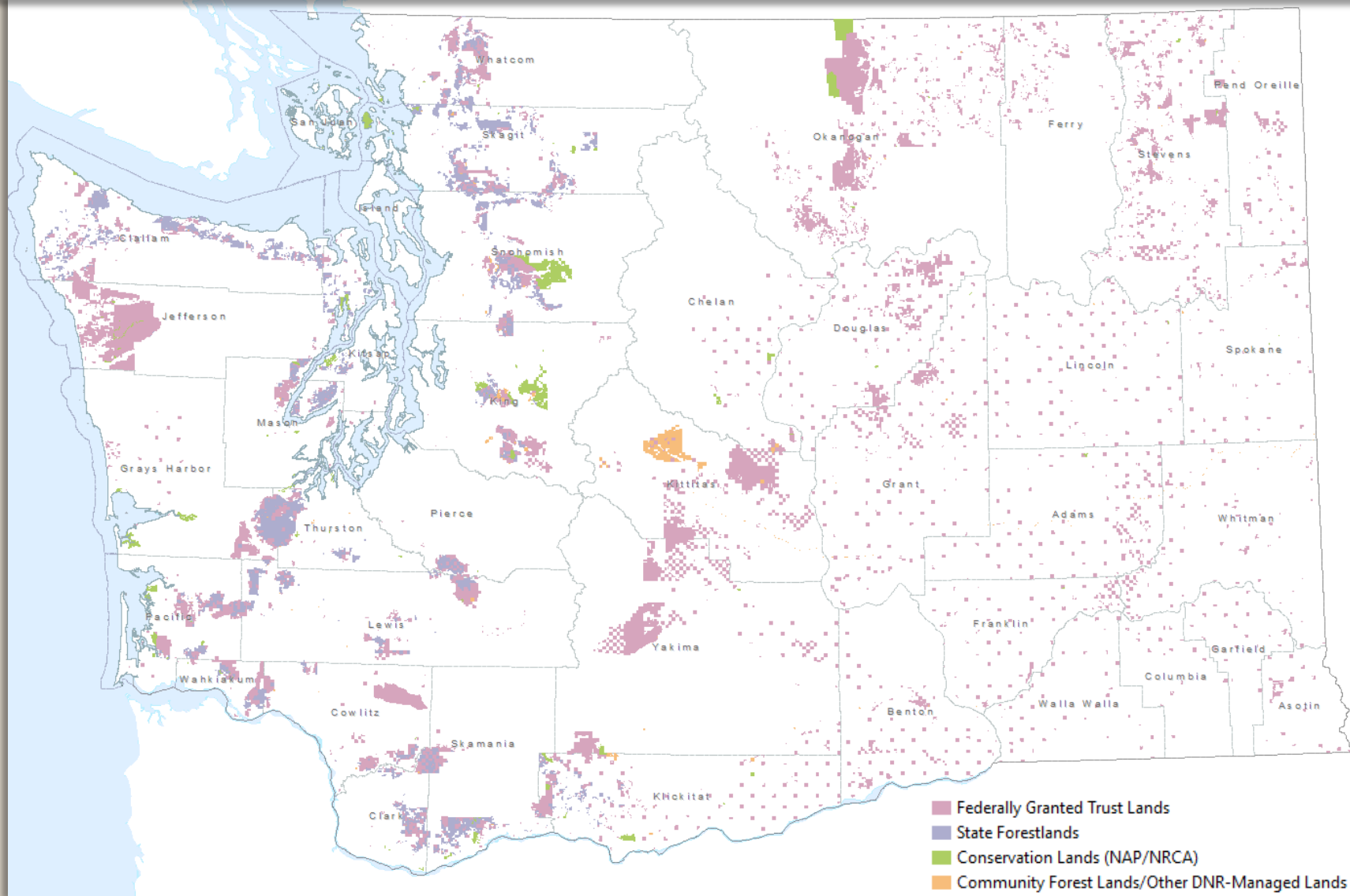
3.1 million acres of **state-owned uplands** that DNR manages to sustainably achieve multiple values and purposes

Economic support of beneficiaries and local communities

Social values and recreation



Ecological health, conservation, and climate mitigation







# State Uplands

## Product Sales & Leasing



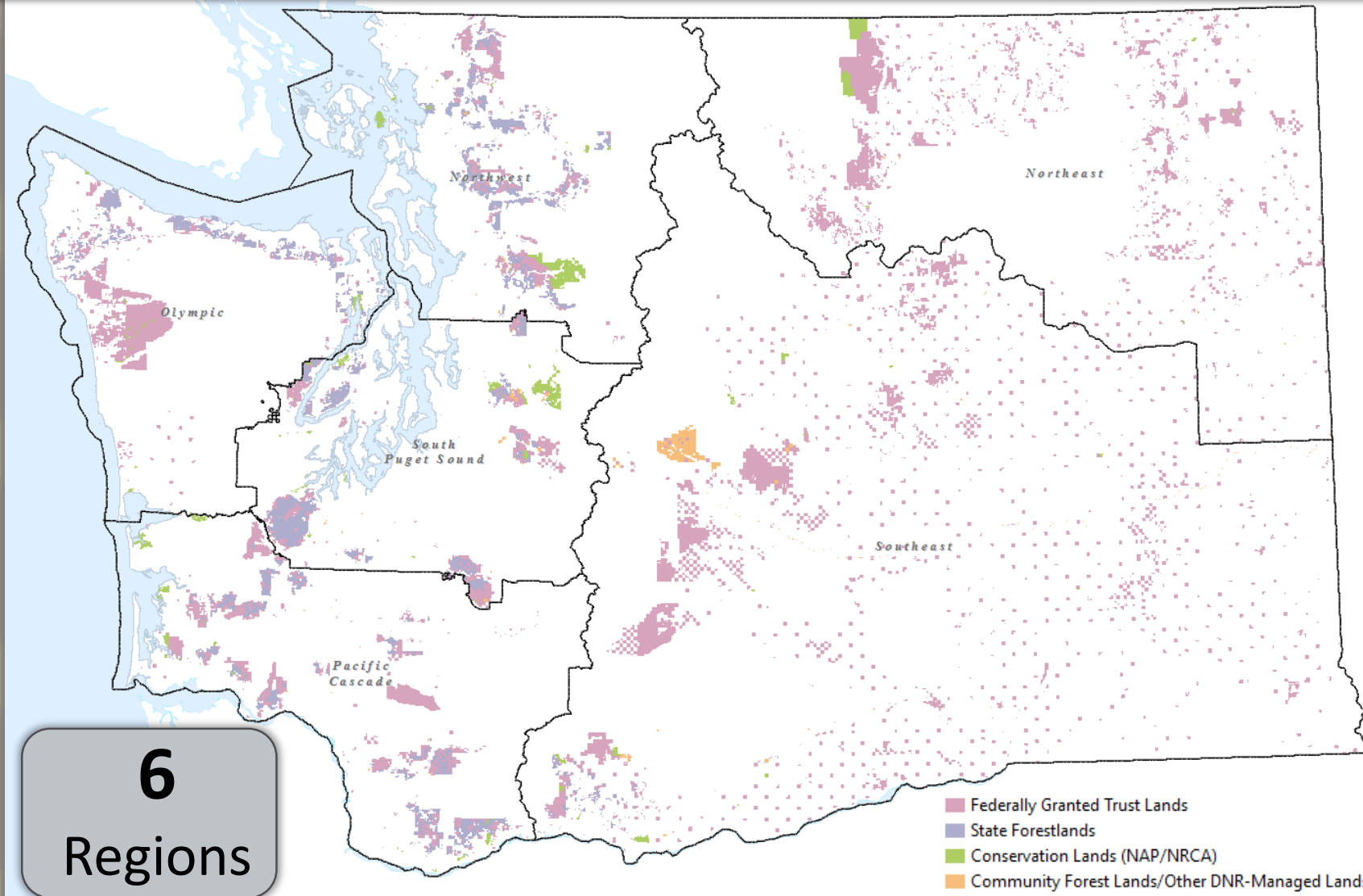
## Forest Resources



## Engineering



## Conservation, Recreation & Transactions





# Trust Responsibilities

**As manager of state trust lands, DNR has legal fiduciary responsibilities to:**

- Generate revenue and other benefits for each trust, in perpetuity
- Preserve the corpus of the trust
- Exercise reasonable care and skill
- Act prudently to reduce the risk of loss for the trusts
- Maintain undivided loyalty to beneficiaries
- Act impartially with respect to current and future beneficiaries



## Product Sales & Leasing



# Business Assets

Fiscal Years  
2020 & 2021



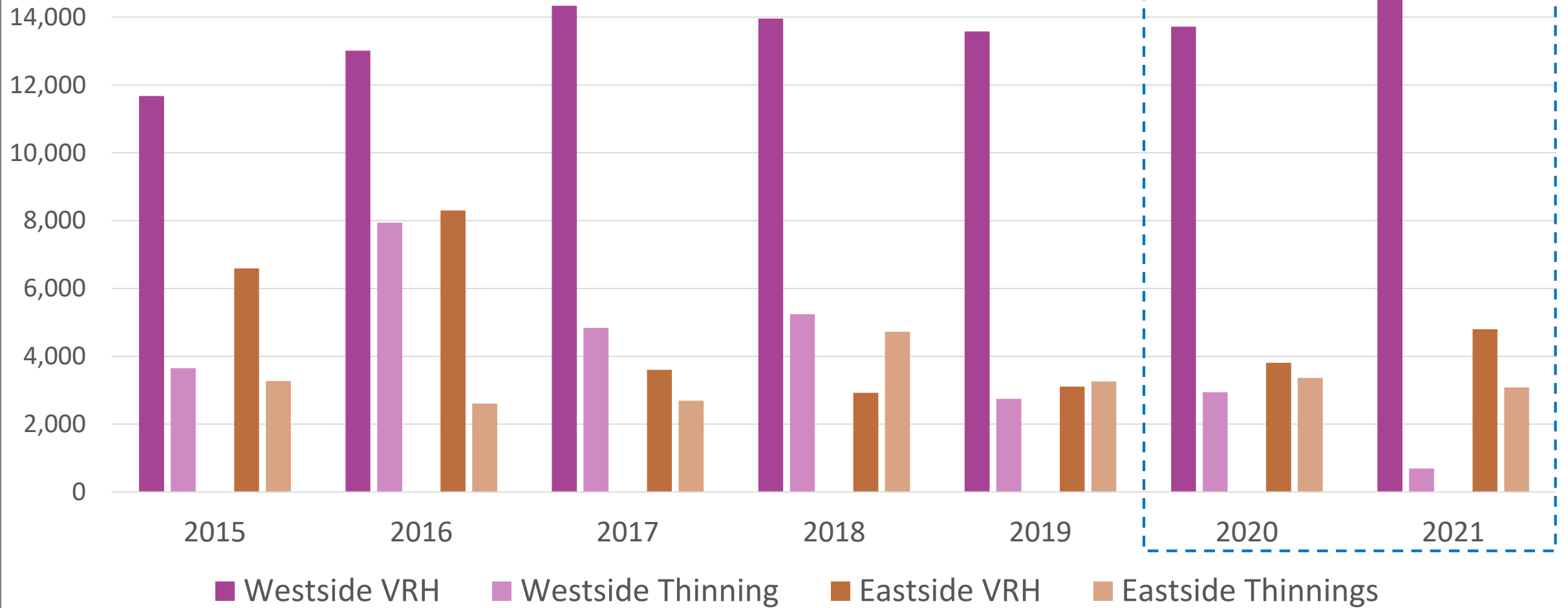
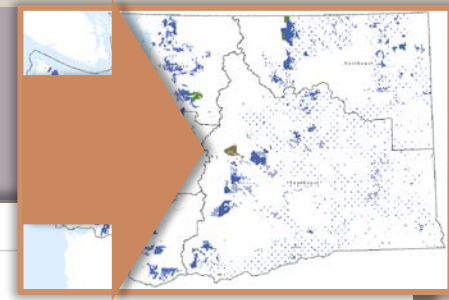
- Forestry
- Agricultural Leasing
- Commercial Real Estate
- Grazing
- Communication Sites
- Clean Energy
- Mining/Minerals
- Rights-of-Way
- Special Use Leases/Special Forest Products





# Commercial Treatment Acres

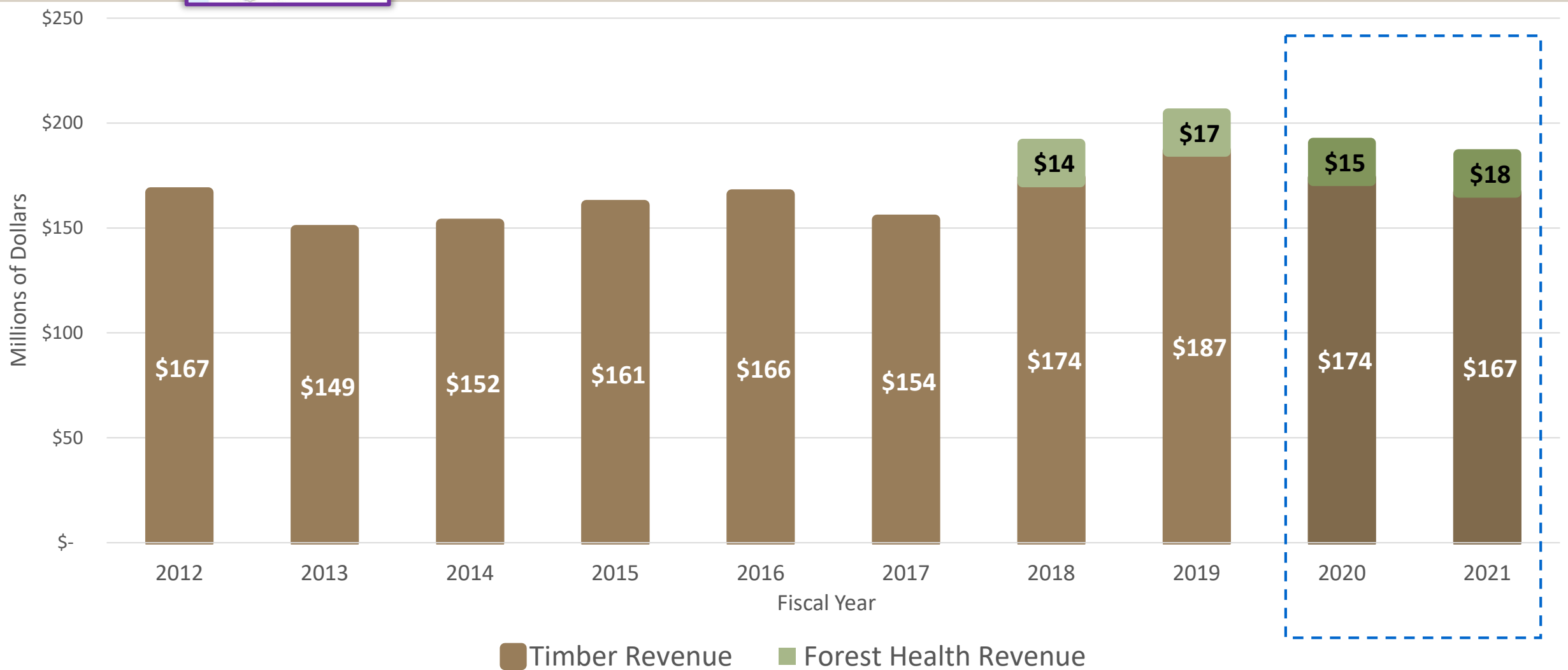
Completed and Sold





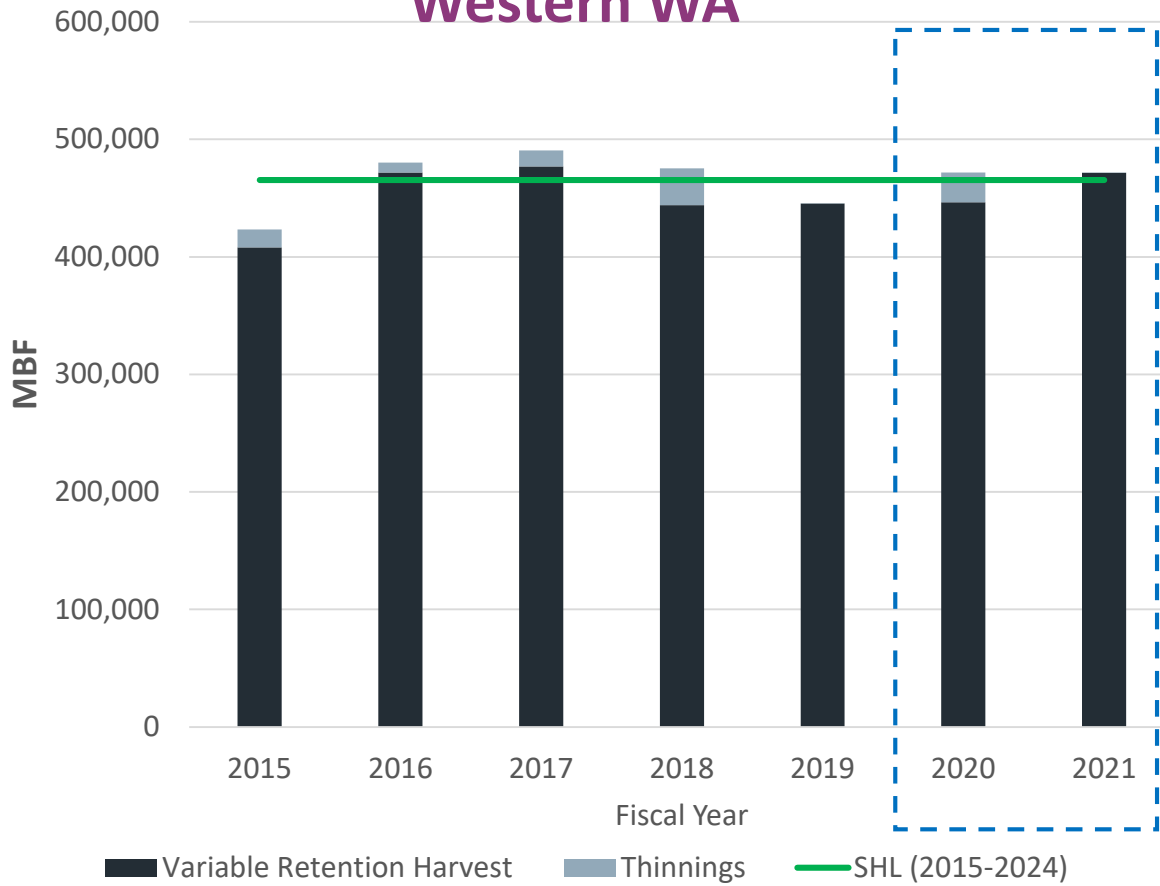
# Revenue from Timber Sales

(Statewide, rounded, not adjusted for inflation)



# Forestry Activities Harvest Volume

## Western WA



## Eastern WA



As of 2/22/2022

# Sustainable Harvest Level for the 2015-2024 Planning Decade

Sustainable Harvest Unit (SHU)		Sold and Completed MMBF (FY 2015-2021)	Planning Decade Target MMBF (FY 2015-2024)	Volume Remaining MMBF (FY 2022-2024) to meet SHU Target
<b>Federally Granted Trusts and State Forest Purchase</b>		1,238	1,876	638
<b>Olympic State Forest</b>		452	739	287
<b>Capitol Forest</b>		343	529	186
<b>State Forest Transfer</b>	<b>Clallam</b>	108	210	102
	<b>Clark</b>	74	48	0*
	<b>Cowlitz</b>	25	23	0*
	<b>Grays Harbor</b>	4	5	1
	<b>Jefferson</b>	32	65	33
	<b>King</b>	44	80	36
	<b>Kitsap</b>	19	12	0*
	<b>Lewis</b>	159	191	32
	<b>Mason</b>	79	95	16
	<b>Pacific</b>	46	41	0*
	<b>Pierce</b>	16	29	13
	<b>Skagit</b>	227	259	32
	<b>Skamania</b>	48	101	53
	<b>Snohomish</b>	167	203	36
	<b>Thurston</b>	31	23	0*
<b>Wahkiakum</b>	29	59	30	
<b>Whatcom</b>	56	67	11	
<b>Total Volume</b>		<b>3,198</b>	<b>4,654</b>	<b>1,456</b>

\*Indicates SHUs that have already met or exceeded decadal target



# Sustainable Harvest Level - Planned Volume – Fiscal Year 2022-2024

Sustainable Harvest Unit (SHU)		Planned, Sold and Completed Volume MMBF (FY 2022-2024)	End of decade MMBF if FY 2022-2024 Volume Met	Over/(Under) Volume MMBF
<b>Federally Granted Trusts and State Forest Purchase</b>		658	1,896	20
<b>Olympic State Forest</b>		267	719	(20)
<b>Capitol Forest</b>		185	528	(1)
<b>State Forest Transfer</b>	<b>Clallam</b>	97	205	(5)
	<b>Clark</b>	3	77	29
	<b>Cowlitz</b>	0	25	2
	<b>Grays Harbor</b>	1	6	1
	<b>Jefferson</b>	31	63	(2)
	<b>King</b>	16	60	(20)
	<b>Kitsap</b>	0	19	7
	<b>Lewis</b>	38	197	6
	<b>Mason</b>	18	96	1
	<b>Pacific</b>	5	51	10
	<b>Pierce</b>	9	25	(4)
	<b>Skagit</b>	36	263	4
	<b>Skamania</b>	26	73	(28)
	<b>Snohomish</b>	50	217	14
	<b>Thurston</b>	-	31	8
<b>Wahkiakum</b>	18	47	(12)	
<b>Whatcom</b>	8	64	(3)	
<b>Total Volume</b>		<b>1,464</b>	<b>4,662</b>	<b>8</b>





# Sustainable Harvest Level for the 2015-2024 Planning Decade

Sustainable Harvest Unit (SHU)	Sold and Completed MMBF (FY 2015-2021)	Planning Decade Target MMBF (FY 2015-2024)	Volume Remaining MMBF (FY 2022-2024) to meet SHU Target	Planned, Sold and Completed Volume MMBF (FY 2022-2024)	End of decade MMBF if FY 2022-2024 Volume Met	Over/(Under) Volume MMBF
<b>Federally Granted Trusts and State Forest Purchase</b>	1,238	1,876	638	658	1,896	20
<b>Olympic State Forest</b>	452	739	287	267	719	(20)
<b>Capitol Forest</b>	343	529	186	185	528	(1)
<b>State Forest Transfer</b>	<b>Clallam</b>	108	210	102	97	(5)
	<b>Clark</b>	74	48	0*	3	29
	<b>Cowlitz</b>	25	23	0*	0	25
	<b>Grays Harbor</b>	4	5	1	1	6
	<b>Jefferson</b>	32	65	33	31	(2)
	<b>King</b>	44	80	36	16	(20)
	<b>Kitsap</b>	19	12	0*	0	19
	<b>Lewis</b>	159	191	32	38	197
	<b>Mason</b>	79	95	16	18	96
	<b>Pacific</b>	46	41	0*	5	51
	<b>Pierce</b>	16	29	13	9	25
	<b>Skagit</b>	227	259	32	36	263
	<b>Skamania</b>	48	101	53	26	73
	<b>Snohomish</b>	167	203	36	50	217
	<b>Thurston</b>	31	23	0*	-	31
<b>Wahkiakum</b>	29	59	30	18	47	
<b>Whatcom</b>	56	67	11	8	64	
<b>Total Volume</b>	<b>3,198</b>	<b>4,654</b>	<b>1,456</b>	<b>1,464</b>	<b>4,662</b>	<b>8</b>

\*Indicates SHUs that have already met or exceeded decadal target



# Forestry Challenges and Opportunities

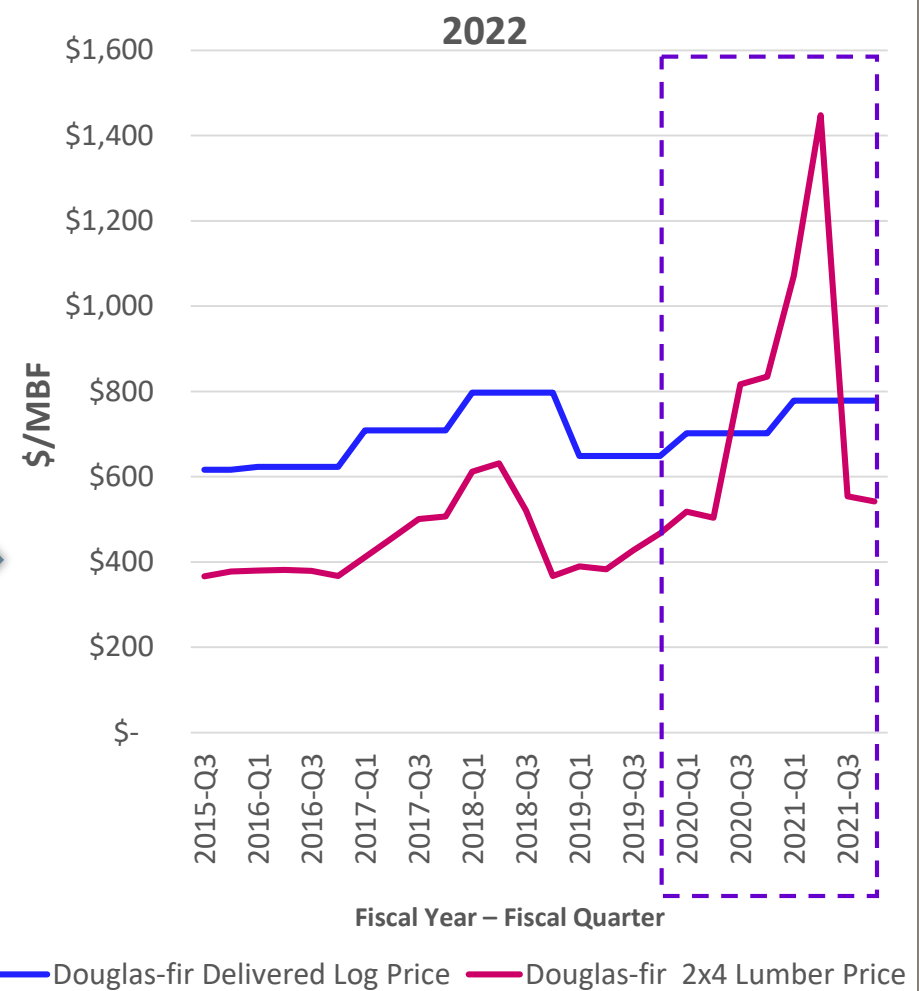
## Challenges:



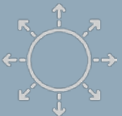
- Harvest level set mid-decade – requiring adjustment at Sustainable Harvest Unit level mid-decade  
*(some units over, some units under)*
- Staffing vacancies
- Increased public interest in timber sales with older forests and the process has increased staff time and outreach efforts
- Historical high lumber prices – but didn't see a corresponding rise in log prices



### Log Price vs. Lumber Price FY 2015 – FY 2022



## Opportunities:



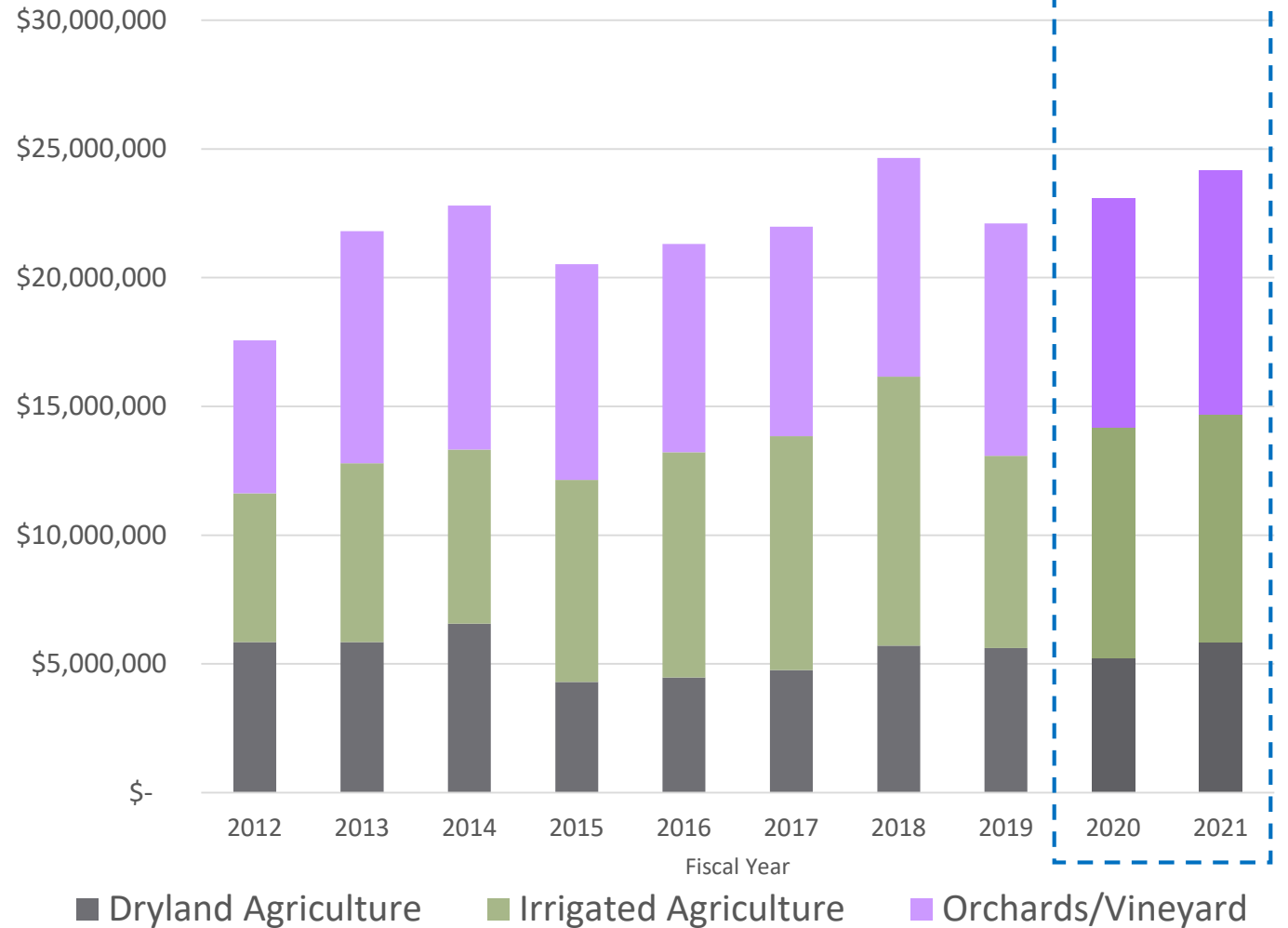
- Increased interest in biomass and potential new forest product markets  
*(cedar salvage, hop poles)*
- Higher log prices may persist for some time as demand for housing remains high

# Agricultural Leasing

## Agricultural Leasing Data FY 2021

Lease Type	Example crops	Acres	Number of Leases	Gross Revenue <i>(rounded)</i>
Orchards & Vineyards	Grapes, apples, cherries	31,653	101	\$9,490,000
Irrigated Agriculture	Onions, potatoes, corn, alfalfa	44,591	128	\$8,843,000
Dryland Agriculture	Hay, lentils, barley	163,296	615	\$5,843,000
<b>Total</b>		<b>239,540</b>	<b>844</b>	<b>\$24,177,000</b>

### Agricultural Leasing Gross Revenue



# Agricultural Leasing Program

## Challenges:



- 2021 drought negatively affected dryland agricultural revenue
- Pandemic related uncertainty in commodity pricing

## Opportunity:



- Working to transfer water rights & expand irrigated agricultural lands



# Commercial Real Estate

## Improved Property Leases

DNR owns the land and structures

*Office buildings, retail, warehouses*

**FY 2021: 12 leases**

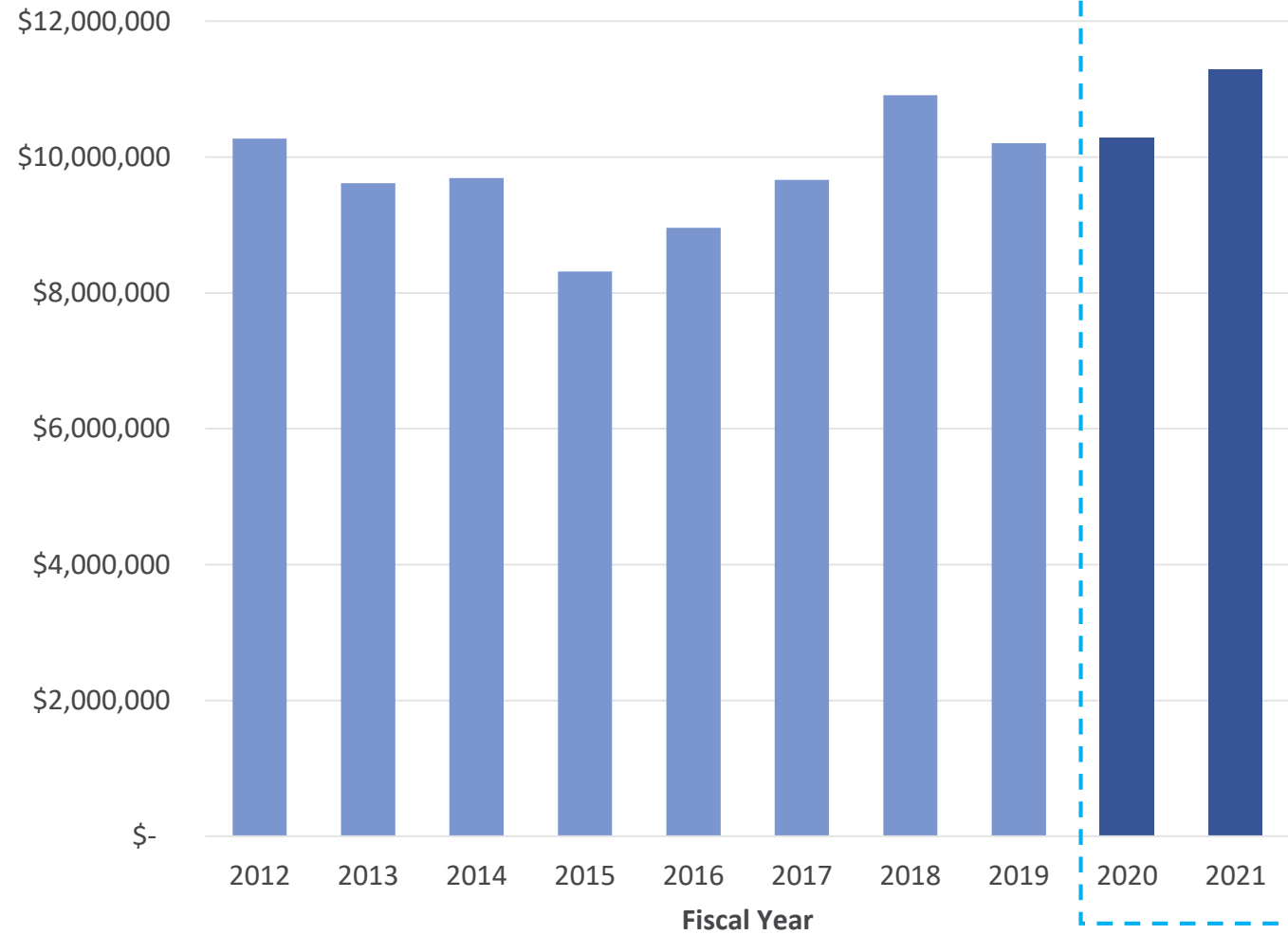
## Ground Leases

DNR owns the land; Lessee owns the structures

*Parking lots, bank, motel, restaurant, retail*

**FY 2021: 30 leases**

## Gross Revenue





# Commercial Real Estate

## Updates



Advisory committee created

- Strategic guidance on modernizing program

Jones Lang Lasalle contract

- Program review, short- & long-term recommendations

## Challenges



High building vacancy rate

Lack of tenant improvement funds to attract new business

## Opportunities



Promoting vacant or underutilized properties

Legislative change the maximum lease term to 99 years



# Transition Lands & Urban Lands

**Transition Lands:** Areas being managed for natural resources that could yield higher economic return from conversion to a different land use (35 properties, 3,489 acres)

**Urban Lands:** Properties zoned residential, commercial, or industrial by local governments (40 properties, 3,750 acres)

## Challenges:

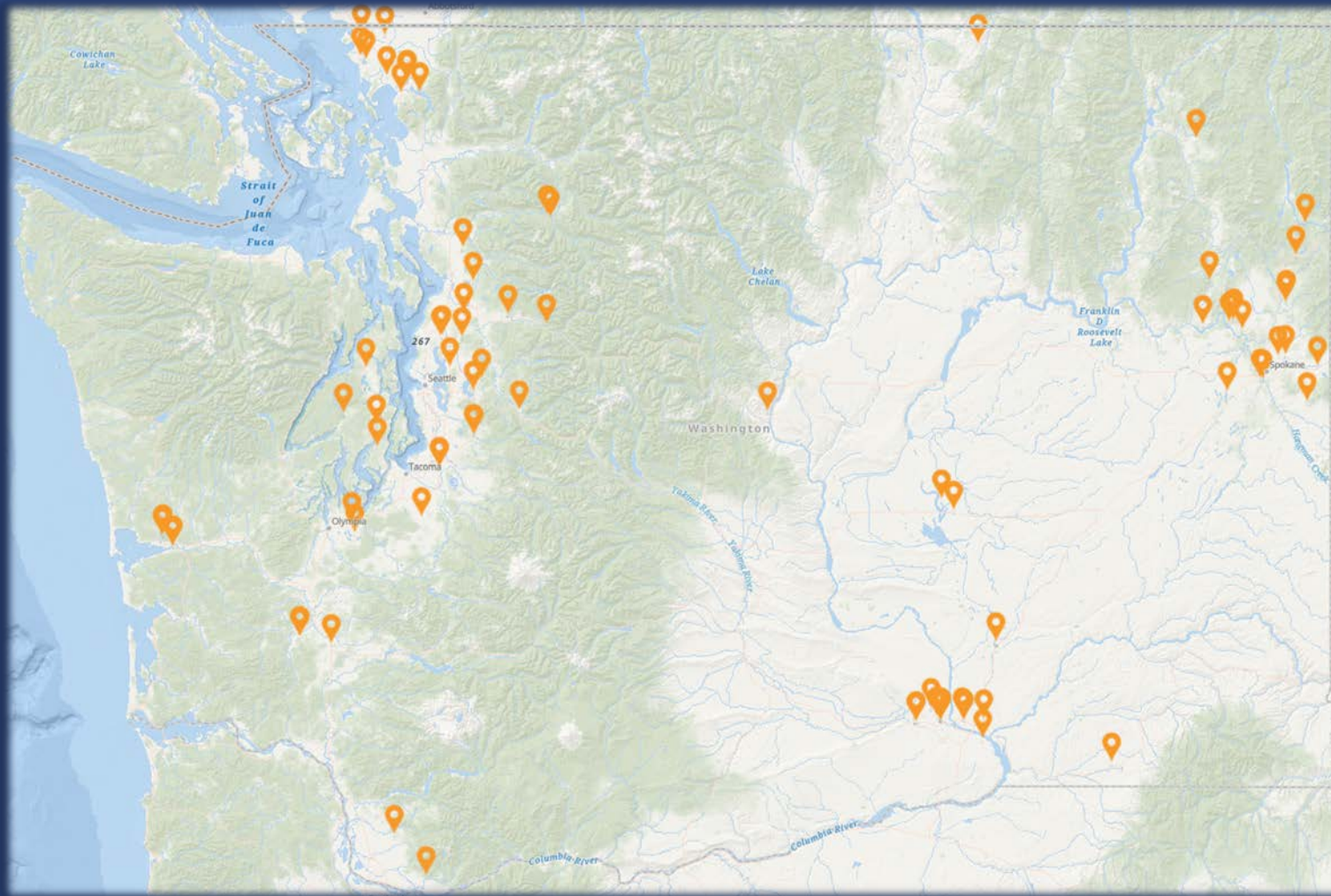


- Community preference to leaving certain areas undeveloped
- Increased homeless encampments on underutilized/vacant Transition or Urban lands

## Opportunity:



- Pursuing/investigating ways to more efficiently transact these properties



<https://wadnr.maps.arcgis.com/apps/webappviewer/index.html?id=47c463498d384e659c4b37ac02e840c8>





# Grazing Program

## Benefits of the Grazing Program

- Provides critical forage for livestock
- Can reduce fuel loads in high risk wildfire areas
- Lessees help steward the land (noxious weeds and dumping)
- Current highest and best use for land
- Revenue generation for beneficiaries

**Leases:** *Exclusive use* of a specific area

(760 leases over ~542,000 acres)

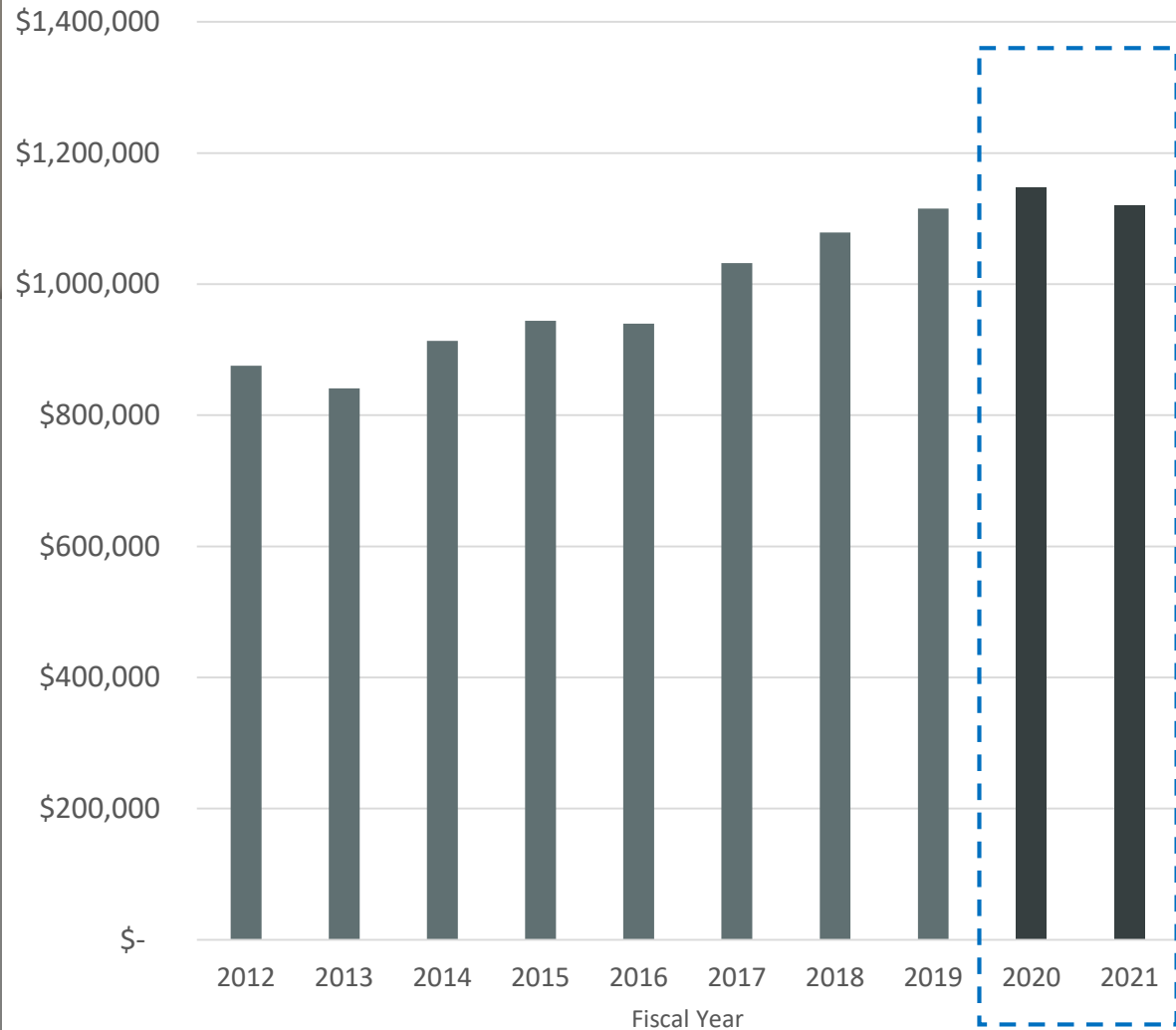
or

**Permits:** *Non-exclusive use* over a broad geographic area  
in locations of intermingled land ownership

(42 permits over ~335,000 acres)



# Grazing Program Gross Revenue



## Challenges:



- Drought and wildfire affected forage levels in some areas
- Deferrals of lands -> loss of revenue during recovery

## Opportunities:

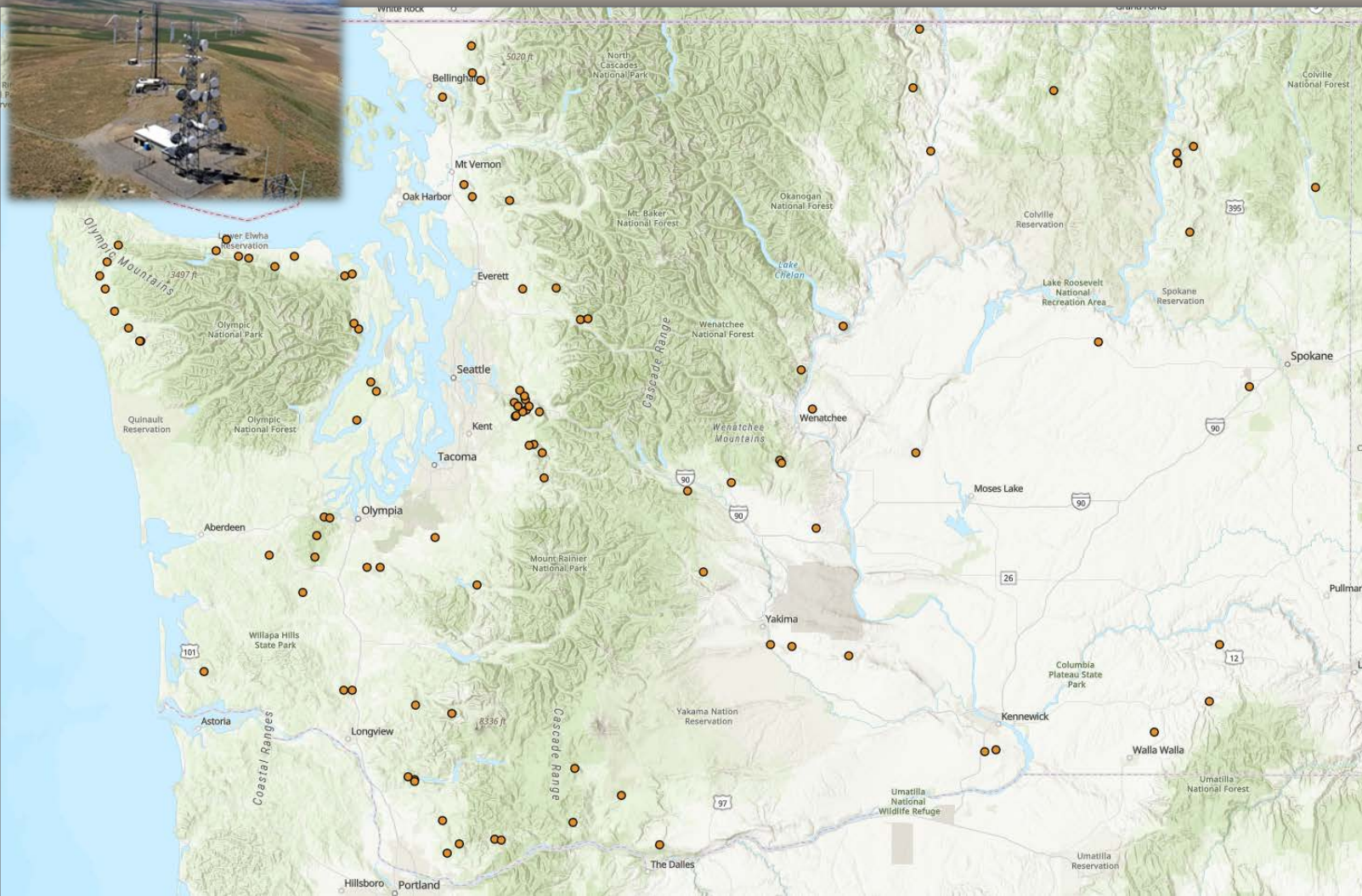


- Actively working with other landowners to coordinate replacement forage lands when there are deferrals from wildfire or drought
- Partnering with other agencies on long-term solutions
  - E.g. Shrub-steppe proviso work group





# Communication Sites



**106 Sites | 439 Leases**

**25 sites:** Mix of DNR-owned and Tenant-owned structures

**76 sites:** Tenant-owned structures

**5 sites:** Under development/no infrastructure

- Radio/TV/Microwave (non-cellular)
- Cellular & Broadband (Wireless telecommunications)



# Communication Sites

## Update:



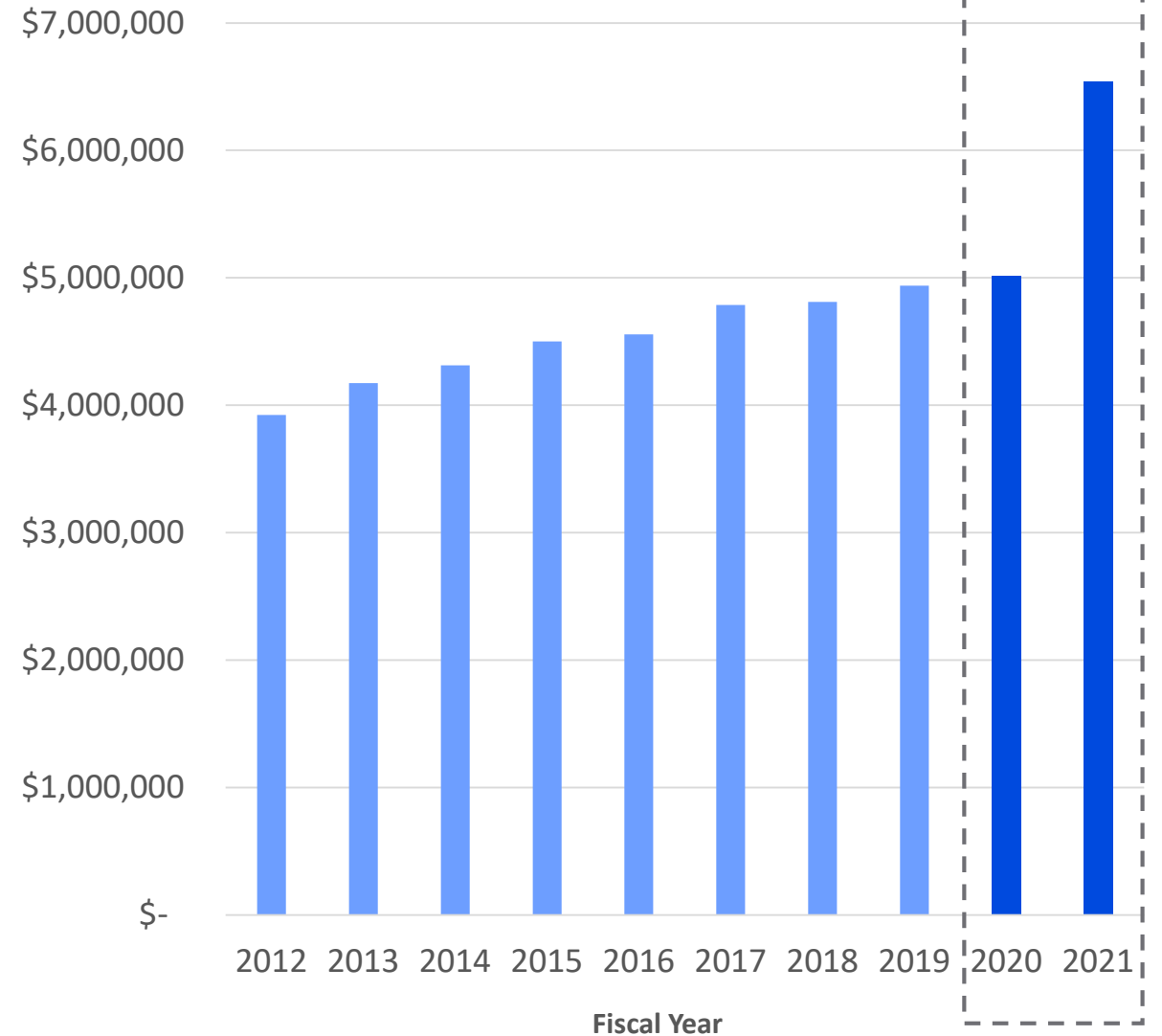
- Caught up on all expired leases and captured ~\$700,000 in back rent for beneficiaries

## Opportunities:



- Received \$2m in capital funding to improved rural broadband infrastructure
- Working with amateur radios users to properly and legally operate on state lands

## Gross Revenue



# Clean Energy

- **Wind Power**

(21 leases | 118 turbines | 216 MW)

- **Solar Power**

(3 leases in pre-development - 1,364 acres)

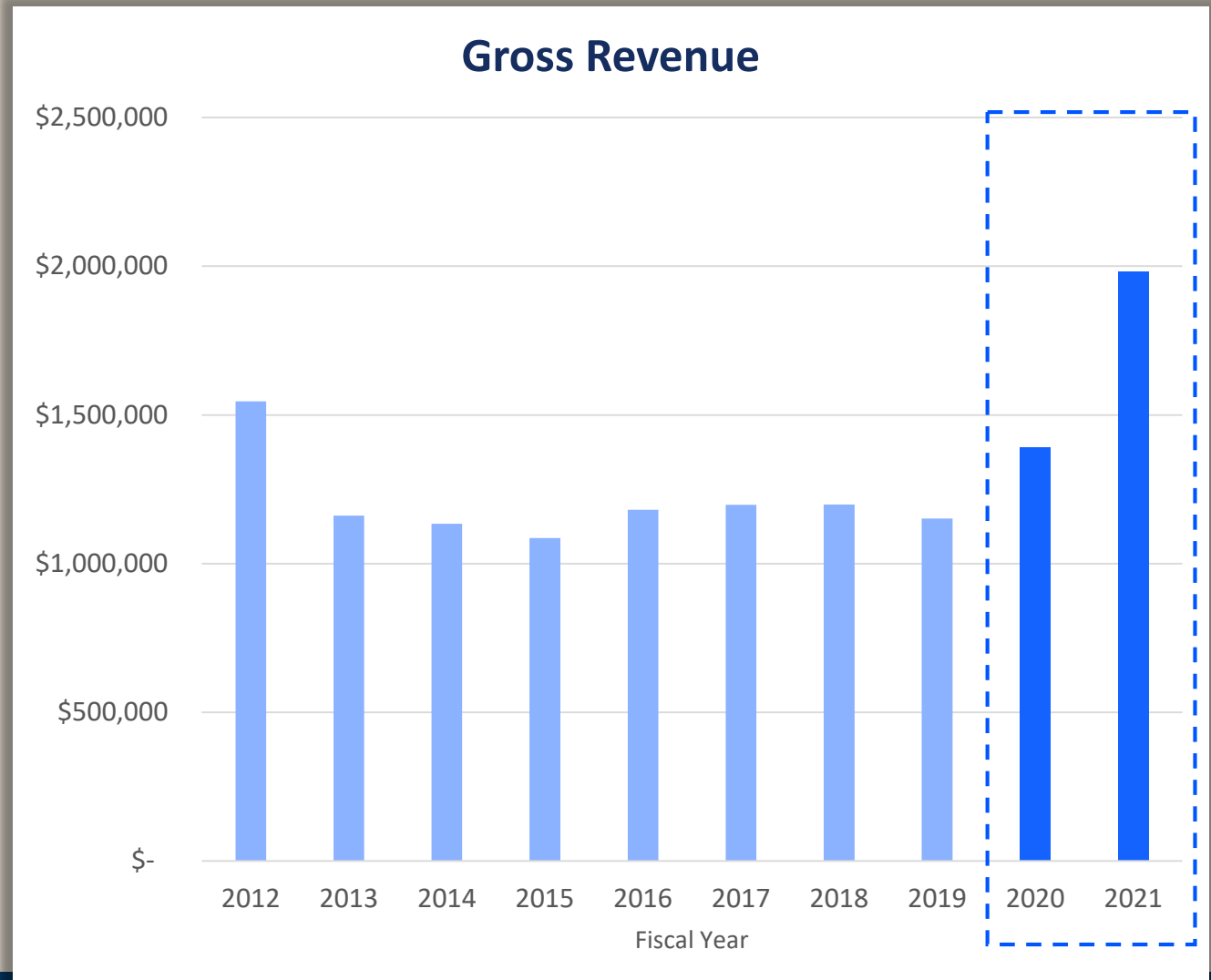
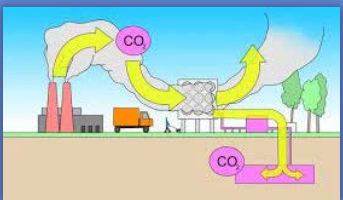
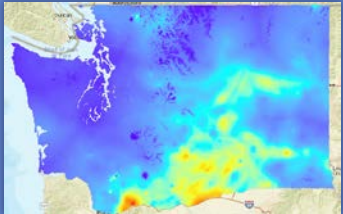
- **Geothermal**

(Mapping areas of untapped potential)

- **Biomass**

(Potential opportunities available in conjunction with timber harvests)

- **Other Projects**



# Clean Energy

## Updates:



- Focus on tribal engagement
- Recognition from National Association of State Trust Land Managers for Clean Energy Strategy
- First solar lease is moving towards the development phase

## Challenge:



- Solar development is a multi-year process
- Development moratoriums in two eastern Washington counties

## Opportunities:



- Collaborating with other DNR programs: Biofuels (Timber), Clean energy locations in transmission corridors (Rights-of way), Geothermal potential (Mining/Minerals)
- Mapping tool under development for sites with renewable energy potential



# Mining & Minerals

## Surface Contracts

Public or private companies who extract rock resources for roads or other construction

*9 contracts, 975 acres in FY 2021*

## Subsurface Leases

Mineral extraction or prospecting

*12 leases, 3,848 acres in FY 2021*

### Update:



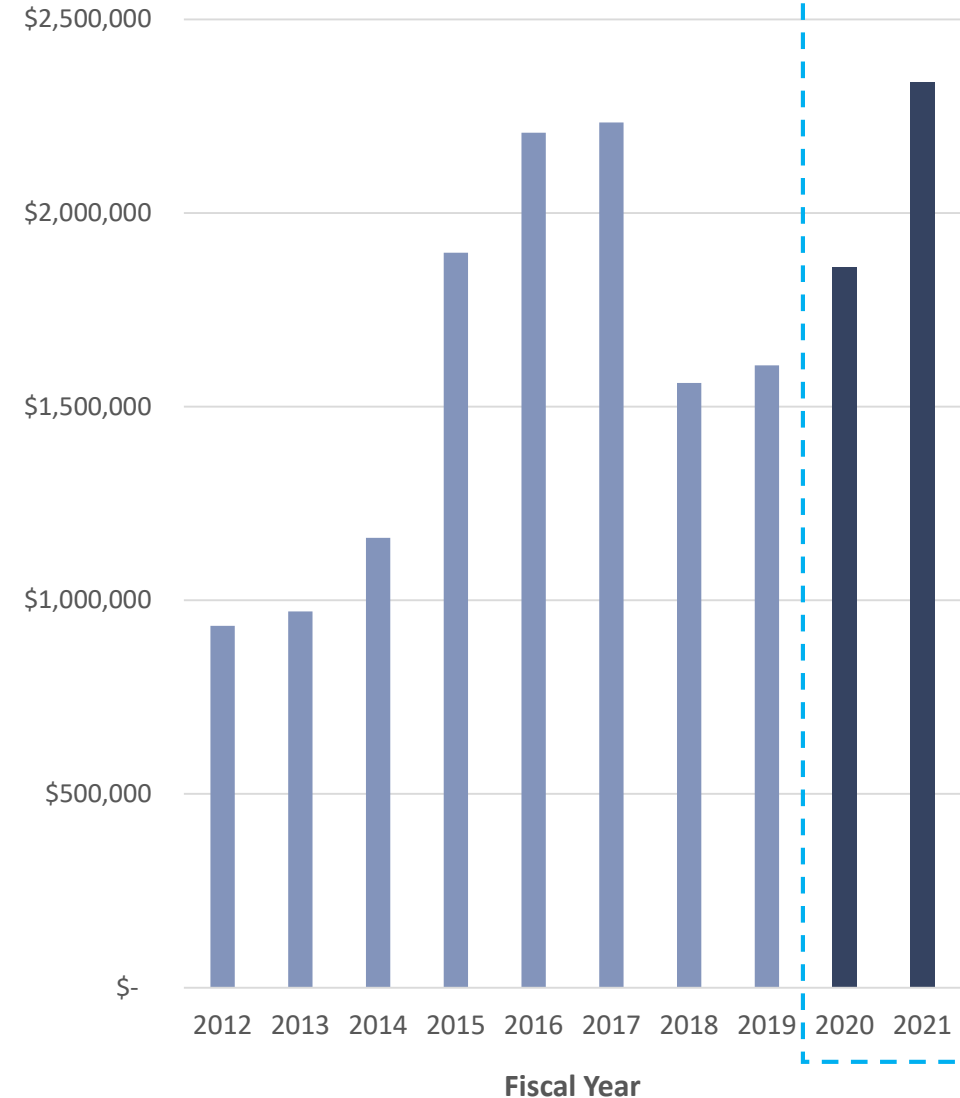
Reclamation earthwork completed for gravel pit in SW Washington - replanting scheduled for Spring 2022

### Challenge:



A large portion of current program revenue is from one aggregate site. Operations will end within upcoming decade, resulting in steep revenue decline for program

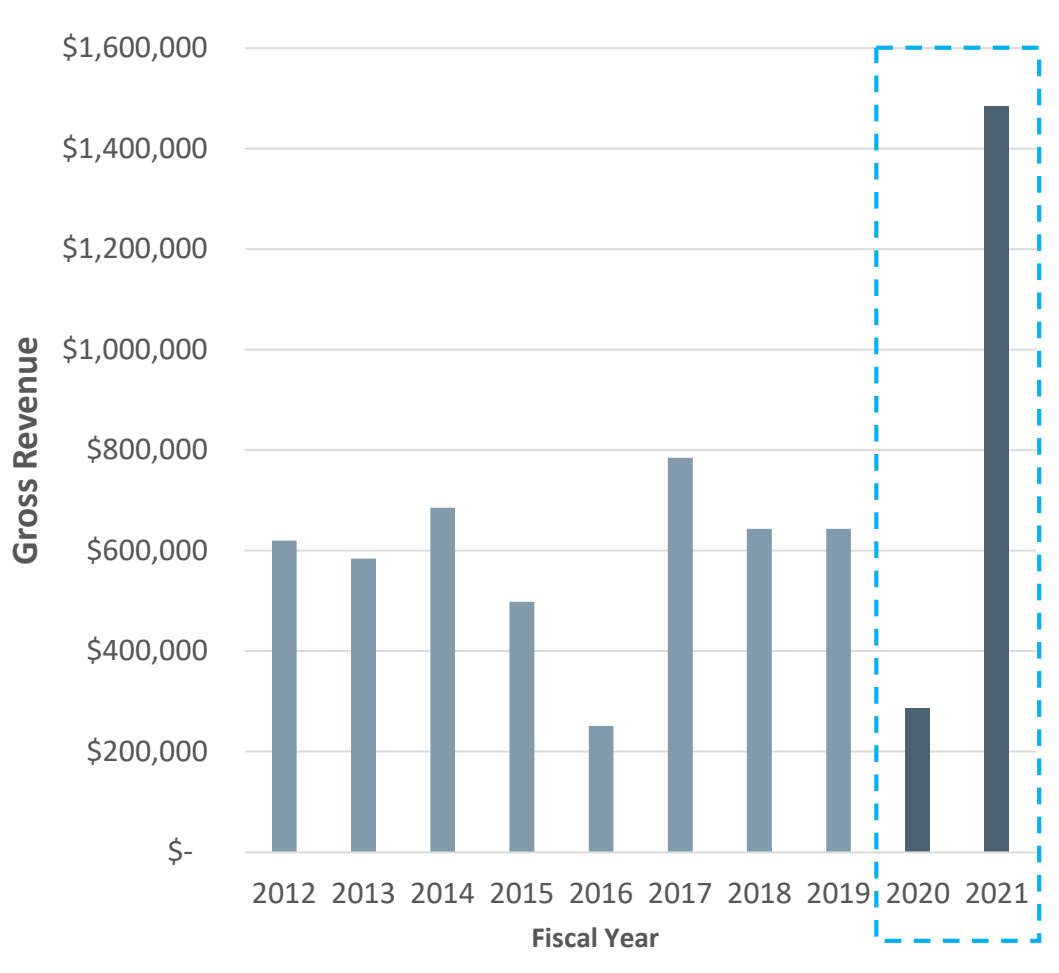
## Gross Revenue





# Rights-of-Way

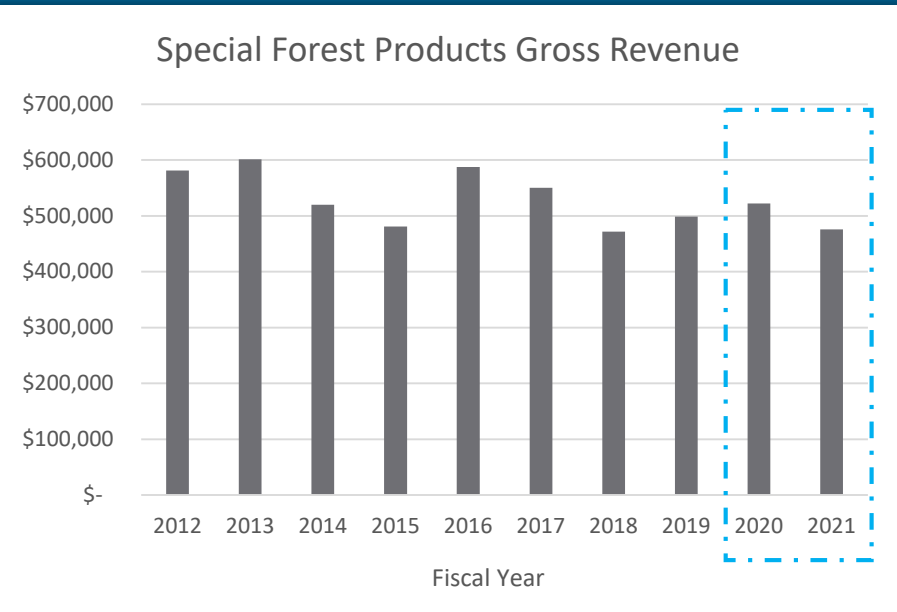
This program grants rights-of-way over state trust lands and works with adjacent landowners to acquire access to state trust lands:

- Road use permits
- Land use licenses
- Easements



<p><b>Update:</b></p> 	<ul style="list-style-type: none"> <li>• Granted easements to U.S. Forest Service, first time in a decade</li> </ul>
<p><b>Challenge:</b></p> 	<ul style="list-style-type: none"> <li>• DNR is statutorily required to grant some access that costs more to administer than is generated</li> </ul>
<p><b>Opportunity:</b></p> 	<ul style="list-style-type: none"> <li>• Working on administrative cost recovery for these agreements</li> </ul>





# Special Forest Products

Leases/permits that allow commercial gathering of forest products such as salal, brush, sword ferns, mushrooms, and boughs in DNR-managed forests

*FY 2021 Number of leases/permits/sales = 97*

Update:

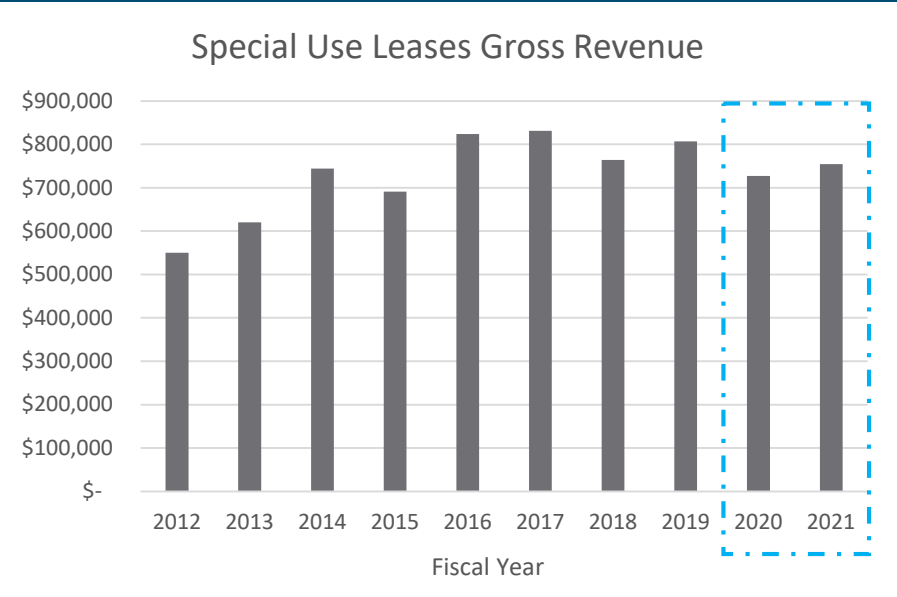


Adapted to a mail-order brush permit process due to office closures – improving efficiency, timeliness, and ease to purchasers

Challenge:



Only 3 regions with limited staff capacity to offer this program



# Special Use Leases

*(non-commercial property leases)*

Examples of current leases: government services, commercial recreation, colleges

*FY 2021 Number of leases – 323*

Update:



Finalizing lease amendment to return unused portion of Fircrest Campus back to DNR for other opportunities

Challenge:



Some properties leased at no cost (legislatively directed)



# Income Statements

## Management Funds

### Fund Balances



# FY 2020 Income Statements

*Other Assets includes Clean Energy, Mining/Minerals, Special Forest Products, Special Use Leases & Rights-of-Way*

## Overall Revenue and Expenditures by Business Asset

		Forestry	Agriculture	Commercial Leases	Communication Sites	Other Assets	Grand Total
Gross Revenue		\$ 202,672,319	\$ 23,953,984	\$ 10,283,120	\$ 4,931,075	\$ 5,136,071	\$ 246,976,568
Expenditures	Direct	\$ (49,317,272)	\$ (1,619,840)	\$ (536,369)	\$ (887,270)	\$ (2,332,253)	\$ (54,693,003)
	Indirect	\$ (14,071,594)	\$ (858,238)	\$ (163,460)	\$ (274,108)	\$ (826,999)	\$ (16,194,400)
	Total Expenditures	\$ (63,388,866)	\$ (2,478,078)	\$ (699,829)	\$ (1,161,379)	\$ (3,159,251)	\$ (70,887,403)
Income		\$ 139,283,453	\$ 21,475,906	\$ 9,583,291	\$ 3,769,696	\$ 1,976,819	\$ 176,089,165

## Trust Beneficiaries Distribution by Business Asset

		Forestry	Agriculture	Commercial Leases	Communication Sites	Other Assets	Grand Total
Gross Revenue		\$ 202,672,319	\$ 23,953,984	\$ 10,283,120	\$ 4,931,075	\$ 5,136,071	\$ 246,976,568
Trust Distribution		\$ 136,970,270	\$ 16,653,729	\$ 7,095,986	\$ 3,414,342	\$ 3,452,844	\$ 167,587,170
% of Gross Revenue Distributed to Trusts		68%	70%	69%	69%	67%	68%

## DNR Management Funds Revenue and Expenditures by Business Asset

		Forestry	Agriculture	Commercial Leases	Communication Sites	Other Assets	Grand Total
(RMCA/FDA/FHRA) Funds Revenue		\$ 65,702,049	\$ 7,300,255	\$ 3,187,134	\$ 1,516,733	\$ 1,683,227	\$ 79,389,398
Expenditures	Direct	\$ (49,317,272)	\$ (1,619,840)	\$ (536,369)	\$ (887,270)	\$ (2,332,253)	\$ (54,693,003)
	Indirect	\$ (14,071,594)	\$ (858,238)	\$ (163,460)	\$ (274,108)	\$ (826,999)	\$ (16,194,400)
	Total Expenditures	\$ (63,388,866)	\$ (2,478,078)	\$ (699,829)	\$ (1,161,379)	\$ (3,159,251)	\$ (70,887,403)
DNR Funds Income		\$ 2,313,183	\$ 4,822,176	\$ 2,487,305	\$ 355,354	\$ (1,476,024)	\$ 8,501,994

# FY 2021 Income Statements

*Other Assets includes Clean Energy, Mining/Minerals, Special Forest Products, Special Use Leases & Rights-of-Way*

## Overall Revenue and Expenditures by Business Asset

		Forestry	Agriculture	Commercial Leases	Communication Sites	Other Assets	Grand Total
Gross Revenue		\$ 185,079,730	\$ 24,996,878	\$ 11,278,935	\$ 6,451,802	\$ 7,291,609	\$ 235,098,954
Expenditures	Direct	\$ (47,438,036)	\$ (3,882,165)	\$ (567,540)	\$ (847,845)	\$ (2,140,991)	\$ (54,876,577)
	Indirect	\$ (13,495,473)	\$ (847,574)	\$ (166,163)	\$ (282,497)	\$ (773,140)	\$ (15,564,848)
	Total Expenditures	\$ (60,933,509)	\$ (4,729,740)	\$ (733,702)	\$ (1,130,343)	\$ (2,914,131)	\$ (70,441,424)
Income		\$ 124,146,221	\$ 20,267,138	\$ 10,545,233	\$ 5,321,459	\$ 4,377,478	\$ 164,657,530

## Trust Beneficiaries Distribution by Business Asset

		Forestry	Agriculture	Commercial Leases	Communication Sites	Other Assets	Grand Total
Gross Revenue		\$ 185,079,730	\$ 24,996,878	\$ 11,278,935	\$ 6,451,802	\$ 7,291,609	\$ 235,098,954
Trust Distribution		\$ 118,544,890	\$ 17,380,200	\$ 7,783,098	\$ 4,469,286	\$ 5,050,152	\$ 153,227,626
% of Gross Revenue Distributed to Trusts		64%	70%	69%	69%	69%	65%

## DNR Management Funds Revenue and Expenditures by Business Asset

		Forestry	Agriculture	Commercial Leases	Communication Sites	Other Assets	Grand Total
(RMCA/FDA/FHRA) Funds Revenue		\$ 66,534,840	\$ 7,616,678	\$ 3,495,837	\$ 1,982,516	\$ 2,241,458	\$ 81,871,329
Expenditures	Direct	\$ (47,438,036)	\$ (3,882,165.44)	\$ (567,539.56)	\$ (847,845)	\$ (2,140,991)	\$ (54,876,577)
	Indirect	\$ (13,495,473)	\$ (847,574)	\$ (166,163)	\$ (282,497)	\$ (773,140)	\$ (15,564,848)
	Total Expenditures	\$ (60,933,509)	\$ (4,729,740)	\$ (733,702)	\$ (1,130,343)	\$ (2,914,131)	\$ (70,441,424)
DNR Funds Income		\$ 5,601,331	\$ 2,886,939	\$ 2,762,135	\$ 852,173	\$ (672,673)	\$ 11,429,904



# Forestry Income Statements

FY 2020

## Overall Revenue and Expenditures for Forestry

		Management Funds	Forest Health
Gross Revenue		\$ 187,679,218	\$ 14,993,101
Expenditures	Direct	\$ (38,206,296)	\$ (11,110,976)
	Indirect	\$ (12,353,761)	\$ (1,717,833)
	Total Expenditures	\$ (50,560,057)	\$ (12,828,809)
Income		\$ 137,119,161	\$ 2,164,292

## Trust Beneficiaries Distribution for Forestry

		Management Funds	Forest Health
Gross Revenue		\$ 187,739,218	\$ 14,933,101
Trust Distribution		\$ 136,970,270	\$ 0
% of Gross Revenue Distributed to Trusts		73%	0%

## DNR Management Funds Revenue and Expenditures for Forestry

		Management Funds	Forest Health
Funds Net Revenue		\$ 50,708,948	\$ 9,331,469
Expenditures	Direct	\$ (38,206,296)	\$ (5,449,345)
	Indirect	\$ (12,353,761)	\$ (1,717,833)
	Total Expenditures	\$ (50,560,057)	\$ (7,167,178)
DNR Funds Income		\$ 148,891	\$ 2,164,291

FY 2021

## Overall Revenue and Expenditures for Forestry

		Management Funds	Forest Health
Gross Revenue		\$ 166,712,389	\$ 18,367,341
Expenditures	Direct	\$ (38,652,951)	\$ (8,785,085)
	Indirect	\$ (11,813,676)	\$ (1,681,797)
	Total Expenditures	\$ (50,466,627)	\$ (10,466,882)
Asset Income		\$ 116,245,762	\$ 7,900,459

## Trust Beneficiaries Distribution for Forestry

		Management Funds	Forest Health
Gross Revenue		\$ 166,712,389	\$ 18,367,341
Trust Distribution		\$ 118,544,890	\$ 0
% of Gross Revenue Distributed to Trusts		71%	0%

## DNR Management Funds Revenue and Expenditures for Forestry

		Management Funds	Forest Health
Funds Net Revenue		\$ 48,167,499	\$ 18,367,341
Expenditures	Direct	\$ (38,652,951)	\$ (8,785,085)
	Indirect	\$ (11,813,676)	\$ (1,681,797)
	Total Expenditures	\$ (50,466,627)	\$ (10,466,882)
DNR Funds Income		\$ (2,299,128)	\$ 7,900,459

Data from 2/17/2022 – All numbers rounded

Corrected 3/31/2022

# Management Funds

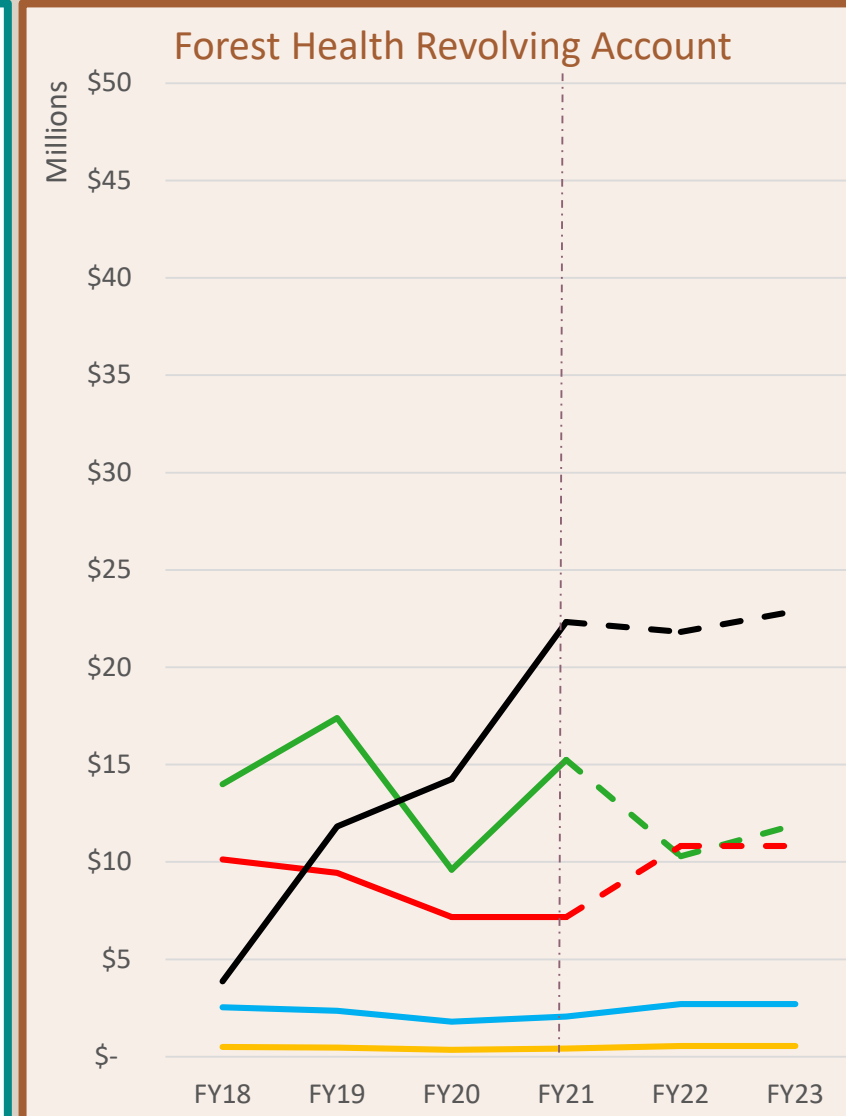
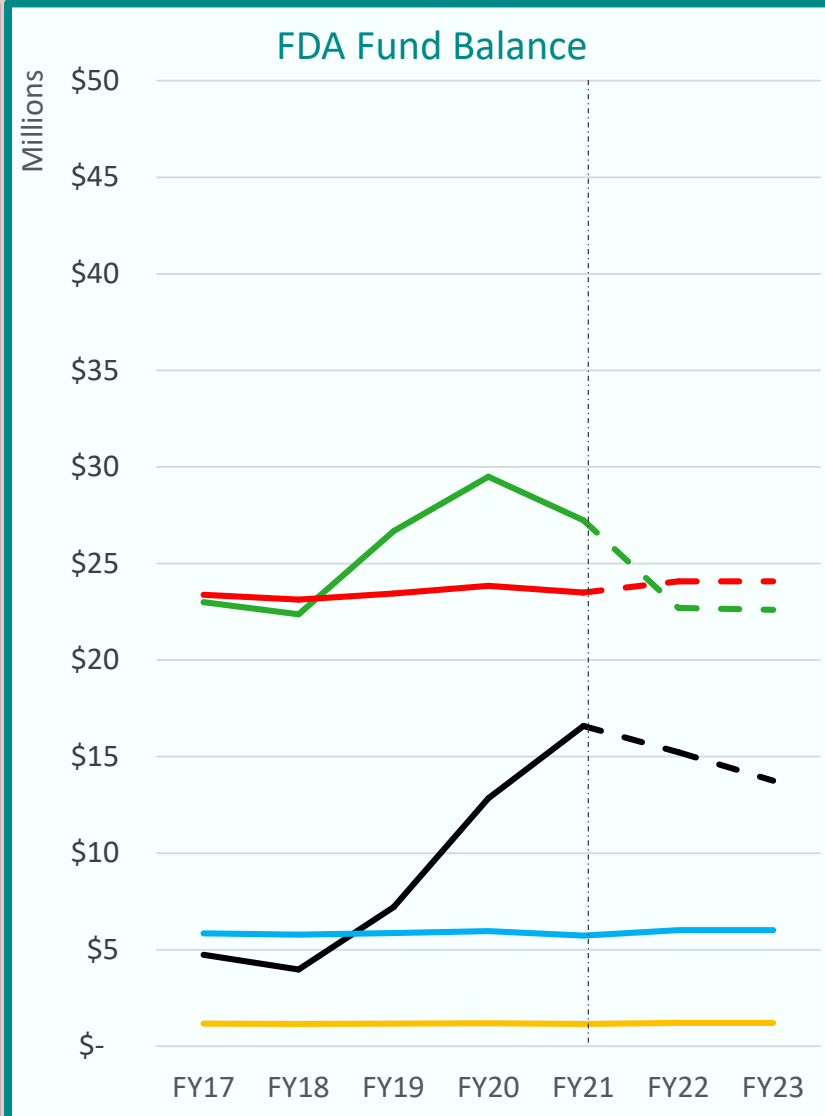
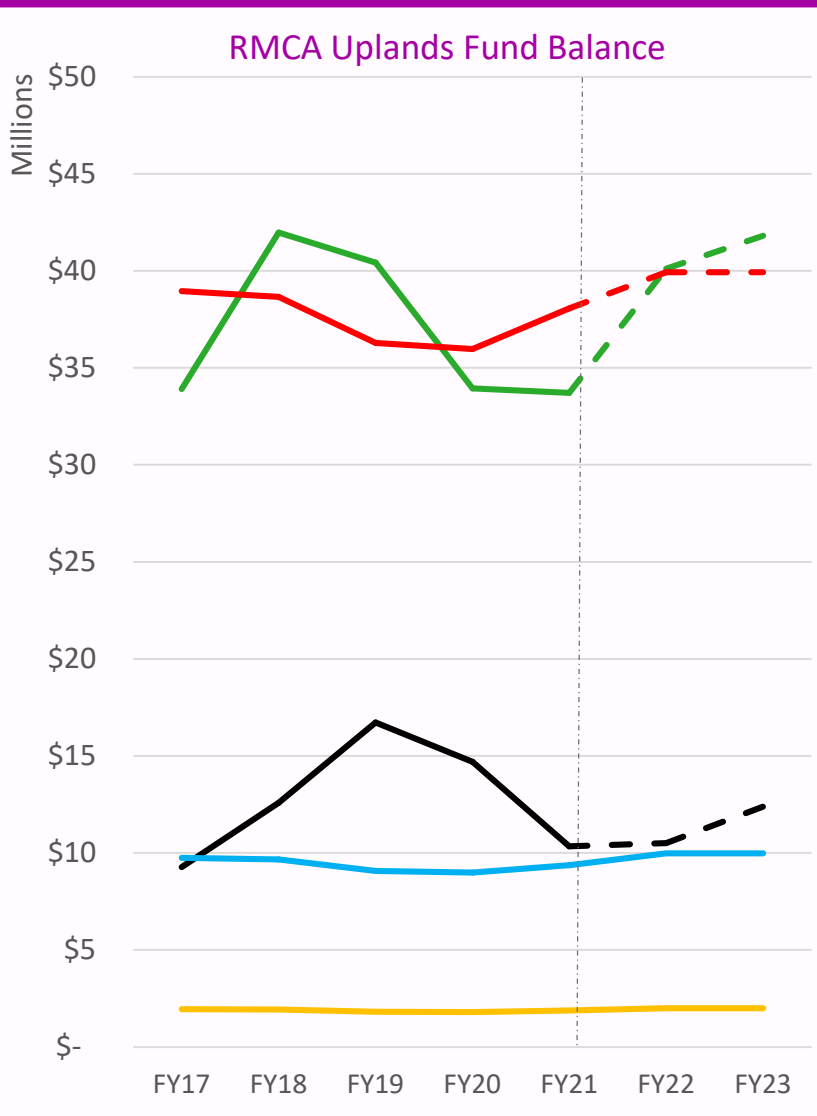
Revenue from the management rate that fund:

- **Resource Management Cost Account** (RMCA) RCW 79.64.020
- **Forest Development Account** (FDA) RCW 79.64.100
- Net revenue into the **Forest Health Revolving Account** RCW 79.64.130
  - Net revenue for this account is gross timber sale receipts minus contract harvester payments
  - DNR retains all revenue from State Lands Forest Health activities to conduct additional forest health activities and distributes unobligated funds to the trust beneficiaries as required by RCW 76.64.130

*DNR does NOT retain a management rate for the Agriculture College Trust Management Account, but receives a direct appropriation from the legislature per RCW 79.64.095*







— Revenue     
 — Expenditures     
 — Ending Fund Balance     
 — 5% Minimum Fund Balance     
 — 3-Month Minimum Fund Balance

February 2022 forecast for FY 2022 & 2023

Slide updated 4/1/2022



April/May 2022

Draft - subject to change

dnr.wa.gov

# Terminology & Notes



**Gross Revenue:** Total revenue from the business asset prior to management rate or trust distribution

**Direct Expenditures:** State Uplands operating expenses for direct support of the management of the business asset

**Indirect Expenditures:** Agency overhead for activities supporting State Uplands FTEs and resources such as Human Resources, Information Technology, Finance, etc.

**Trust Beneficiaries Distribution:** The amount of the gross revenue that is distributed to the trust beneficiaries from the business asset

*Note: Revenues reported from Business Assets in this report may differ from DNR's Annual Report for various reasons including, but not limited to, the methods for reporting the Contract Harvest Revolving Account activity, grouping of business assets, inclusion of business assets in this update, and tracking of revenue for the Agricultural College Trust Management Account.*



# State of the State Lands Report for Fiscal Years 2020 and 2021



## A Presentation to the Board of Natural Resources – Part II

May 3, 2022

Angus Brodie  
Calvin Ohlson-Kiehn  
Dale Mix  
Laurie Benson



# Part II



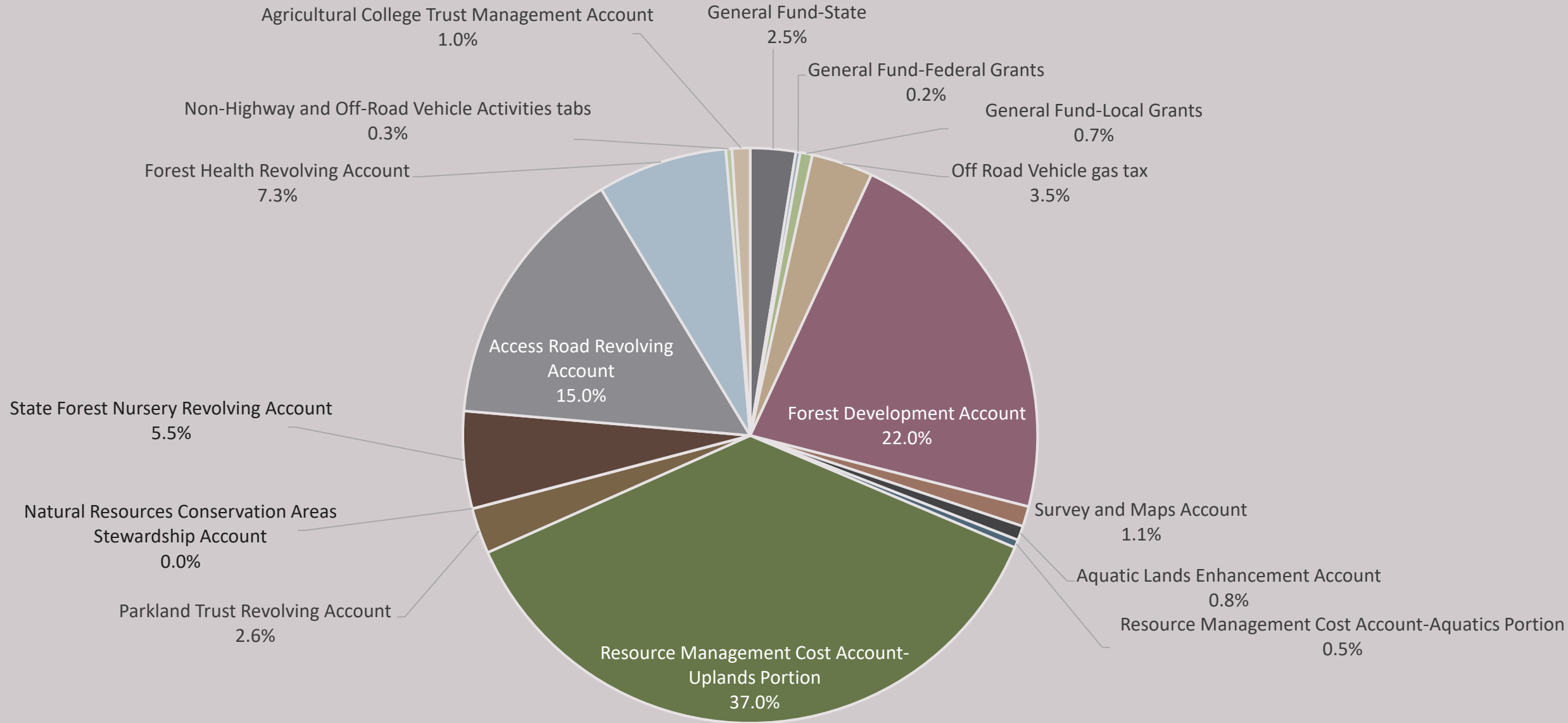




# Operating Budget Expenditures & FTEs



# Operating Fund Sources for all Uplands Programs FY 2021





# Uplands Operating Expenditures

		FY 2020 FTEs	FY2020 Expenses	FY 2021 FTE	FY2021 Expenses
Forest Resources	Silviculture, Webster Nursery, Seed Orchard & Seed Center	74	\$ 15,279,886	74	\$ 17,634,390
	Habitat Conservation & Scientific Consultation	30	\$ 3,274,000	30	\$ 3,237,725
	Informatics	18	\$ 2,221,863	18	\$ 2,233,851
	Projects & Planning	5	\$ 564,524	5	\$ 323,992
<b>Forest Resources Total</b>		<b>127</b>	<b>\$ 21,340,273</b>	<b>127</b>	<b>\$ 23,429,958</b>
Product Sales & Leasing	Product Sales	188	\$ 18,832,254	188	\$ 18,211,616
	Leasing & Business	31	\$ 3,300,506	31	\$ 3,258,423
	Agriculture	22	\$ 1,988,374	22	\$ 4,264,586
<b>Product Sales &amp; Leasing Total</b>		<b>241</b>	<b>\$ 24,121,134</b>	<b>241</b>	<b>\$ 25,734,625</b>
Conservation, Recreation & Transactions	Natural Areas & Natural Heritage	16	\$ 1,732,348	16	\$ 1,718,404
	Recreation & Public Use	39	\$ 4,278,494	39	\$ 4,950,300
	Asset Planning & Appraisals	13	\$ 1,709,569	13	\$ 1,364,942
	Teaway Community Forest Trust	2	\$ 431,339	2	\$ 445,226
<b>Conservation, Recreation &amp; Transactions Total</b>		<b>70</b>	<b>\$ 8,151,750</b>	<b>70</b>	<b>\$ 8,478,872</b>
Engineering	Forest Roads	73	\$ 10,007,986	73	\$ 11,378,334
	Title & Records	11	\$ 784,831	11	\$ 797,601
	Geomatics & Public Land Survey Office	36	\$ 3,799,782	36	\$ 3,815,044
<b>Engineering Total</b>		<b>120</b>	<b>\$ 14,592,599</b>	<b>120</b>	<b>\$ 15,990,979</b>
State Lands Operations	SL Operations & Retention	9	\$ 780,638	9	\$ 715,157
	SL Infrastructure	0	\$ 1,838,816	0	\$ 1,515,531
<b>State Lands Operations Total</b>		<b>9</b>	<b>\$ 2,619,454</b>	<b>9</b>	<b>\$ 2,230,688</b>
<b>Uplands Total</b>		<b>567</b>	<b>\$ 70,825,210</b>	<b>567</b>	<b>\$ 75,865,122</b>



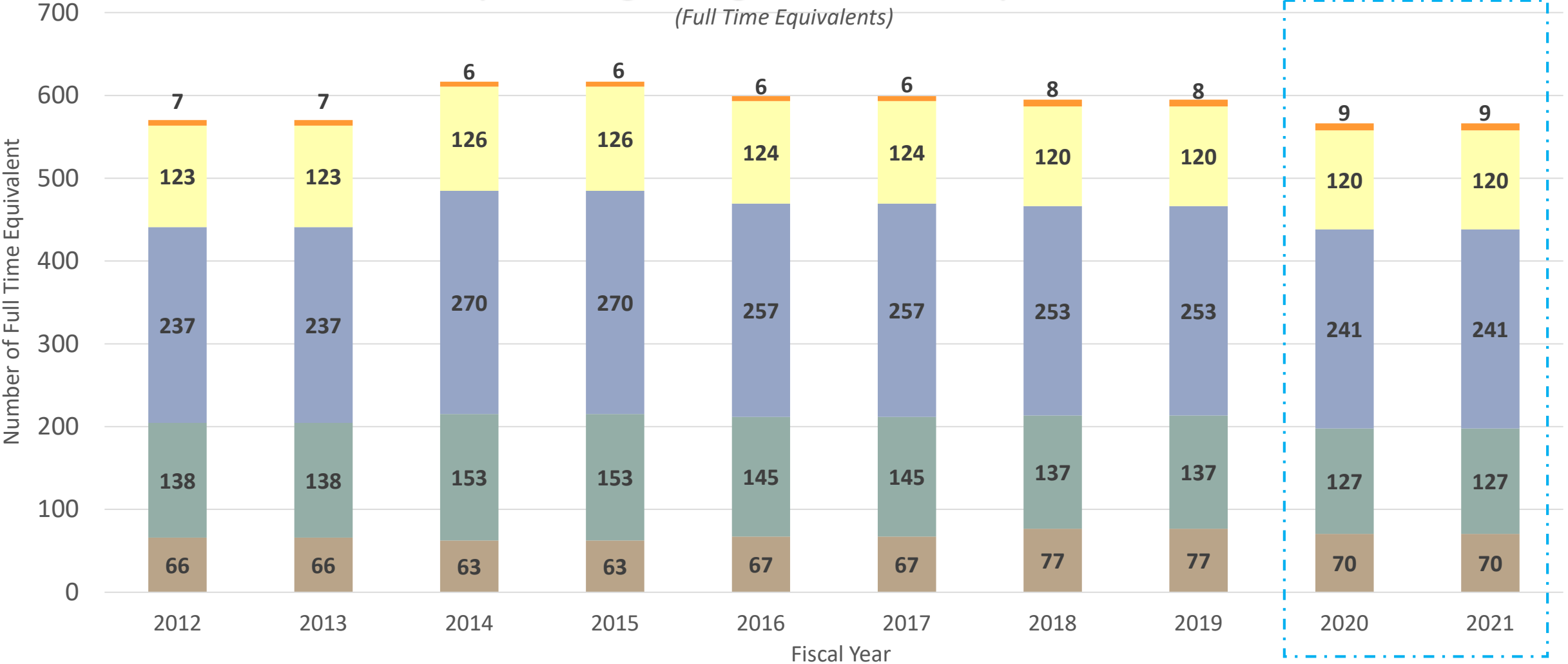
# FY 2021: Region & Division FTEs and Operating Expenditures

		Region FTEs	Region Expenses	Division FTEs	Division Expenses
Forest Resources	Silviculture, Webster Nursery, Seed Orchard & Seed Center	31	\$ 10,785,851	43	\$ 6,848,539
	Habitat Conservation & Scientific Consultation	7	\$ 735,856	23	\$ 2,501,869
	Informatics	0	\$ 22,742	18	\$ 2,211,110
	Projects & Planning	0	\$ -	5	\$ 323,992
<b>Forest Resources Total</b>		<b>38</b>	<b>\$ 11,544,449</b>	<b>89</b>	<b>\$ 11,885,510</b>
Product Sales & Leasing	Product Sales	177	\$ 16,542,824	11	\$ 1,668,791
	Leasing & Business	13	\$ 1,239,282	18	\$ 2,019,141
	Agriculture	16	\$ 1,323,873	6	\$ 2,940,712
<b>Product Sales &amp; Leasing Total</b>		<b>206</b>	<b>\$ 19,105,979</b>	<b>35</b>	<b>\$ 6,628,644</b>
Conservation, Recreation & Transactions	Natural Areas & Natural Heritage	5	\$ 530,902	11	\$ 1,187,502
	Recreation & Public Use	30	\$ 3,930,304	9	\$ 1,019,996
	Asset Planning & Appraisals	1	\$ 191,460	12	\$ 1,173,482
	Teaway Community Forest Trust	2	\$ 442,582	0	\$ 2,643
<b>Conservation, Recreation &amp; Transactions Total</b>		<b>38</b>	<b>\$ 5,095,248</b>	<b>32</b>	<b>\$ 3,383,623</b>
Engineering	Forest Roads	63	\$ 9,737,857	10	\$ 1,640,476
	Title & Records	0	\$ -	11	\$ 797,601
	Geomatics & Public Land Survey Office	10	\$ 1,095,894	26	\$ 2,719,150
<b>Engineering Total</b>		<b>73</b>	<b>\$ 10,833,751</b>	<b>47</b>	<b>\$ 5,157,227</b>
State Lands Operations	SL Operations & Retention	0	\$ 47,598	9	\$ 667,558
	SL Infrastructure	0	\$ 90,465	0	\$ 1,425,065
<b>State Lands Operations Total</b>		<b>0</b>	<b>\$ 138,063</b>	<b>9</b>	<b>\$ 2,092,623</b>
<b>Uplands Total</b>		<b>355</b>	<b>\$ 46,717,490</b>	<b>212</b>	<b>\$ 29,147,627</b>



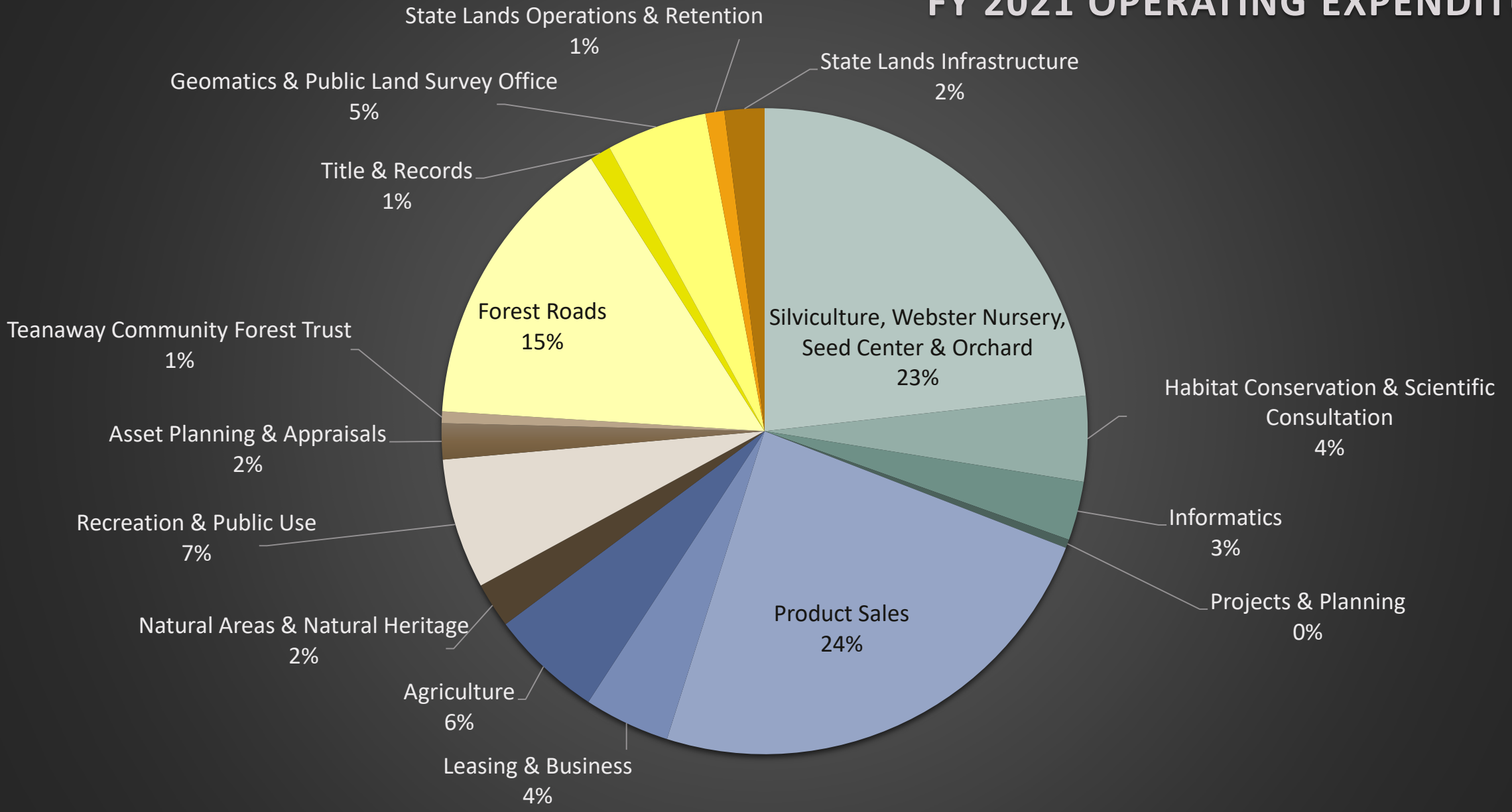
# Operating Budget FTEs for Uplands

(Full Time Equivalents)



■ Conservation, Recreation & Transactions
 ■ Forest Resources
 ■ Product Sales & Leasing
 ■ Engineering
 ■ State Lands Operations

# FY 2021 OPERATING EXPENDITURES





# Trust Land Transactions

DNR utilizes a variety of land transaction mechanisms to meet DNR's fiduciary obligations, as well as ecological and social goals, through strategically repositioning land assets and enhancing the trust land portfolio

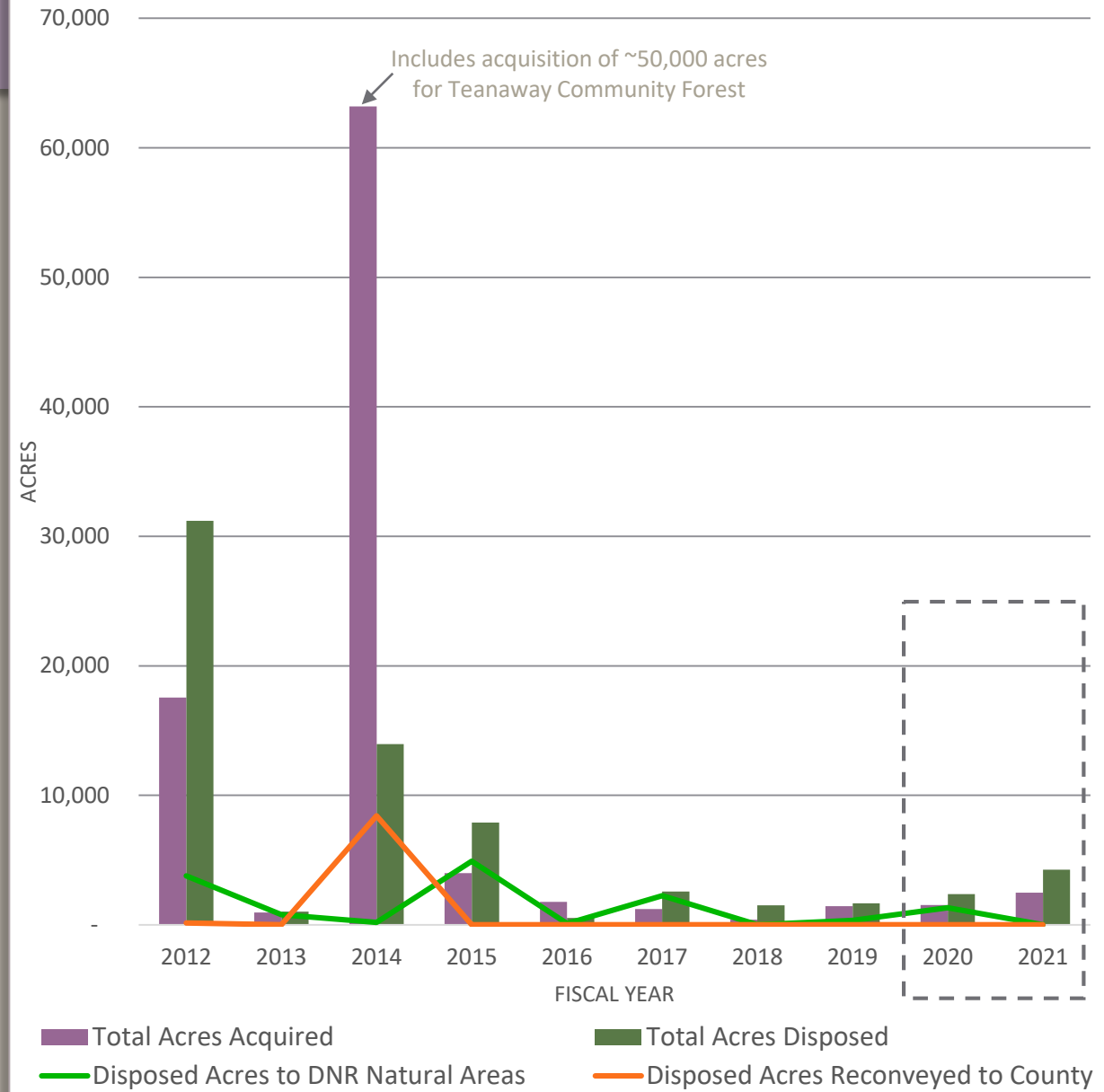


# Trust Land Transactions: FY 2012-2021

Fiscal Year	Acquired Trust Land Total Acres	Disposed Trust Land Total Acres
2012	17,549	31,204
2013	955	1,015
2014	63,203	13,963
2015	3,983	7,891
2016	1,770	527
2017	1,215	2,582
2018	407	1,515
2019	1,447	1,670
2020	1,523	2,361
2021	2,493	4,258

## Two Subsets of Disposed Acres

Fiscal Year	Disposed Trust Land Acres to DNR Natural Areas	Disposed Trust Land Acres Reconveyed to County
2012	3,777	150
2013	788	-
2014	191	8,420
2015	5,467	-
2016	160	-
2017	2,249	-
2018	-	-
2019	331	-
2020	1,328	-
2021	-	-



Exchanged acres are included in acquired and disposed totals







# Updates on Selected Complementary & Supporting Upland Programs



- Reforestation Operations
- Forest Health and Silviculture
- Habitat Conservation Plan Monitoring
- Road Management
- Photogrammetry
- Conservation
- Recreation

## Forest Resources



## Engineering



## Conservation, Recreation & Transactions





# Reforestation Operations

Webster Forest Nursery, The Seed Center,  
Meridian Seed Orchard and Region Field Work

## Forest Resources



## Webster Nursery:

Sowing and growing of seedlings for reforestation of DNR-managed lands, and other public and private forestlands



## The Seed Center:

Collection and processing of forest tree cones and seed storage



## Meridian Seed Orchard:

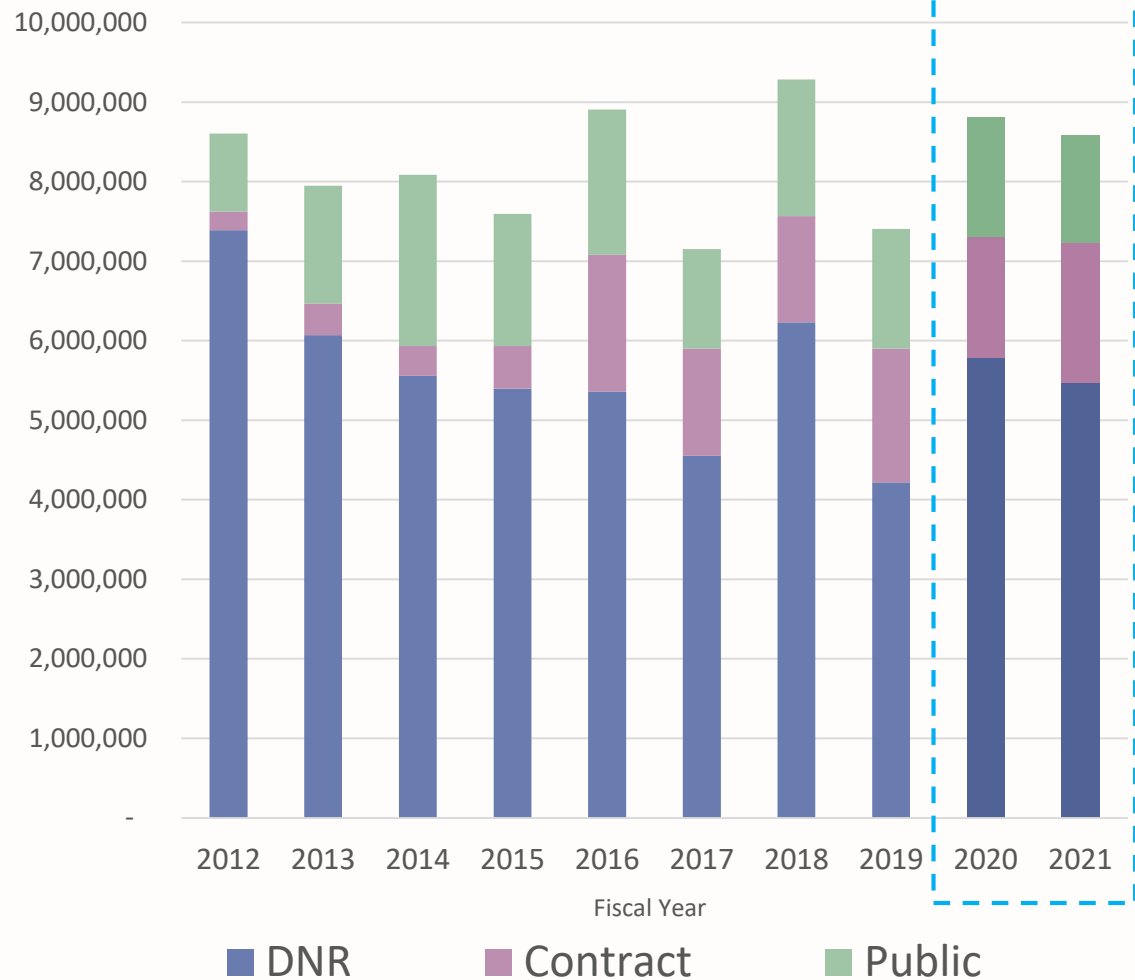
Research and cultivation of robust and desirable seeds





# Reforestation Operation Updates

## Seedlings Shipped



## Webster Nursery:



High production rate while ensuring safe working environment



- No COVID-19 infections in the facility
- Earliest harvest completion in a decade
- Above average pace of transplanting





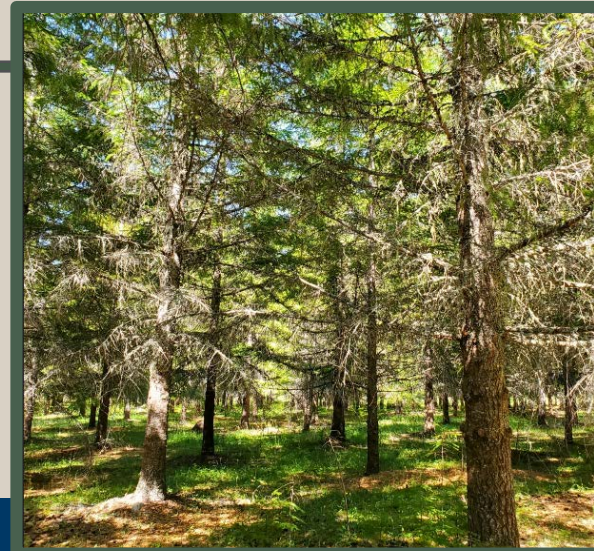
## Updating critical infrastructure

- Improvements to nursery irrigation wells – now at full capacity
- Upgraded and maintained existing buildings and equipment
- Obtained funding for new seed processing center design and new seedling cooler

## Working with USFS to improve federal seed orchards and collaborate on production and research efforts

## Studying seed adaptation & migration to address climate change

- Planting 5 sites every year throughout region for broad and robust data
- Inform choices to adapt to climate change for seeds, cones, and trees
- Partnerships with multiple organizations on the implementation and research







# Forest Health and Silviculture

## Forest Resources



# What do we mean by Forest Health?

“The condition of a forest being sound in ecological function, sustainable, resilient, and resistant to insects, diseases, fires and other disturbances, and having the capacity to meet landowner objectives” (RCW 76.06.020)

## How does DNR achieve and/or maintain Forest Health?

Through forest health treatments:

“... actions taken by the department to restore forest health, including, but not limited to, sub-landscape assessment and project planning, site preparation, reforestation, mechanical treatments including timber harvest, road realignment for fire protection and aquatic improvements, and prescribed burning” (RCW 79.10.520)





# Forest Health & Silviculture Treatments

## Commercial Treatments:

Treatments that generate revenue from forest products removed

---

Examples:

- Variable Retention Harvest (VRH)
- Commercial Thinnings
- Uneven-aged Management



## Non-Commercial Treatments:

Treatments that produce little or no valuable products to offset cost of treatments, yet move the stand to a more desirable future condition

---

Examples:

- Site preparation
- Reforestation (hand-planting)
- Vegetation management
- Pre-commercial thinning (PCT)



## What is Silviculture?

The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet diverse needs

**Updates:**



- New State Lands Forest Health Program Manager
- Salvage operations have begun
- Planned increase in forest health treatments over previous biennium

**Challenges:**



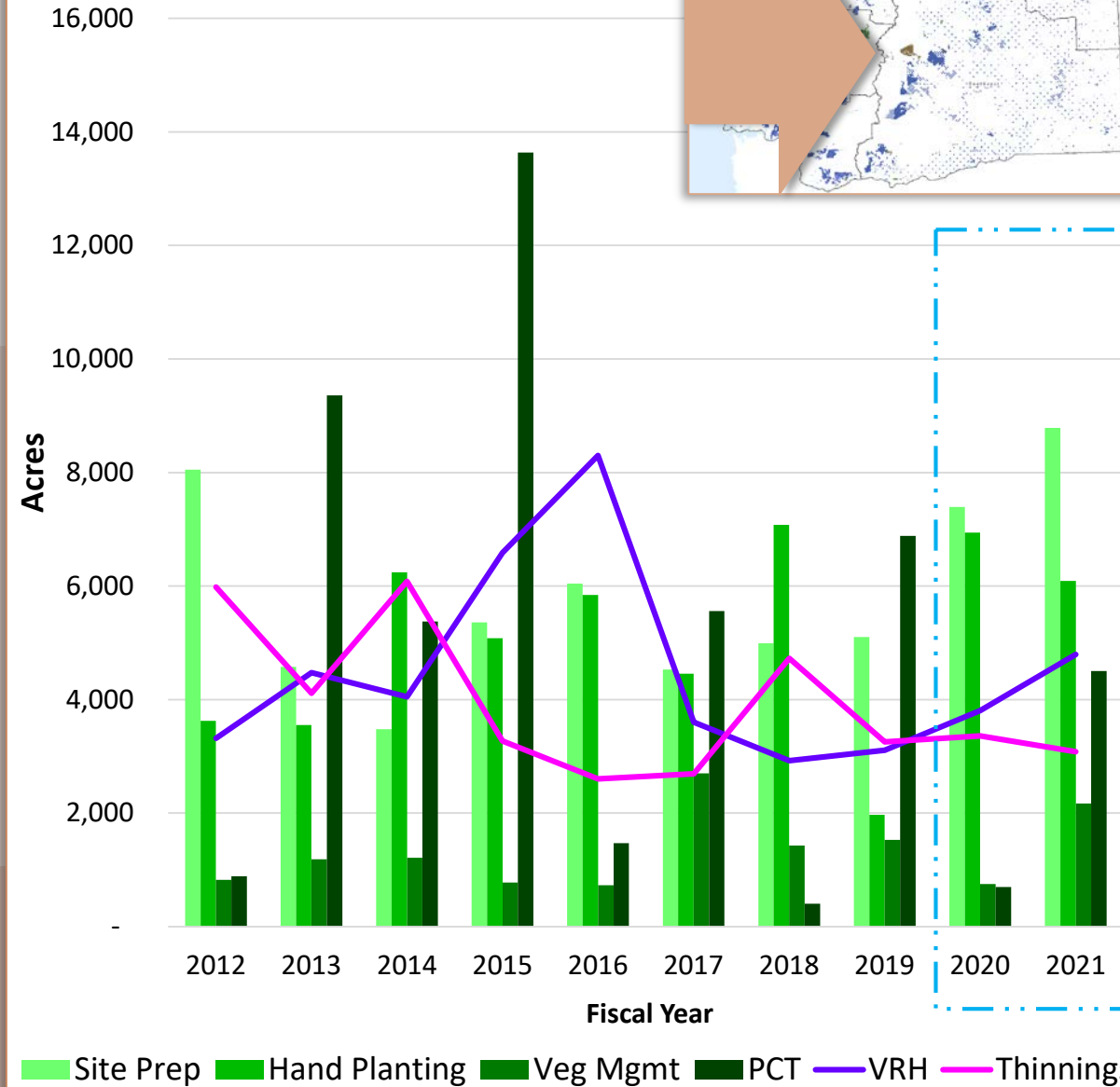
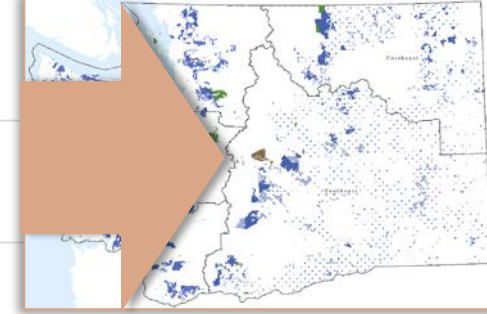
- Significant wildfire season this biennium reduced staff time dedicated to forest health-related work
- Salvage operations are time sensitive and can impact planned harvest schedule

**Opportunities:**



- Developing burn plans for prescribed burning in spring 2022

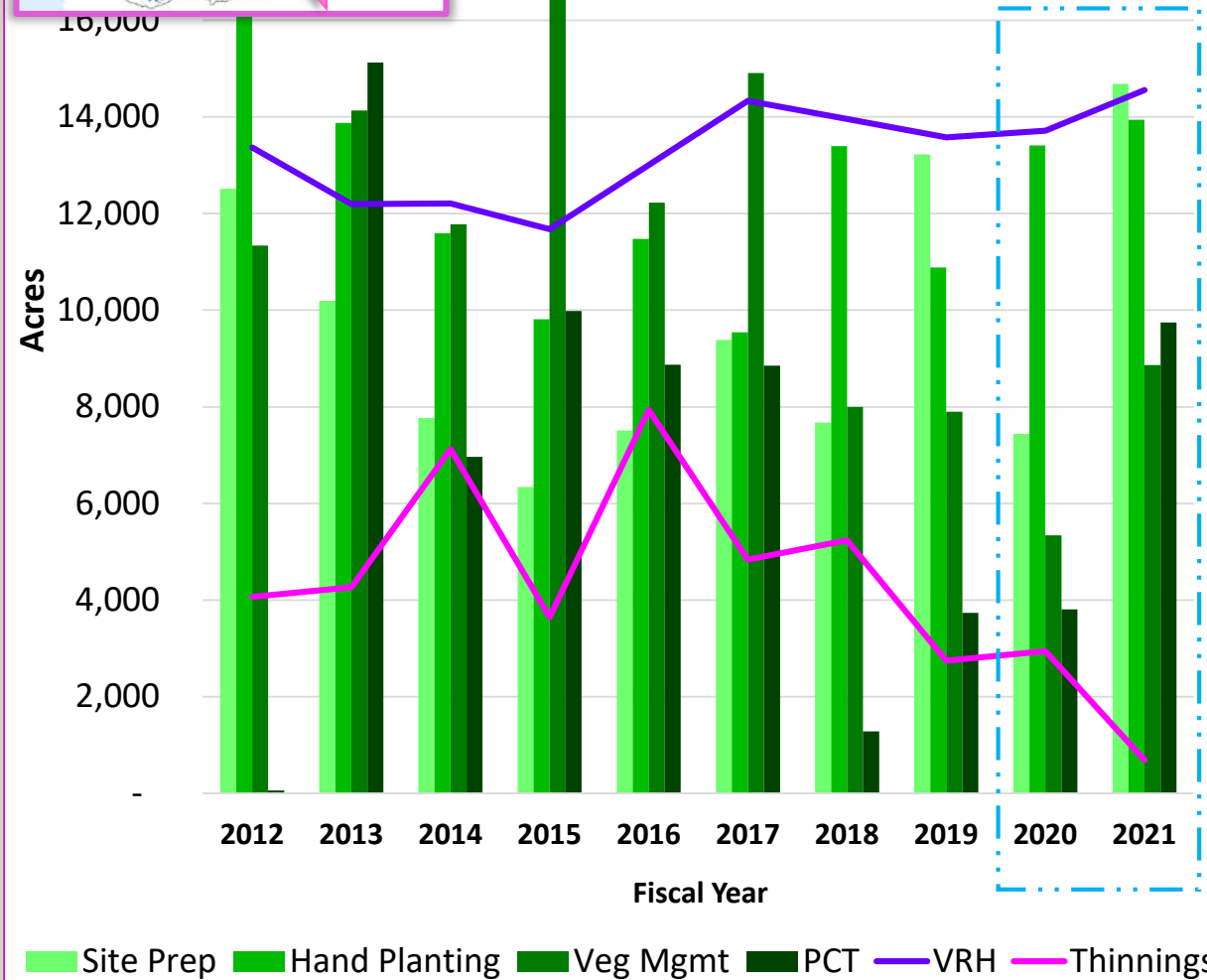
**Eastern Washington**



Data from 1/26/2022



# Western Washington



Data from 1/26/2022

## Updates:



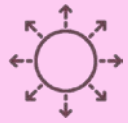
- New silviculture scientist hired
- Received outside funding:
  - Arbor Day Grants in FY 2020 & 2021 (\$169 and \$467K) for special projects
  - HB 1168 – Forest Action Plan objectives

## Challenges:



- Backlog of silviculture needs
- Need for long-term silviculture funding
- COVID-19 related labor availability and costs

## Opportunities:



- Legislative funding request in 2023 for silviculture (\$3.9M)

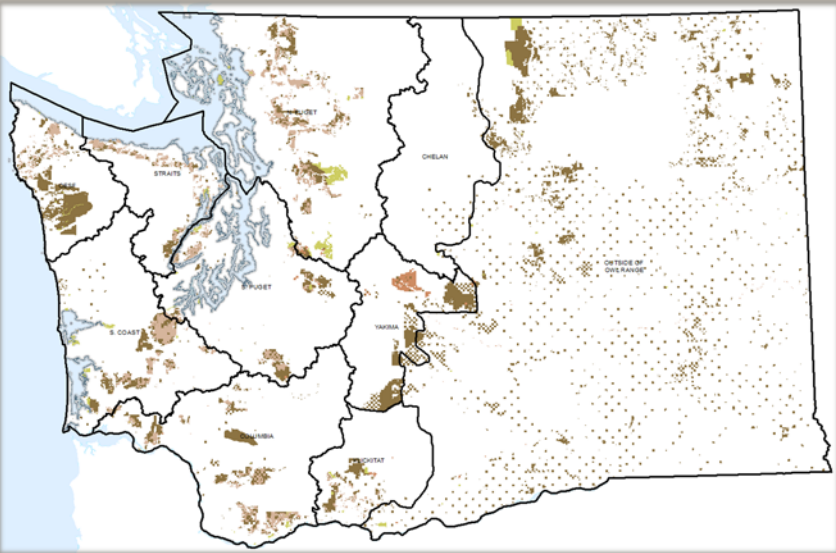


# Habitat Conservation Plan Update

## Forest Resources



# Habitat Conservation Plan (HCP)



HCP Planning Units

~825,000 acres  
of conservation statewide  
under the HCP

4

Long-term management plan  
required for an  
Incidental Take Permit

## Strategies in the HCP

- Northern Spotted Owl
- Marbled Murrelet
- Riparian
- Uncommon Habitats

# Brief Overview of the HCP Strategies

## Northern Spotted Owl



Provides habitat that makes a significant contribution for:

- Demographic support
- Species distribution
- Dispersal

Provides nesting habitat across the landscape

## Marbled Murrelet



- Maintains occupied sites
- Increases habitat capacity and promotes development of high-quality habitat
- Meters harvest of released habitat for the first decade to maintain current capacity

## Riparian



- Maintains or restores salmonid freshwater habitat
- Contributes to the conservation of other aquatic and riparian obligate species

## Uncommon Habitats



For species that rely on uncommon habitats or habitat elements

- Talus
- Caves
- Cliffs
- Oak Woodlands
- Balds
- Mineral Springs
- Large structurally unique trees
- Snags





# HCP Research, Monitoring, and Reporting

## Implementation monitoring

Determines whether the strategies are being implemented as written  
(also known as compliance monitoring)

Example projects:

- Uncommon habitats
- Large, structurally unique trees and snags
- Road crossings over streams

## Effectiveness monitoring

Determines if implementation has resulted in the expected habitat conditions

Example project:

- Northern Spotted Owl Habitat Effectiveness Monitoring

## Validation monitoring

Evaluates the habitat conditions and the effect on the fish and wildlife populations

Example project:

- Riparian Validation Monitoring Program

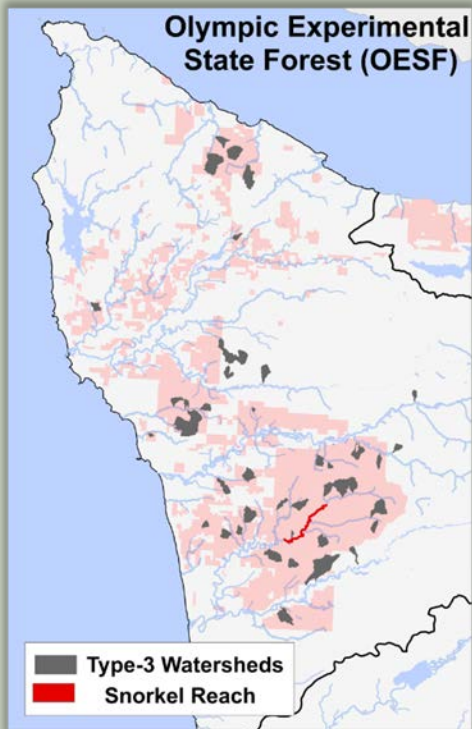


The HCP Annual Report is a summary of management activities completed on DNR lands managed under the HCP, monitoring and research efforts, and conservation strategy progress

<https://www.dnr.wa.gov/programs-and-services/forest-resources/habitat-conservation/monitoring-and-reporting>



# ★ Riparian Validation Monitoring in the OESF



Electrofishing and habitat surveys

## Type 3 Streams – 50 streams throughout OESF

*(Smallest fish-bearing streams)*

Component #1

- Key findings:
  - Overabundance of mid-successional forest with dense canopies
  - Decreases instream wood and blocks sun to streams
  - Limits trout and salmon recovery
- Next steps – Examine current and alternative management with T3 watershed experiment

## Clearwater River – 12 kilometer section

*Type 1 Stream – (classified as “Shoreline of the state”)*

Component #2

- Key findings:
  - Low structural complexity due to decreased wood and history of landslides
- Next steps - Working with the Quinault ‘lead entity’ to prioritize future restoration activities

Snorkel and habitat surveys



2 Components  
Looking at habitat conditions in streams and the effect on Salmonids

**Riparian monitoring is an ongoing program for the HCP**



# DNR-Managed Roads and Photogrammetry

Engineering





# DNR Roads Management

Over 14,000 miles of usable, maintained roads on DNR-managed lands

DNR-managed roads are primarily built and maintained by timber harvests

The roads provide multiple benefits for forest management and public access

**FY 2020:** 12 bridges were installed *(new or replaced)*

**FY 2021:** 15 bridges were installed *(new or replaced)*



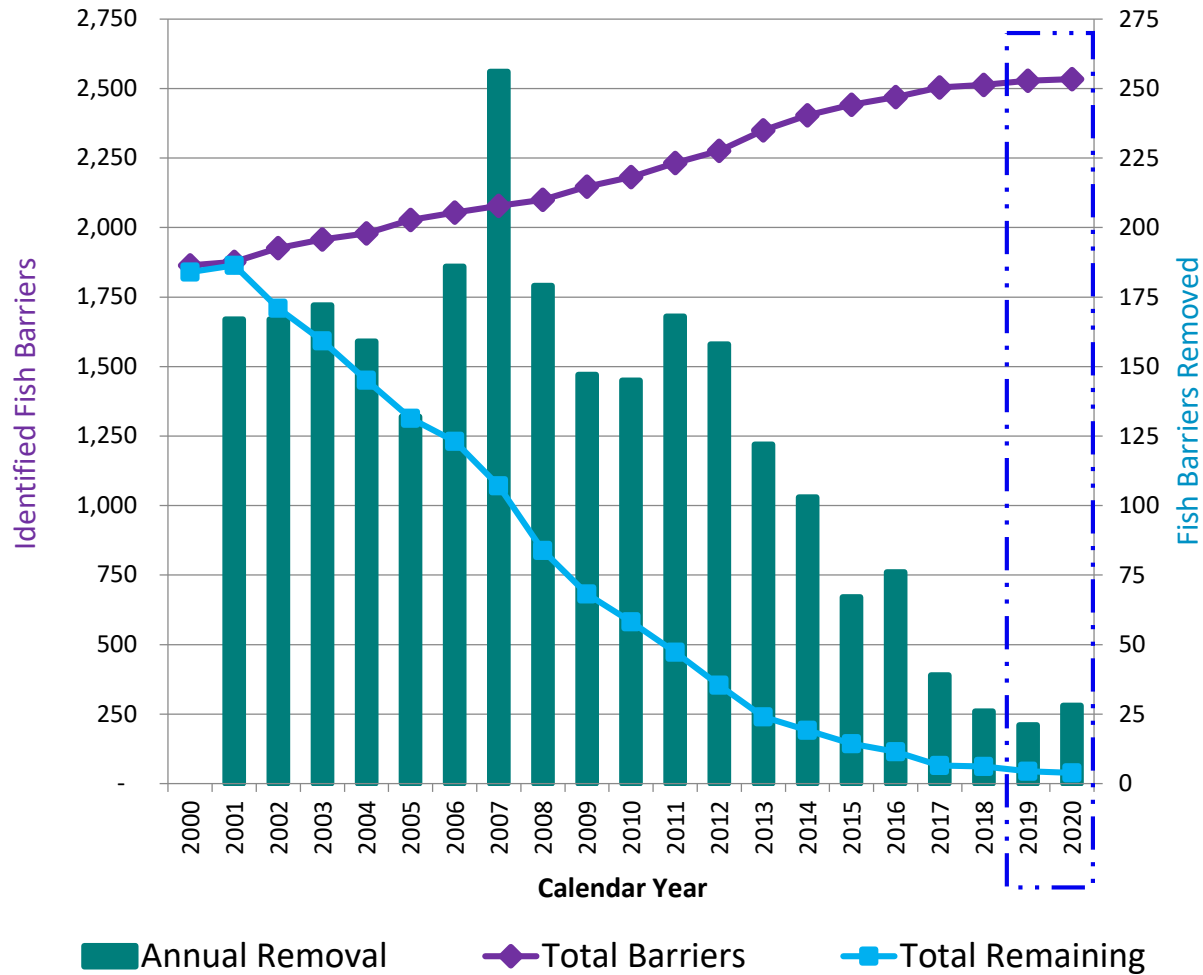
*In some areas roads may be gated and locked for public safety, road damage mitigation, or natural resource protection*



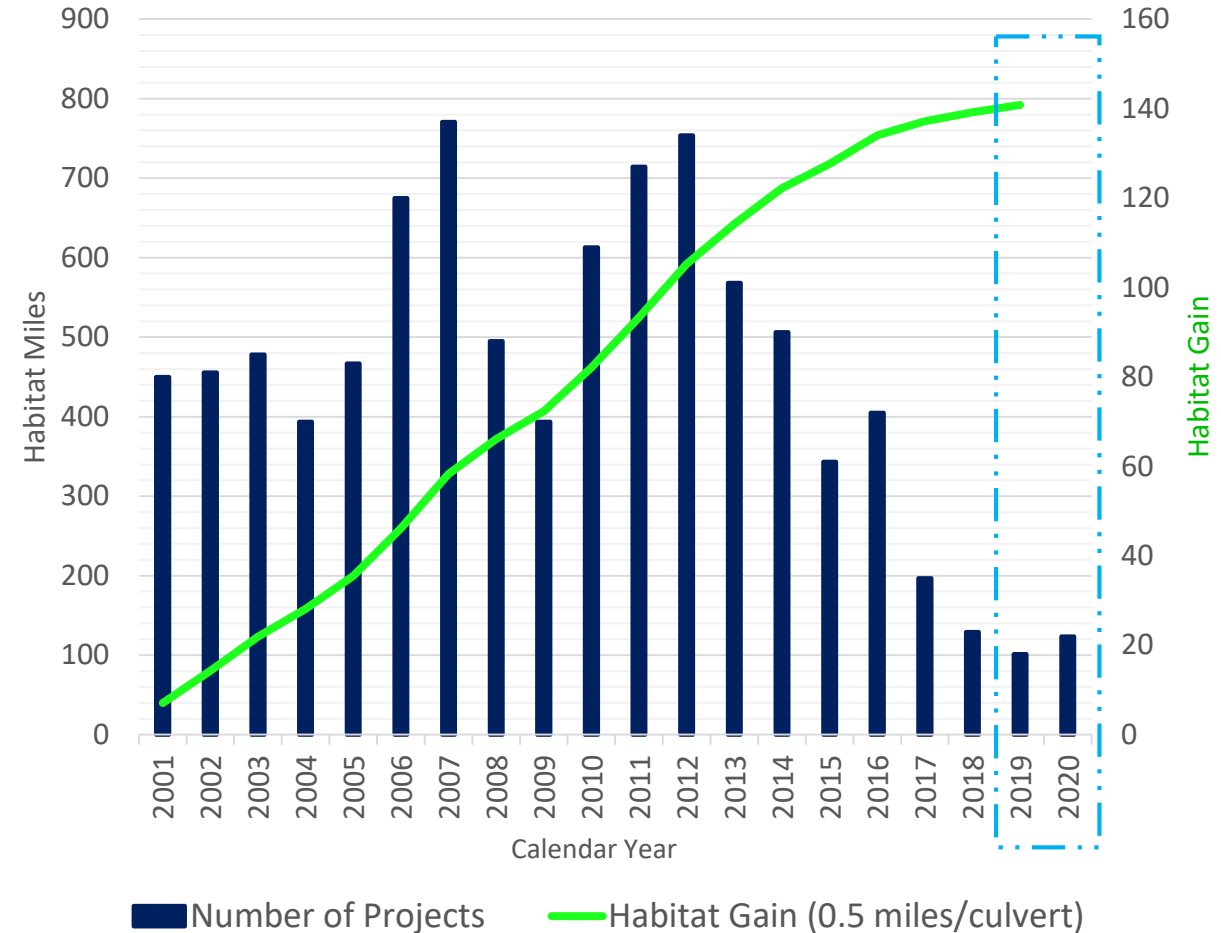
# Road Maintenance and Abandonment Plans

(RMAPs)

## DNR Fish Barrier Removal Progression



## Number of projects completed per year & Potential linear habitat gain in miles (cumulative)





# Photogrammetry

*The science of using aerial imagery to create geospatial products*



Orthophotos (GIS)

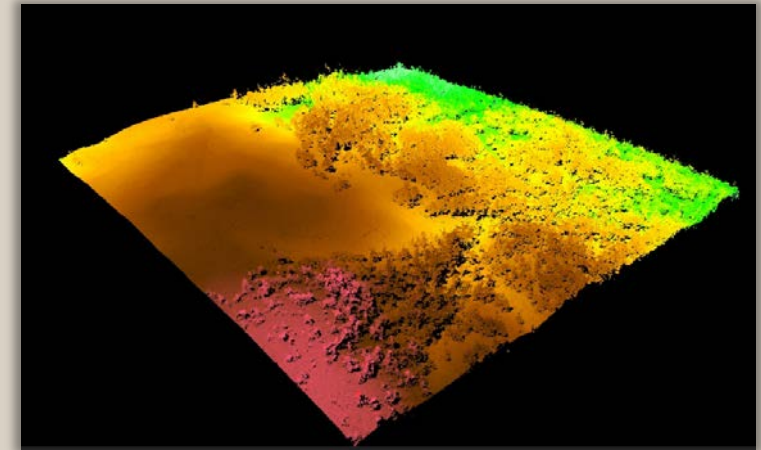


Image Date 1958



Image Date 2019

Historical Aerial Imagery Archive



Digital Top Surface



Digital Aerial  
Photogrammetry

By using overlapping images, a stereo model can perform 3-D measurements such as calculate the height of tree or the volume of gravel removed from a pit







# Digital Aerial Photogrammetry (DAP)

High-resolution 3-D model of the forest

## Core of DNR's inventory: RS-FRIS

Process and analyze DAP to build models and predict about 40 different forest inventory attributes such as tree diameter, timber volume, carbon, and trees per acre

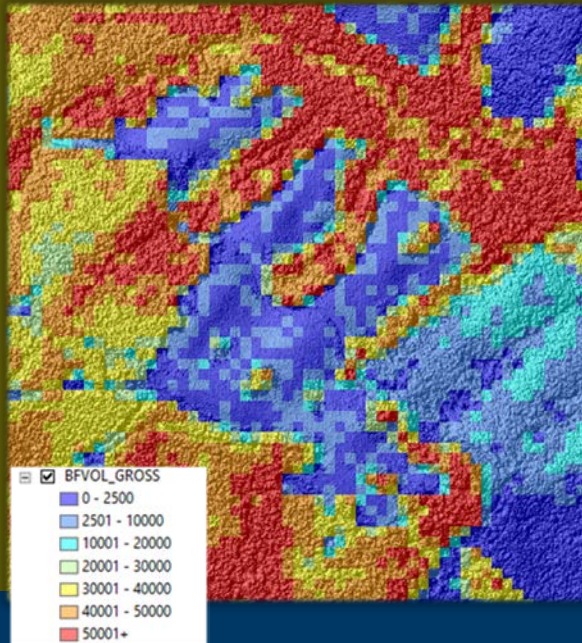
Examples of uses:

- Timber sales planning
- Wildlife habitat mapping
- Sustainable Harvest Calculation input

Top surface hillshade showing forest canopy



RS-FRIS model showing merchantable volume

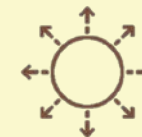


### Challenges:



- Washington's rugged terrain and heavy forest cover requires advance flight planning, proper camera systems, and advanced photogrammetric experience
- Converting historic aerial film to digital

### Opportunities:



- Share expertise with external state and federal agencies, as well as vendors who collect aerial imagery
- Developed work flow process to perform aerial triangulation with no initial GPS data





# Conservation and Recreation

Conservation, Recreation  
& Transactions



# Natural Areas Program

*Conserving Washington's native species and ecosystems, today and for future generations*

**Natural Area Preserves:**  
Protect best remaining examples of ecological communities including rare plant and animal habitat

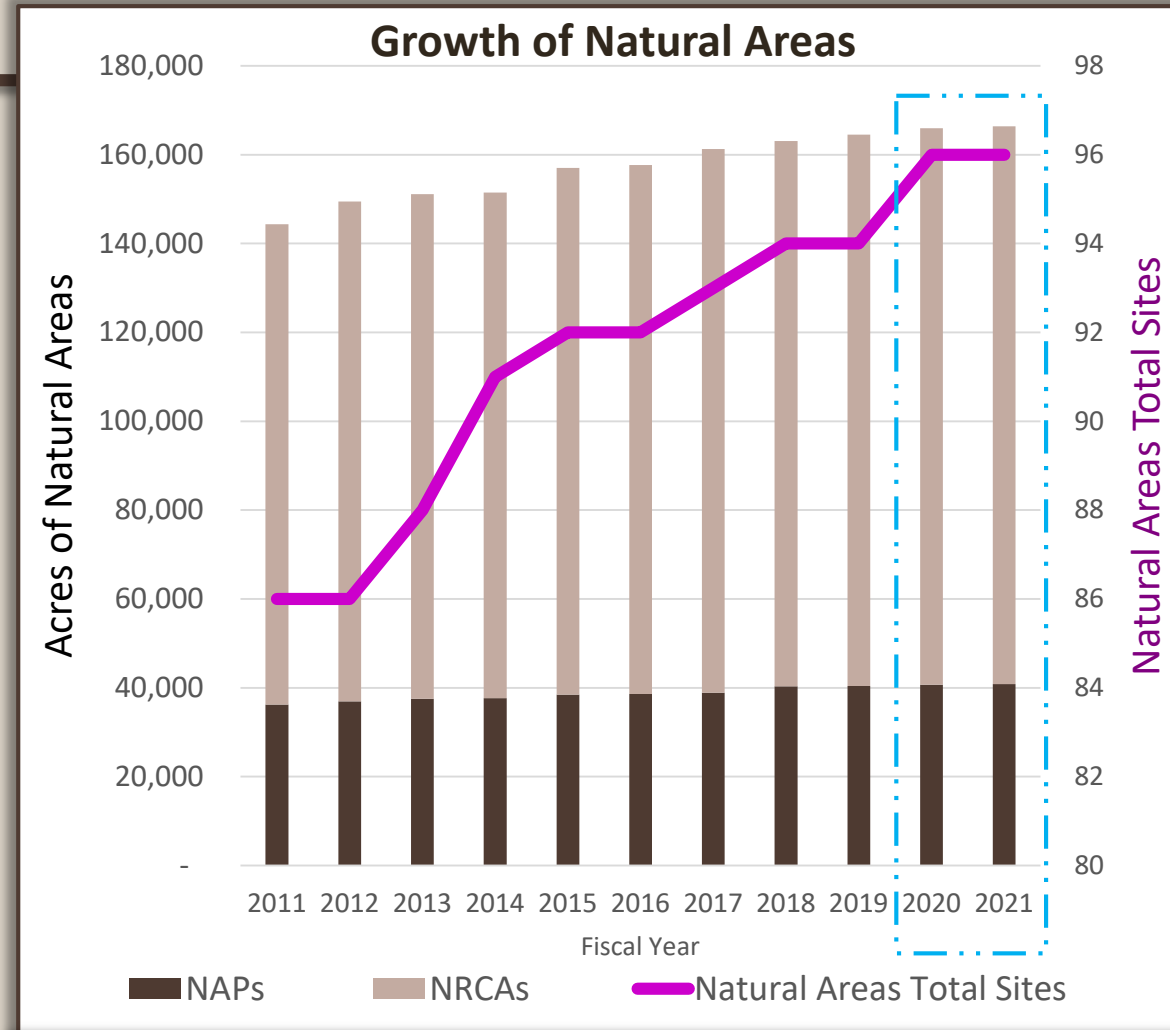


Castle Rock NAP



Mount Si NRCA

**Natural Resources Conservation Areas:**  
Protect outstanding examples of native ecosystems, habitat for endangered, threatened and sensitive plants and animals, and scenic landscapes

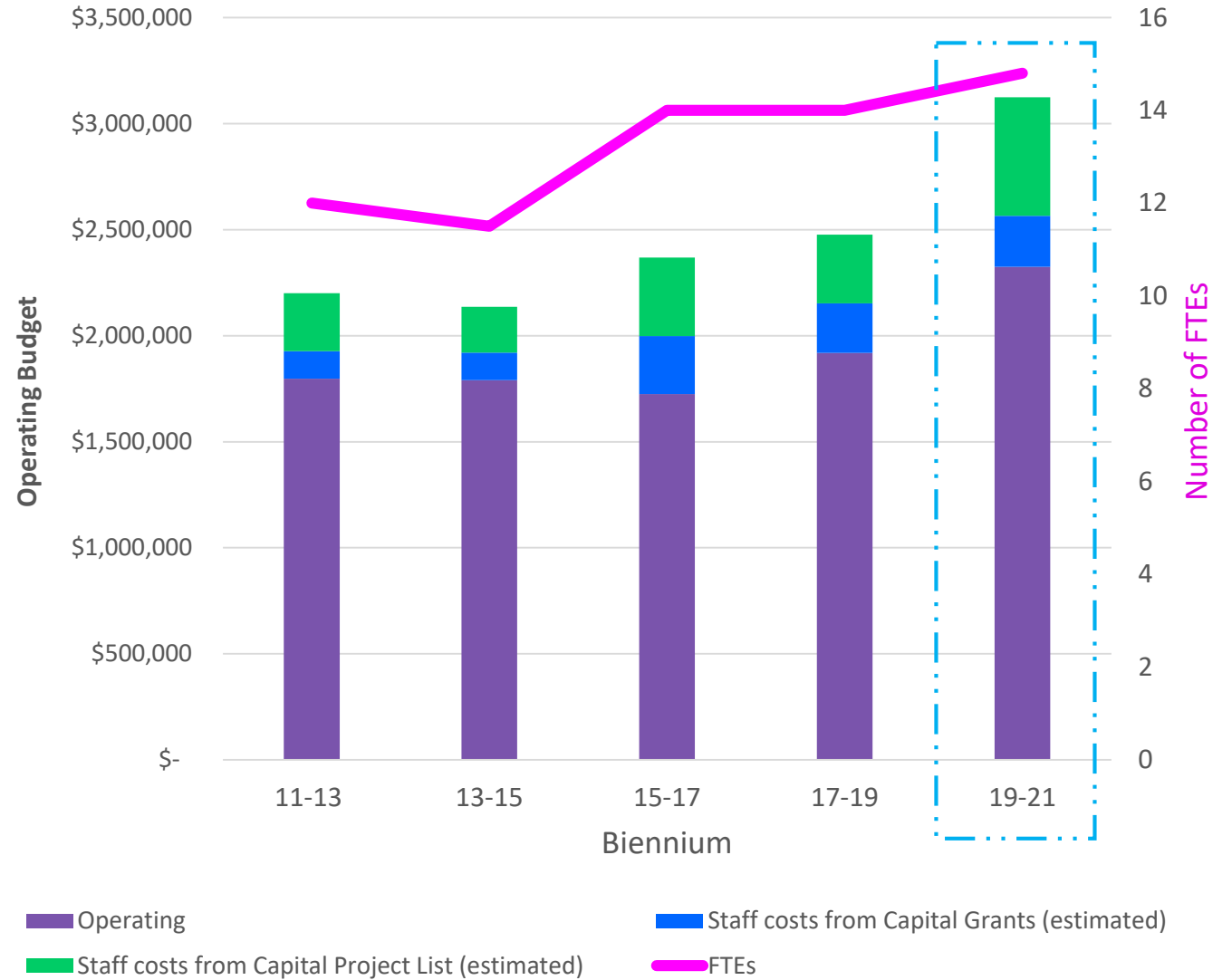


*Natural Areas provide important contributions to DNR's Habitat Conservation Plan obligations as well as provide habitat for ~44 other federally listed or 'special-status' animal and plant species*





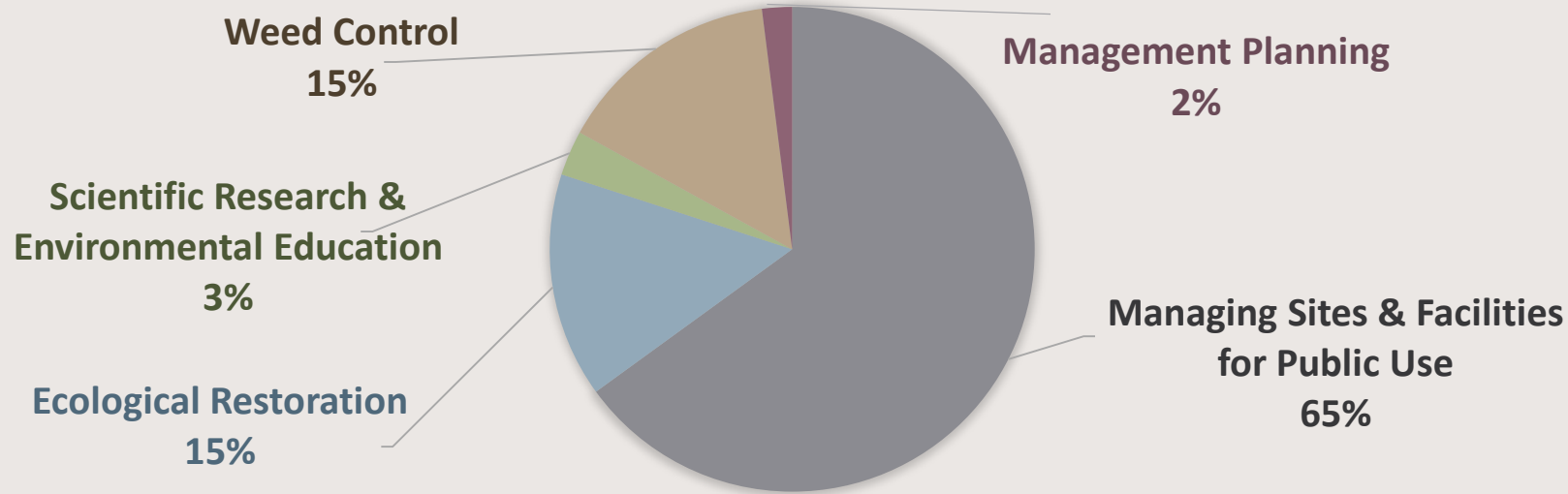
## Natural Areas Program Operating Budget by Fund Source



‘Operating’ funds include a mixture of federal, state, and local operating grants

Capital Grants and Capital Project List funds are estimated staff costs only, and do not include purchased items

# Natural Areas Program Activities



## FY 2020 & 2021 Program Highlights:

- Newly installed or renovated public amenities at several sites  
*(Point Doughty NAP, Merrill Lake NRCA, Morning Star NRCA, Lummi Island NRCA)*
- Confirmation of habitat use by threatened or sensitive species  
*(Sandhill cranes at Trout Lake NAP & Slender-billed nuthatch at Lacamas Prairie NAP)*
- Progress or completion of ecological restoration projects  
*(Woodard Bay NRCA, Elk River NRCA, Davis Canyon NAP, Riverside Breaks NAP, Methow Rapids NAP)*








# Recreation Program

## Recreational Opportunities



**DNR GO! map** A Story Map   

Navigate to DNR recreation sites by using the various tabs, below. Click on a site for a window with more information. For site status and details, click the "More Info" link in each site's window.

**Accessible Amenities Available** | Campground | Day Use Area | Trailhead use: motorized | Trailhead use: non-motorized

	Total end of FY 2021	New in FY 2021	New in FY 2020
Recreational Facilities	205	1	4
Recreational Trail Miles	1,168	13	34



Recreation on state trust lands  
is additional to  
and compatible with  
trust management activities

*Multiple Use Concept (RCW 79.10.100-140)*

## Recreation in Working Forests

*Example: Capitol State Forest*



56,000+ MBF for FY 2020

58,000+ MBF for FY 2021



167 miles of Recreational Trails



17 Recreational Facilities



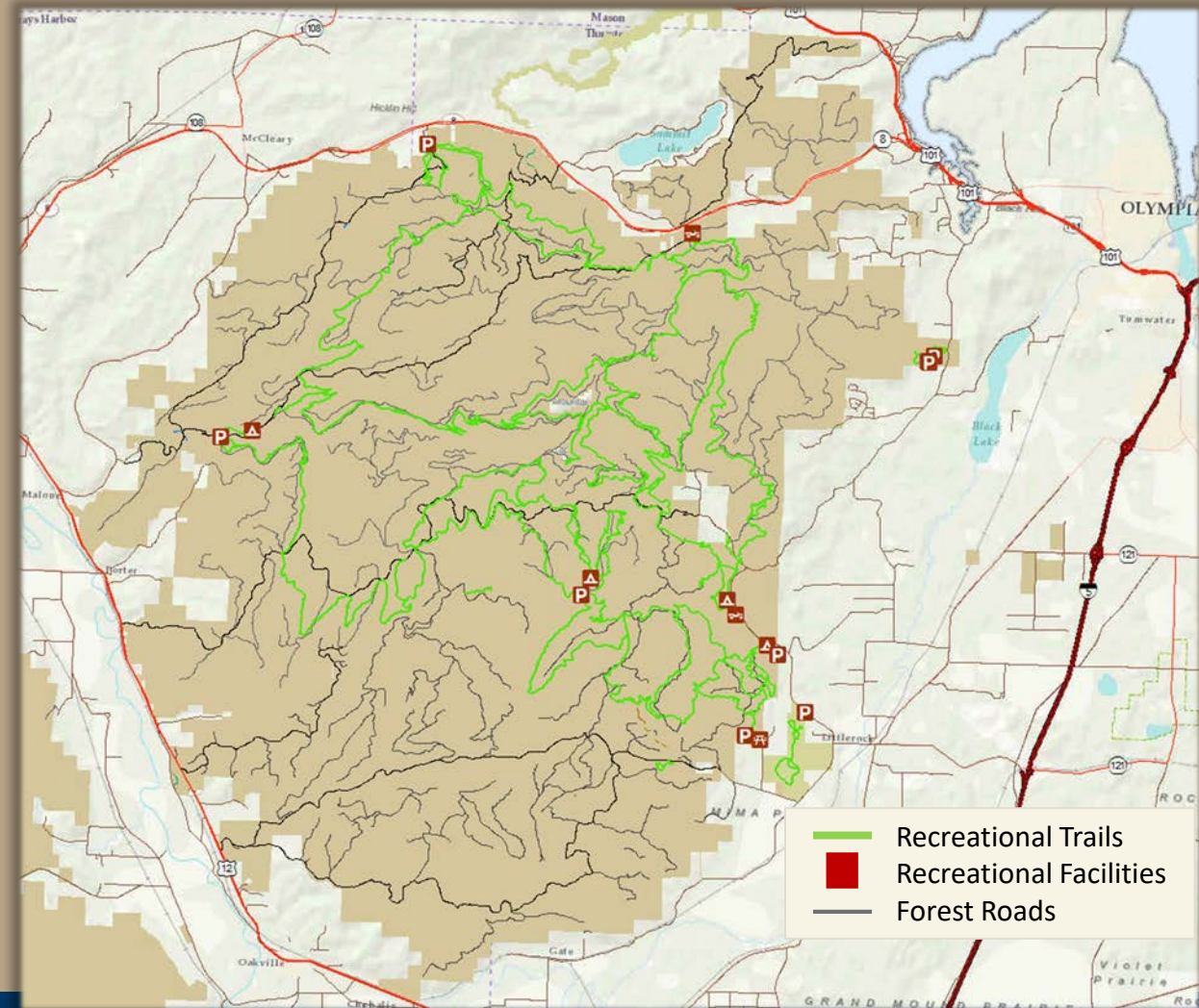
600+ miles of Forest Roads

**500,000+ Recreational Visitors Annually**

# Capitol State Forest

West and southwest of Olympia, WA

~110,000 acres







## Updates



- Partnered with WDFW, Parks, and RCO to commission a use study
- Became a founding member of the Recreate Responsibly Coalition
- Completed numerous trail, trailhead and campground statewide

## Challenges



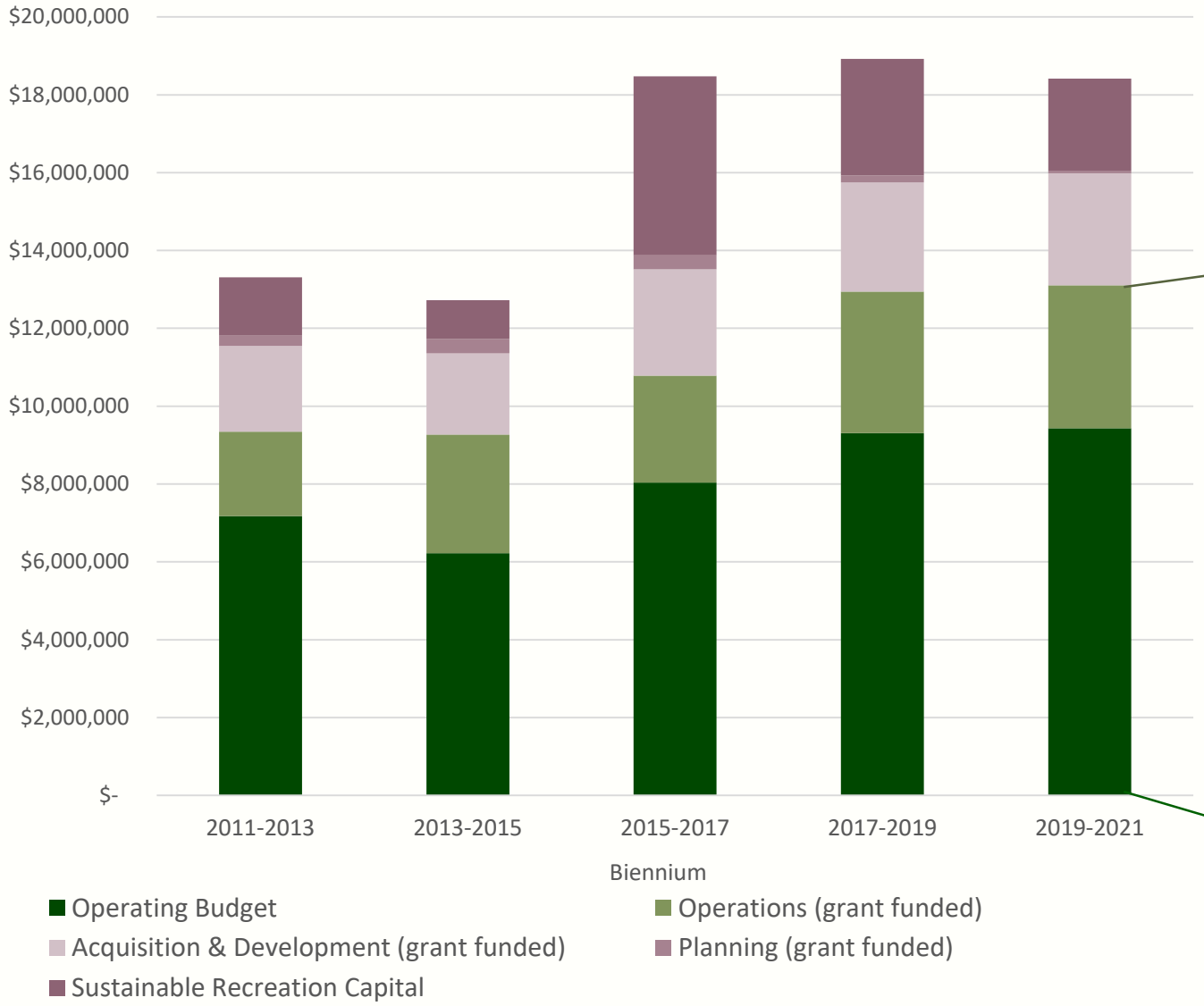
- Statewide recreational closures due to COVID
- Eastside recreational closures due to extreme wildfire risk
- Decreased funding during increased recreational use

## Opportunities

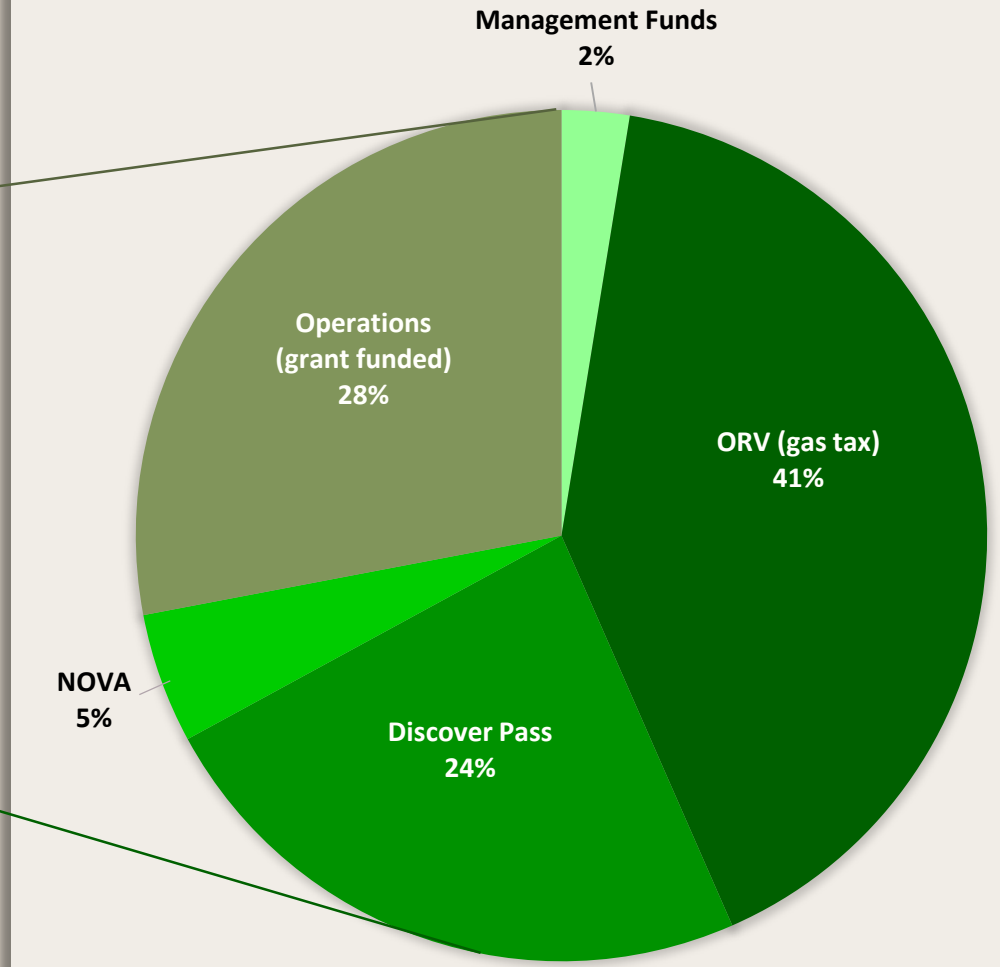


- Engaging in initial outreach with tribes and recreation users on Statewide Recreation Plan
- Continuing to partner with Timber Sales Program on projects and trust land outreach in recreational areas

Recreation Program Operating, Capitol & Grant Budget



OPERATING FUNDS BY SOURCE FY 2021



Questions?



