# Clearwater County Forest Inventory Stocks





### Land Base Overview

The Forest Inventory and Analysis (FIA) program administered by the USDA Forest Service serves as our national forest inventory. In Idaho, each plot represents roughly 6,000 acres and is revisited on a 10year cycle beginning in 2004. The data collected provides valuable information on forest extent and stocks as well as how those stocks change over time. This fact sheet details the FIA data for Clearwater County, Idaho.

Area Sq Miles	Forested Acres	% Forested	Total Acres	
2,488	1,445,738	90.8%	1,592,378	

Clearwater County is highly forested with just under 1.5 million acres (90%) of its land base classified as forest. Forest Service forests dominate the eastern parts of the county while the private and state forest land is concentrated mostly in the western parts.



Distribution of 261 Idaho USDA Forest Inventory and Analysis Plots by land ownership

### Area and Volume by Forest Type and Owner

Equally important to the overall extent of the county's forests is its ownership and prevalent forest types. Forest extent by type and the volume on those acres provides insight into the economic and ecological opportunities given each owner's management focus. Clearwater County is dominated by Forest Service land in largely softwood forest types like True Fir, Douglas-fir, and other softwood.

				Private/					Private/	
	Forest	Other	State/	Native		Forest	Other	State/	Native	
	Service	Federal	Local	American	Total	Service	Federal	Local	American	Total
	m	illions of cubic	feet				ti	nousand acre	<u></u>	
Softwood										
Douglas-fir	716	35	233	262	1,247	158	6	60	107	331
Lodgepole Pine	256	0	2	5	263	104	0	2	6	111
Other Softwood	607	0	105	195	907	107	0	43	84	234
Ponderosa Pine	61	0	15	40	116	9	0	12	26	48
True Fir	1,288	149	488	397	2,323	339	19	142	168	667
Hardwood	0	0	1	0	1	14	0	5	11	30
Total	2,928	184	845	899	4,856	730	25	264	402	1,421

Fact Sheet #15 (April 28, 2022) – Fact Sheets are based on research reports relevant to current natural resource topics. Contributors: Kelsey Vershum Undergraduate Researcher and Greg Latta, Policy Analysis Group Director



## Clearwater County Forest Inventory Change



### **Forest Carbon**

Forests are a significant part of the global carbon cycle. The productivity class indicates potential annual forest growth. This potential along with current forest size and stocking affect how much carbon a forest can intake, sequestering it from atmospheric accounts into woody biomass. Clearwater County's forests have been removing carbon from the atmosphere at a rate of 0.3 MT C per year since 2013. Dead tree carbon pools have been relatively stable over that time period ranging between 5 and 6 MT C in stocks.





Each year since 2004, the FIA has measured 1/10th of the plots in Clearwater County. This means that a full sample was not collected until 2013. This is indicated by the blue coloring on the graph, which becomes lighter as more plots are measured. The early measurements are less precise than the ones after 2013, when all plots were measured, and the remeasuring process began.

#### Disturbance



Disturbances, either natural or management-related, are another factor of change affecting Idaho's forests. Insects are the largest factor of disturbance observed in the FIA data for Clearwater County, and becoming a bigger problem as they infect more trees. Forest management related disturbance is much smaller.

	Forest Service	Other Federal	State/ Local	Private/ Native American	
		ocres			
Disturbance					Total
Disease	28,764	1,856	6,959	14,591	52,170
Fire	7,423	0	0	0	7,423
Insect	24,604	0	0	2,474	27,078
Other Disturbance	0	0	0	3,932	3,932
Total	60,791	1,856	6,959	20,997	90,603
Management					
Planting	0	0	0	2,174	2,174
Cutting	619	0	6,031	6,384	13,034
Other Treatment	0	0	1,237	1,372	2,610
Preparation	1,237	0	0	1,237	2,474
Total	1,856	0	7,268	11,168	20,292
Grand Total	62,647	1,856	14,228	32,165	110,89

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Established by the Idaho Legislature in 1989 to provide objective analysis of the impacts of natural resource proposals.