

The 1930s Survey of Forest Resources in Washington and Oregon

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Early PNW Forest Inventories

General Land Office (USDI) had responsibility for “forest reserves” until 1905

**GLO surveys emphasized arable land
Traversed section/quarter section
lines**

**Described forest condition and
measured witness trees**

Early PNW Forest Inventories

1910 Washington Forest Inventory (Timber Cruise)

Each county surveyed forest land

**Prepared maps with vegetation
types and timber volumes**

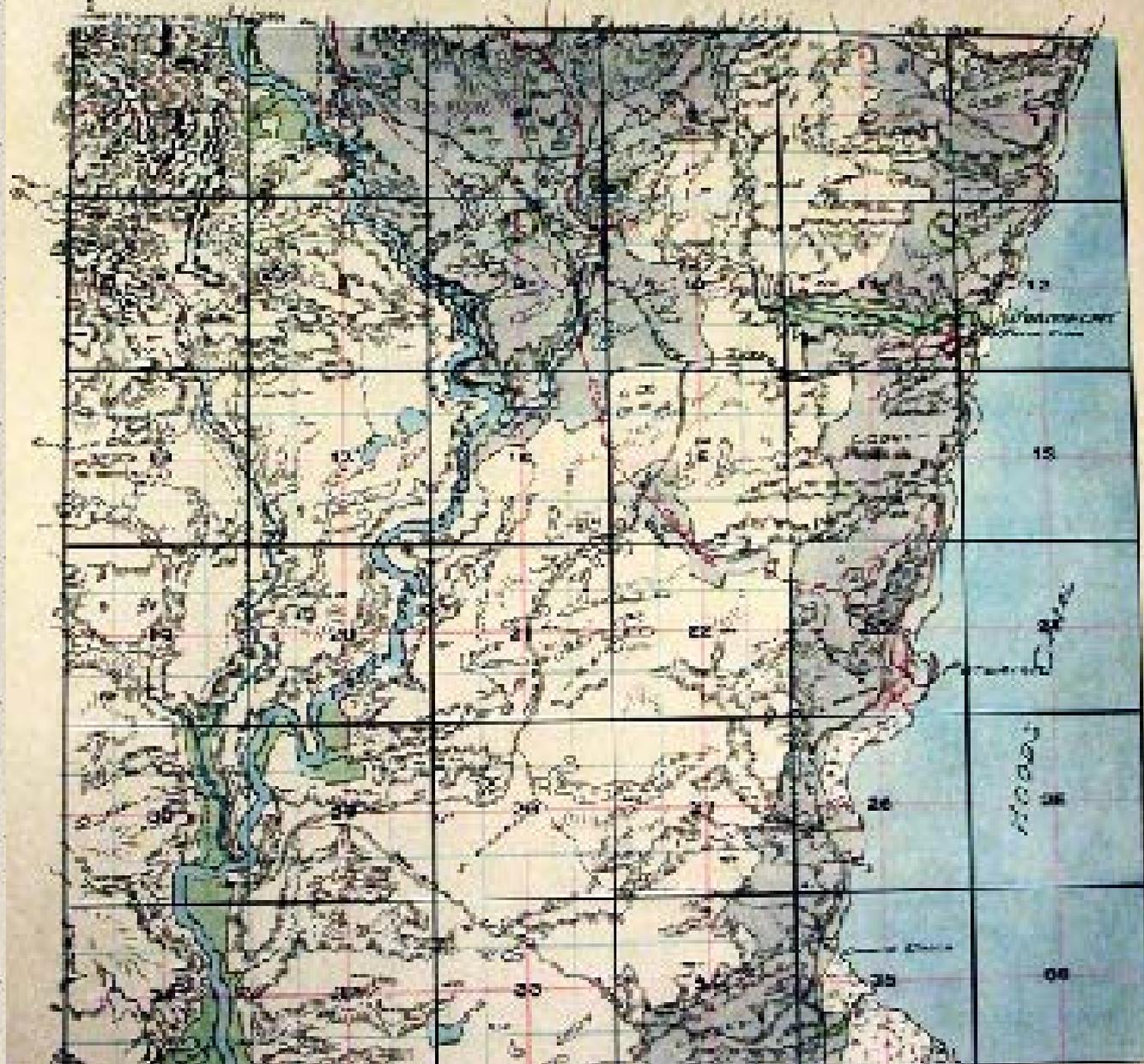
Quality varies

**Available in WA State Archives in
Olympia (call for appointment)**

MASON COUNTY, WASHINGTON

OFFICE OF A. J. LEITCH, ENGINEER

TOWNSHIP 31 N. RANGE 1 W. WEST WILLAMETTE MERIDIAN

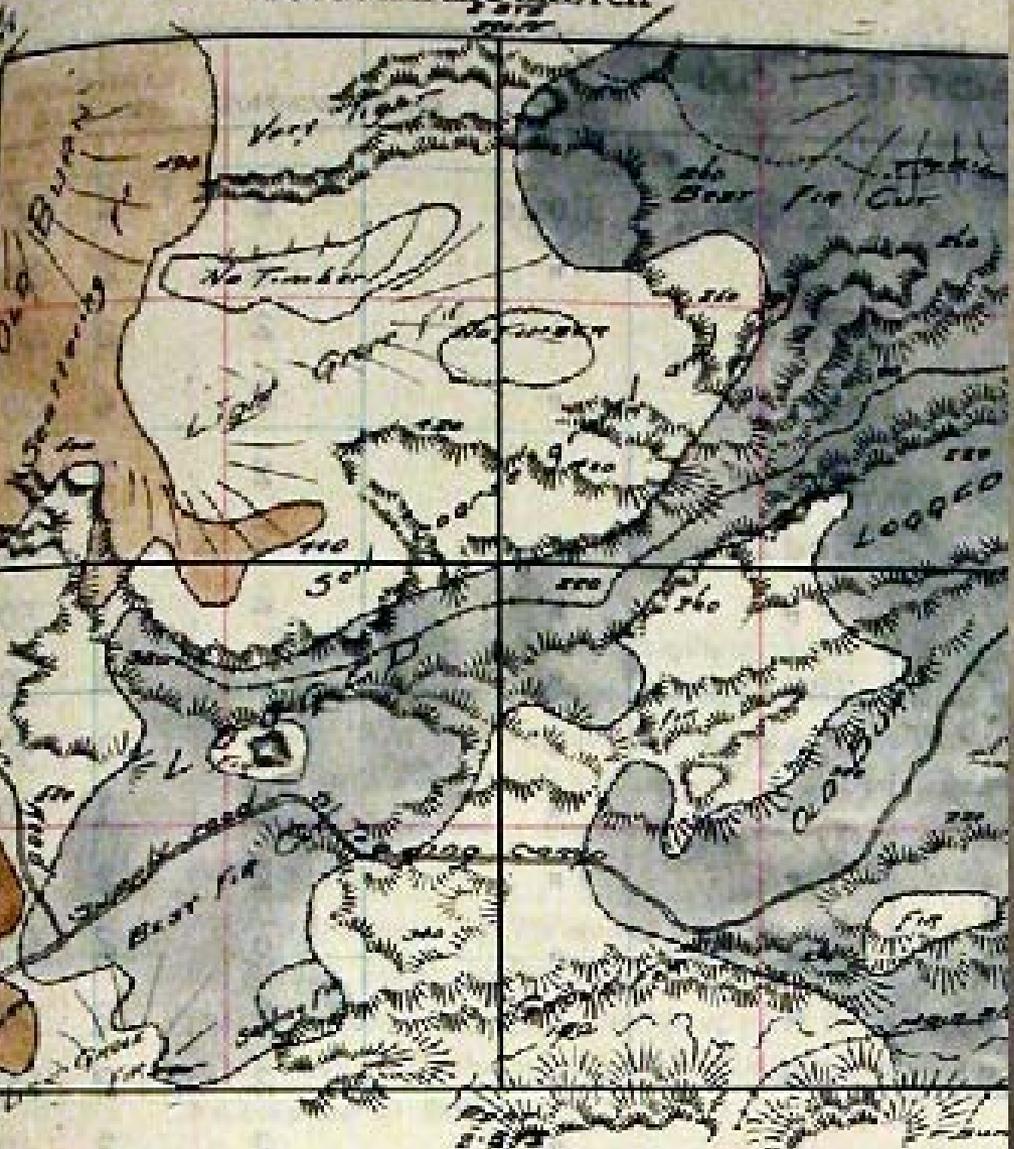


MASON COUNTY

OFFICE OF LEWIS J

SECTION 34 TOWNSHIP _____

TOPOGRAPHIC SKETCH



LOGGING CONDITIONS

While most of the logging that has been done on this section has been of an easy venture with horses, the balance offers no serious obstacles. Though quite brushy and somewhat rough in the Southern part of section, the conditions are not difficult. The timber on the whole is somewhat scattered and in the choppings is culls. A few patches of grove timber.

SPECIAL

Indicate on Topographic Map Location of Minerals, Coal Chatterings, etc. Giving Full Information Regarding

MASON COUNTY, WASHINGTON

OFFICE OF LEWIS J. WADE, CHIEF CRUISER

SECTION 34 TOWNSHIP 22 N. RANGE 4 W. W. M.

TIMBER ESTIMATE

(By Ten Acre Tracts)

FORMER P. & T. CO. 140000 - 5170

F 140 2 1/2 X 100 2	F 30 1	F 100 1 1/2	F 4 0 3	F 4 0 2 1/2	F 45 0 1	F 18 0 1
F 20 0 1 1/2 X 14 0 1	F 30 0 1	F 100 0 1 1/2	F 32 0 1 1/2	F 10 0 1 1/2	F 45 0 1	F 18 0 1
S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0
C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0
H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0
Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X
F 40 0 2 1/2 X 10 0 2 1/2	F 30 0 1	F 100 0 1 1/2	F 50 0 1 1/2	F 16 0 1 1/2	F 15 0 1	F 38 0 1 1/2
F 60 0 1	F 30 0 1	F 100 0 1 1/2	F 50 0 1 1/2	F 16 0 1 1/2	F 15 0 1	F 38 0 1 1/2
S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0
C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0
H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0
Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X
F 6 0 3	F 70 0 1	F 60 0 1 1/2	F 52 0 1 1/2	F 50 0 1 1/2	F 15 0 1	F 30 0 1 1/2
F 36 0 1 1/2 X 70 0 1	F 60 0 1 1/2	F 72 0 1 1/2	F 52 0 1 1/2	F 50 0 1 1/2	F 15 0 1	F 30 0 1 1/2
S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0
C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0
H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0
Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X
F 0 0	F 60 0 1	F 100 0 3	F 0 0	F 0 0	F 0 0	F 0 0
F 50 0 1	F 60 0 1	F 200 0 1 1/2	F 100 0 1 1/2	F 20 0 1 1/2	F 100 0 1	F 15 0 1 1/2
S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0
C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0	C 0 0
H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0
Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X
F 4 0 3	F 30 0 1	F 50 0 1	F 0 0	F 60 0 1 1/2	F 30 0 1	F 10 0 1
R 50 0 1 1/2 X 30 0 1	F 50 0 1	F 12 0 1	F 10 0 1	F 60 0 1 1/2	F 30 0 1	F 10 0 1
S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0
C 0 0	C 0 0	C 6 0 1	C 0 0	C 0 0	C 0 0	C 0 0
H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0	H 0 0
Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X
F 5 0 3	F 6 0 3	F 0 0	F 7 0 3	F 0 0	F 0 0	F 0 0
F 72 0 1 1/2 X 40 0 1 1/2	F 40 0 1 1/2	F 5 0 1	F 40 0 1 1/2	F 30 0 1 1/2	F 40 0 1 1/2	F 50 0 1
S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0	S 0 0
C 0 0	C 0 0	C 5 0 1	C 0 0	C 0 0	C 0 0	C 0 0
H 0 0	H 0 0	H 6 0 1	H 0 0	H 0 0	H 0 0	H 0 0
Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X	Ph.P. X

TOTAL ESTIMATE MERCHANTABLE TIMBER

	STANDING	PERT B. M.
Fir		4389000
Spruce		
Cedar		27000
Hemlock		6000
Dead Fir		
Dead Cedar		
TOTAL		4422000
DOWN		
Fir		
Cedar		
GRAND TOTAL		
	No.	Av. Lgh. Av. Diamtr.
Fir Piles	24	1570 60 120
Fir Spars		
Cedar Phone Poles	53	
Cedar Tel. Poles	120	
R. R. Ties		
Cords Single Bolts		

1928 McSweeney-McNary Forestry Research Act

Directed the Secretary of Agriculture to:

**“ . . . make and keep current a
comprehensive inventory and analysis
of the nation’s forest resources . . . ”**

**Secretary of Agriculture directed the Forest
Service to conduct the survey**



Thornton T. Munger, Director of the PNW Forest Experiment Station, traveled to Wash. DC in early 1929 to discuss new project

Decided to start with Douglas-fir region (greatest volume of merchantable timber) and then expand to other forest lands in WA and OR

First survey to cover ALL ownerships

Forest conditions (species, age class, volume)

Estimates of growth

Depletion from cutting, fire, pests

Estimates of merchantable products

Early workers on survey in PNW

Horace J. Andrews

(Director, later R-6 regional forester)

Warren H. Bolles

Phillip A. Briegleb

(later PNW Station Director)

Edward D. Buell

Robert W. Cowlin

(later PNW Station Director)

James W. Girard

(of Mason, Bruce, Girard)

A.W. Hodgman

Herman M Johnson

Paul D. Kemp

Charles W. Kline

W.V.S. Litchfield

Donald N. Mathews

Walter H. Meyer

Floyd L. Moravets

W.E. Pelto

Percy N Pratt

W.E. Sankela

Francis X. Schumacher

R.W. Taylor

William J. Wakeman

C.H. Willison, Jr.

Harry M. Wolfe

Horace J. Andrews



**“Hoss” was known as an
“artist” at evading red tape**

Between 1930 and 1936, surveyed all forested portions of WA and OR, total of 33 million acres

At the time, the world's largest survey at such an intensive scale

Many of PNW's procedures were later used in other regions

**How the heck did they get
the work done?**

Intensive reconnaissance

Adjustment cruise

Type mapped and cruised

**Additional surveys of cutover
or recently burned areas**

Intensive reconnaissance (on National Forests)

**Mapped areas of uniform type and
estimated average volume**

**Used aerial photographs where
available (especially in later years)**

Adjustment cruise (30% of non-FS land with recent intensive cruise)

Private timber companies, county cruises for taxation purposes, state owned land, O+C revested grant lands, tribal lands

Spot checked and adjusted as needed to survey standards

Type mapped and cruised

Traveled roads, trails, used lookouts & photos to type map

Cruised for age class, species composition, stocking, volume

Many products from the survey

Base maps

Forest type maps

Reports of many types

Regeneration of areas logged in 1920s

Sawtimber volume

Pulpwood resources

Acres by timber types

Base maps -- both WA and OR cooperated in making new base maps

Forest type maps – Several types and scales

1/4" = 1 mile lithographed color

Quarter state maps -- \$1 per sheet

1/2" = 1 mile generalized, for each county

1" = 1 mile detailed, for each county and national forest

Map availability

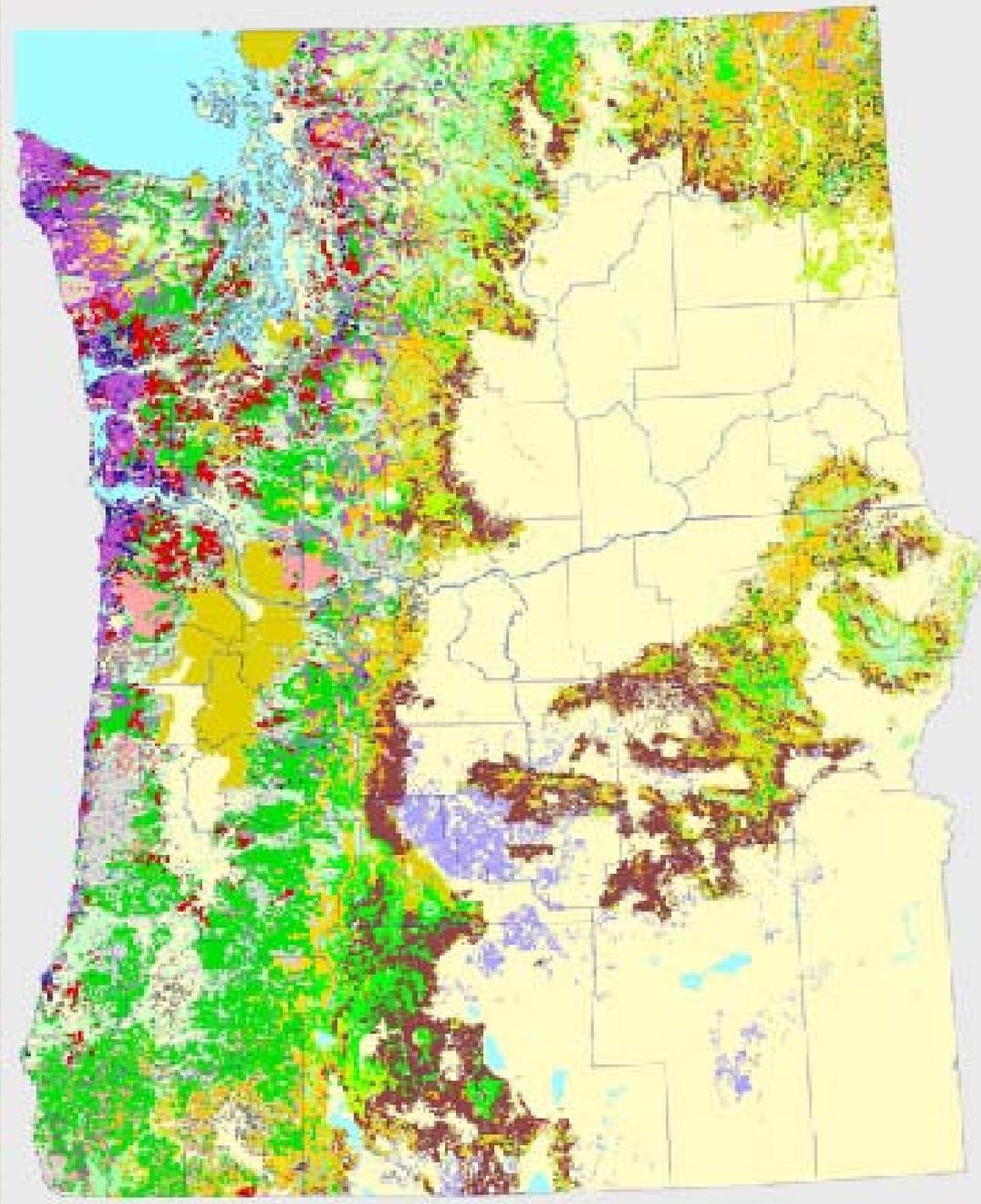
Some published

**Some distributed as colored sheets
($\frac{1}{4}$ -state maps)**

**County maps available as uncolored
prints at cost (8¢ per sq. ft. in Dec. 1934,
up to 50 sq. ft.)**

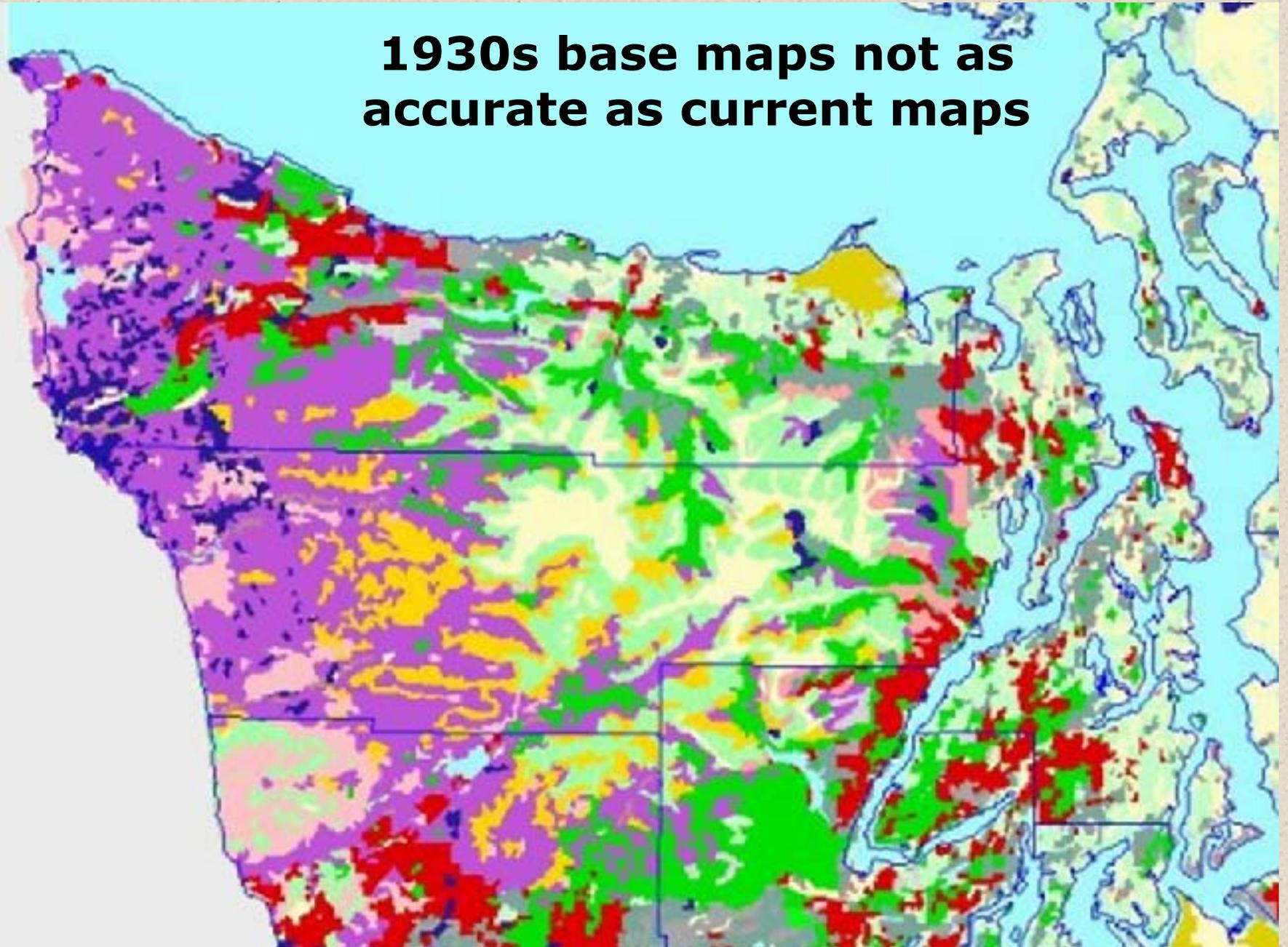
**Legends coded for hand-coloring
with Dixon, Eagle or Castell pencils**

**Instructions even provided for
“fixing” colors**

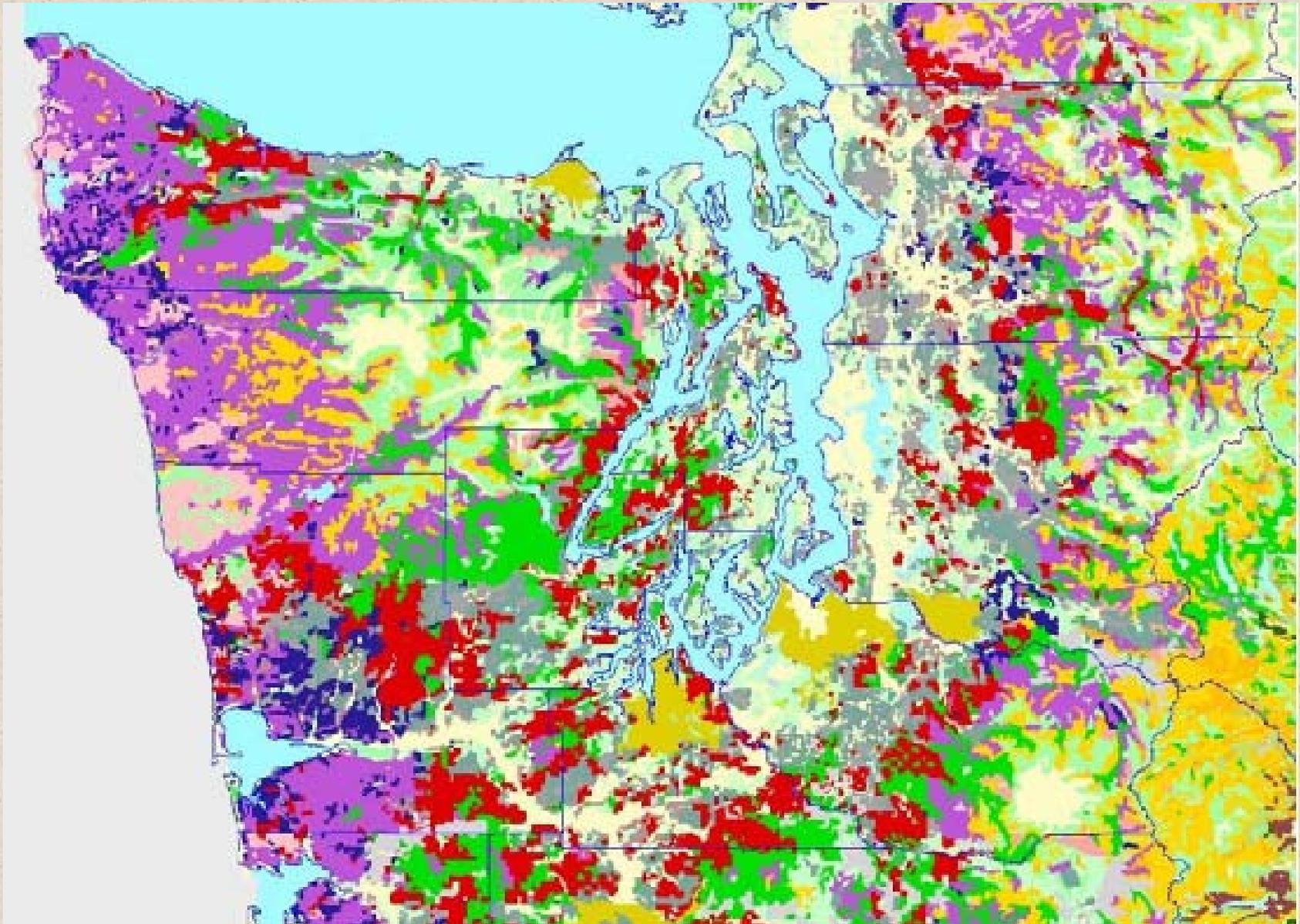


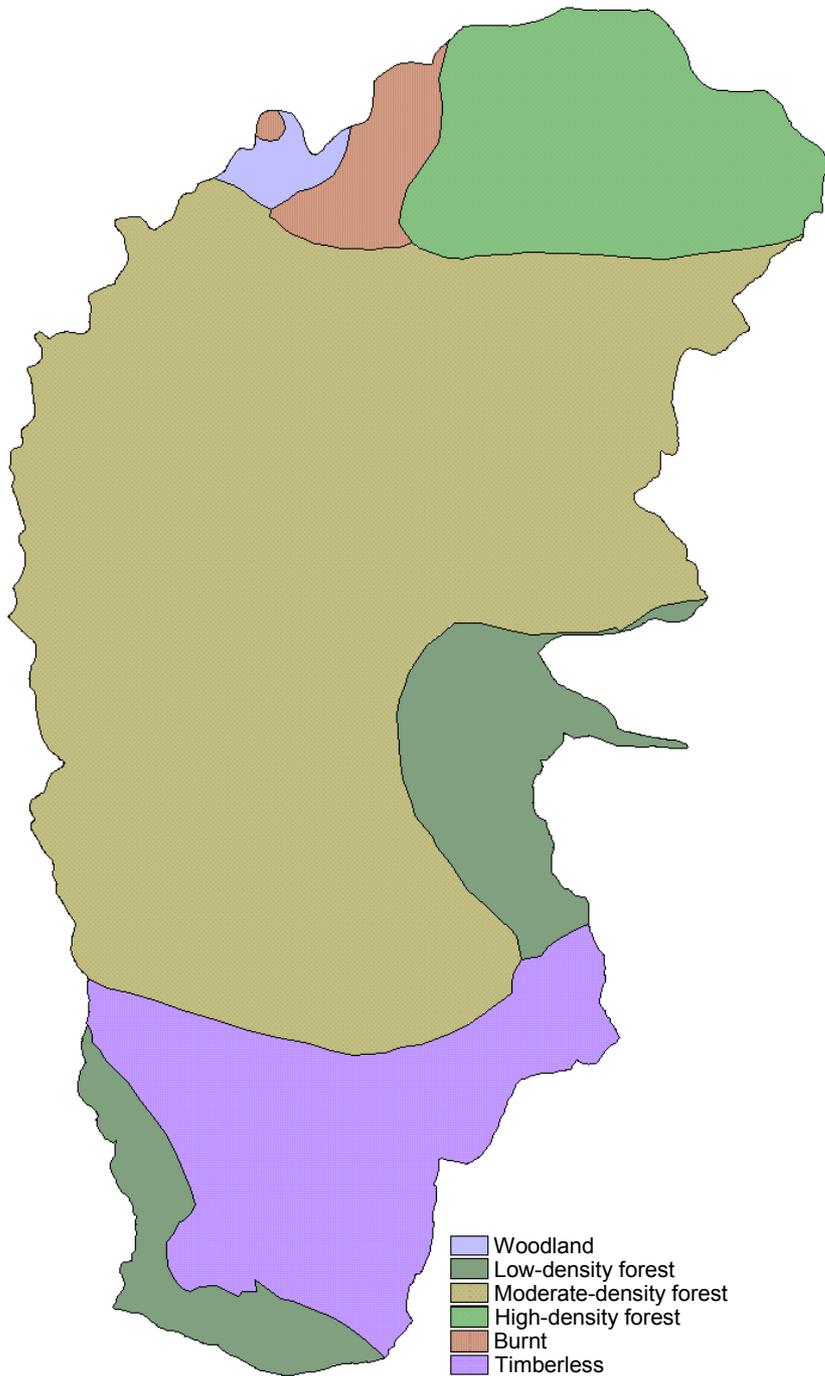
**GIS layer
based on 8
1/4-state maps**

1930s base maps not as accurate as current maps

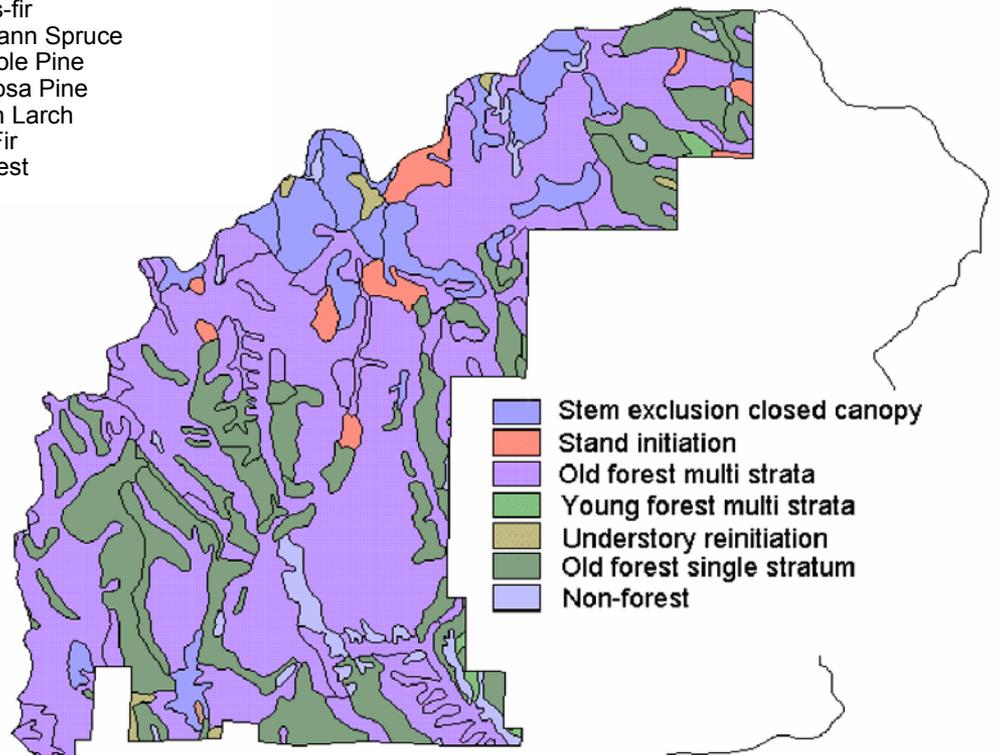
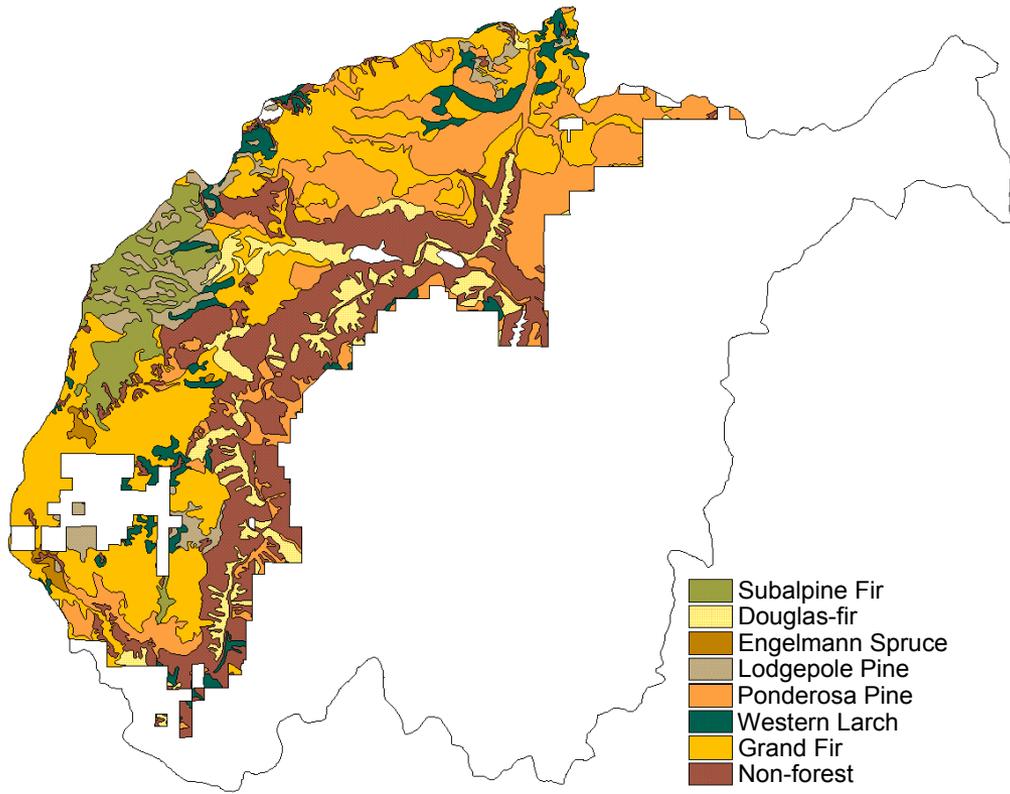


Also available as .jpg

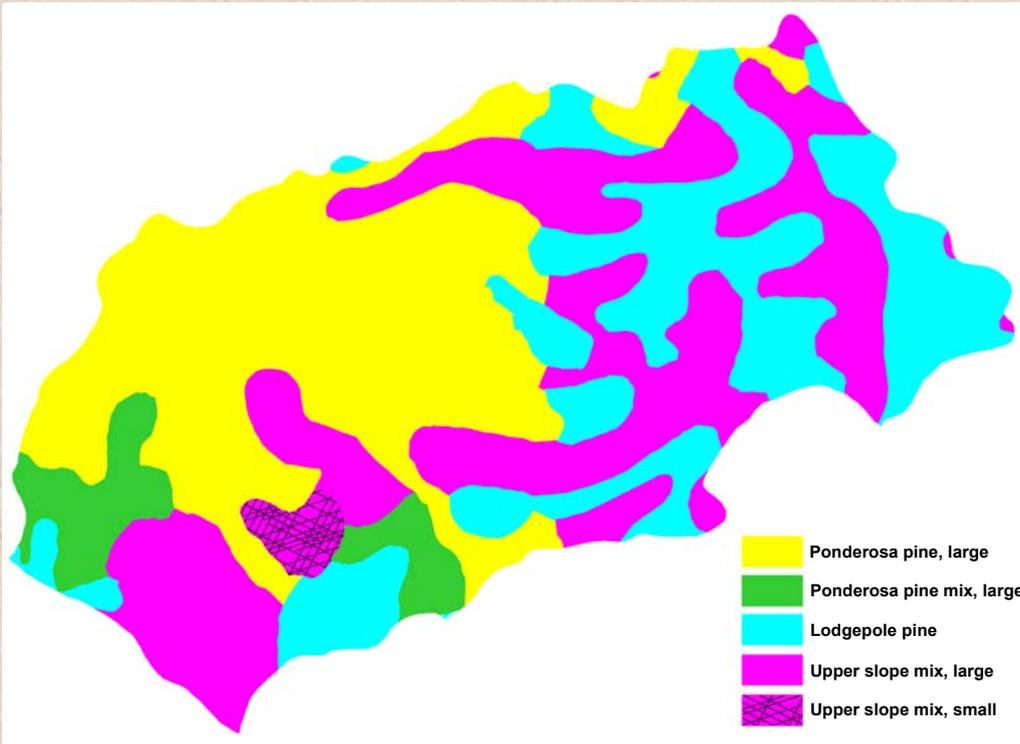




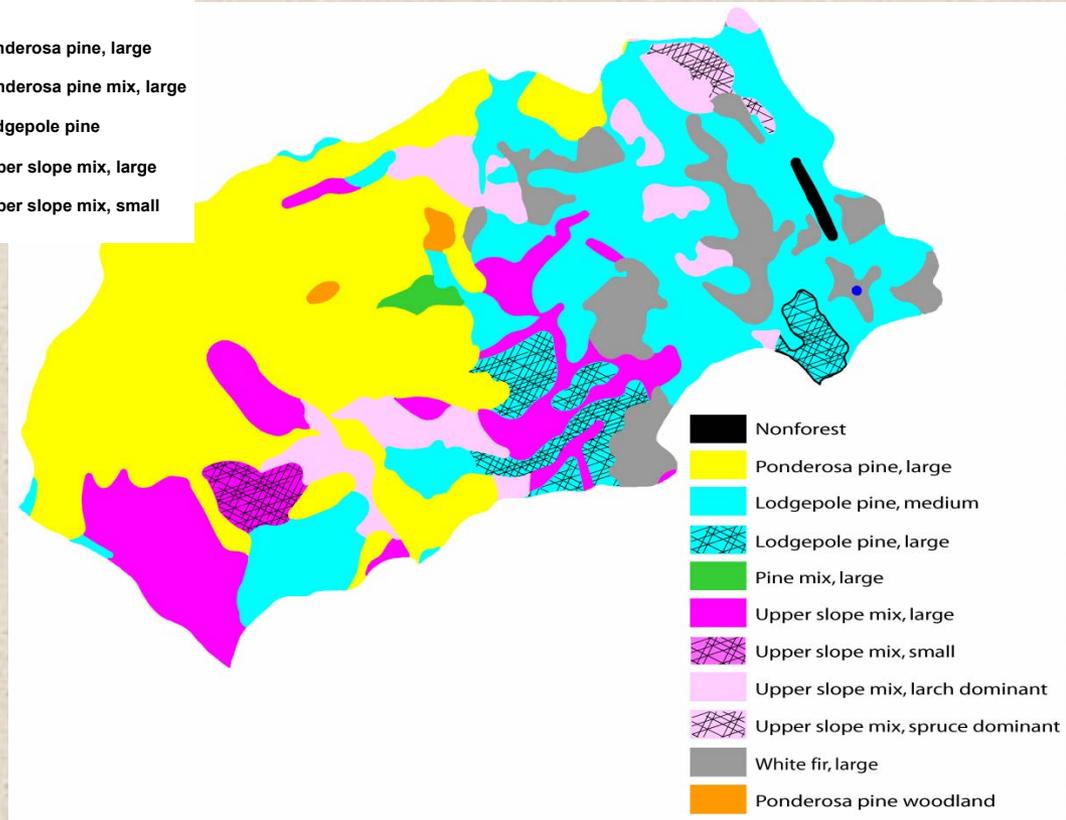
**Can use info to
develop various
type maps**



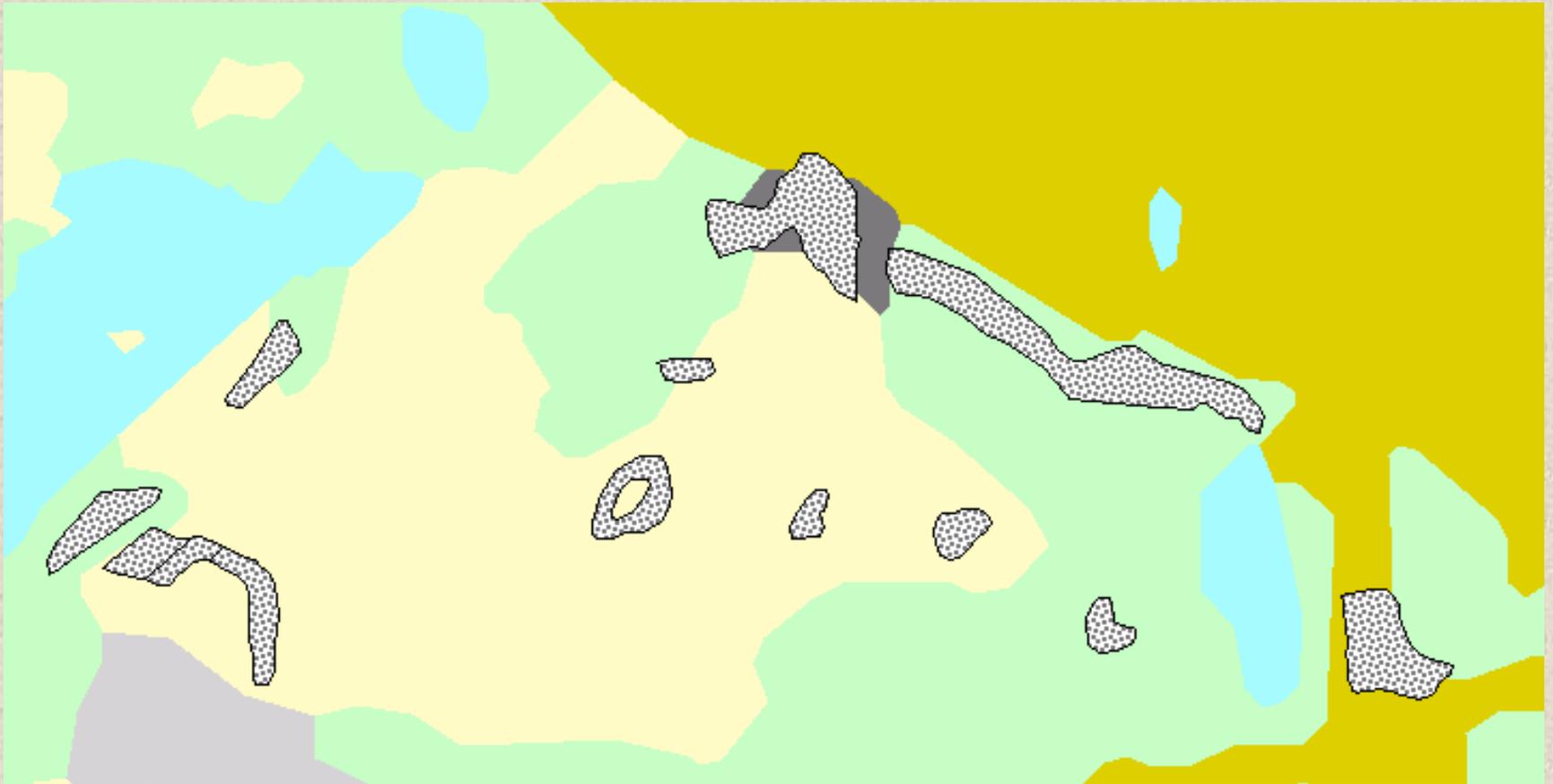
1/4-State cover



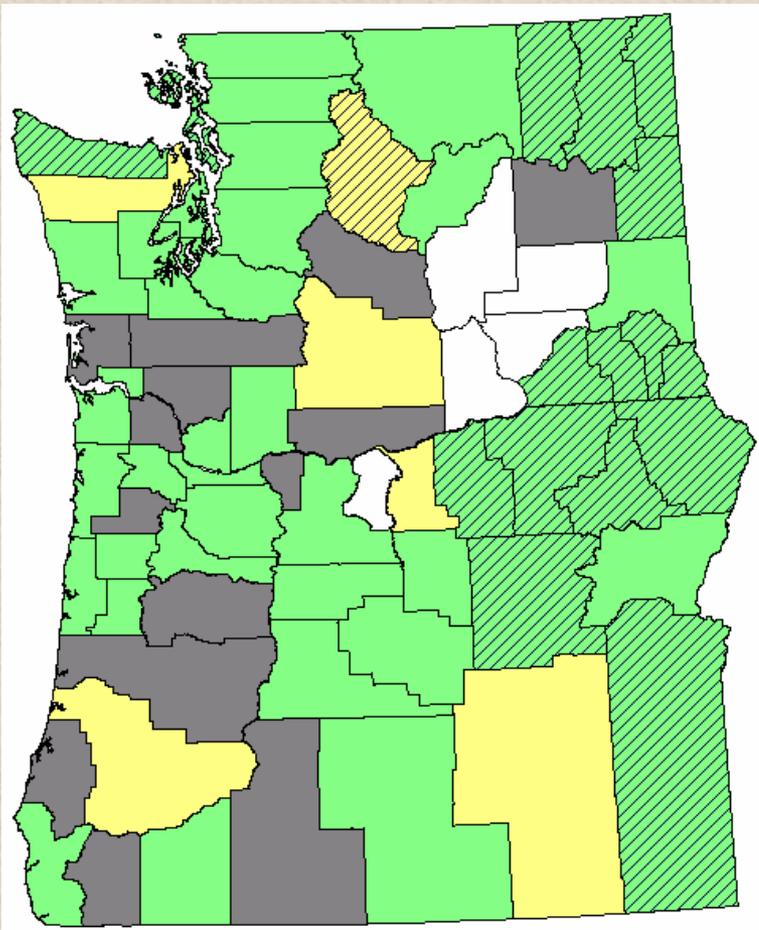
County cover



Presence of oak in portion of Pierce County



(No oak mapped in Thurston Co)



-  Non-forest
-  No maps located
-  Some maps located
-  All maps located
-  Maps digitized

**For more map information, contact:
Dale Weyermann
PNW Forest Inventory and Analysis Program
P.O. Box 3890
Portland, OR 97208-3890
Phone: 503-808-2042
E-mail: dweyermann@fs.fed.us**

Many Reports from the Survey

- **Volume by species, timber size and many categories**
 - **From beginning, procedures established confidentiality of each owner's information**
- **Reports by state and country**
- **Economic assessments**
- **Regeneration reports**



FOREST RESEARCH NOTES

Issued by the

PACIFIC NORTHWEST FOREST EXPERIMENT STATION

No. 13 -----

Portland, Oregon.

July 17, 1934 -----

FOREST RESOURCES OF THE DOUGLAS FIR REGION

A SUMMARY OF THE FOREST INVENTORY OF WESTERN OREGON AND WESTERN WASHINGTON

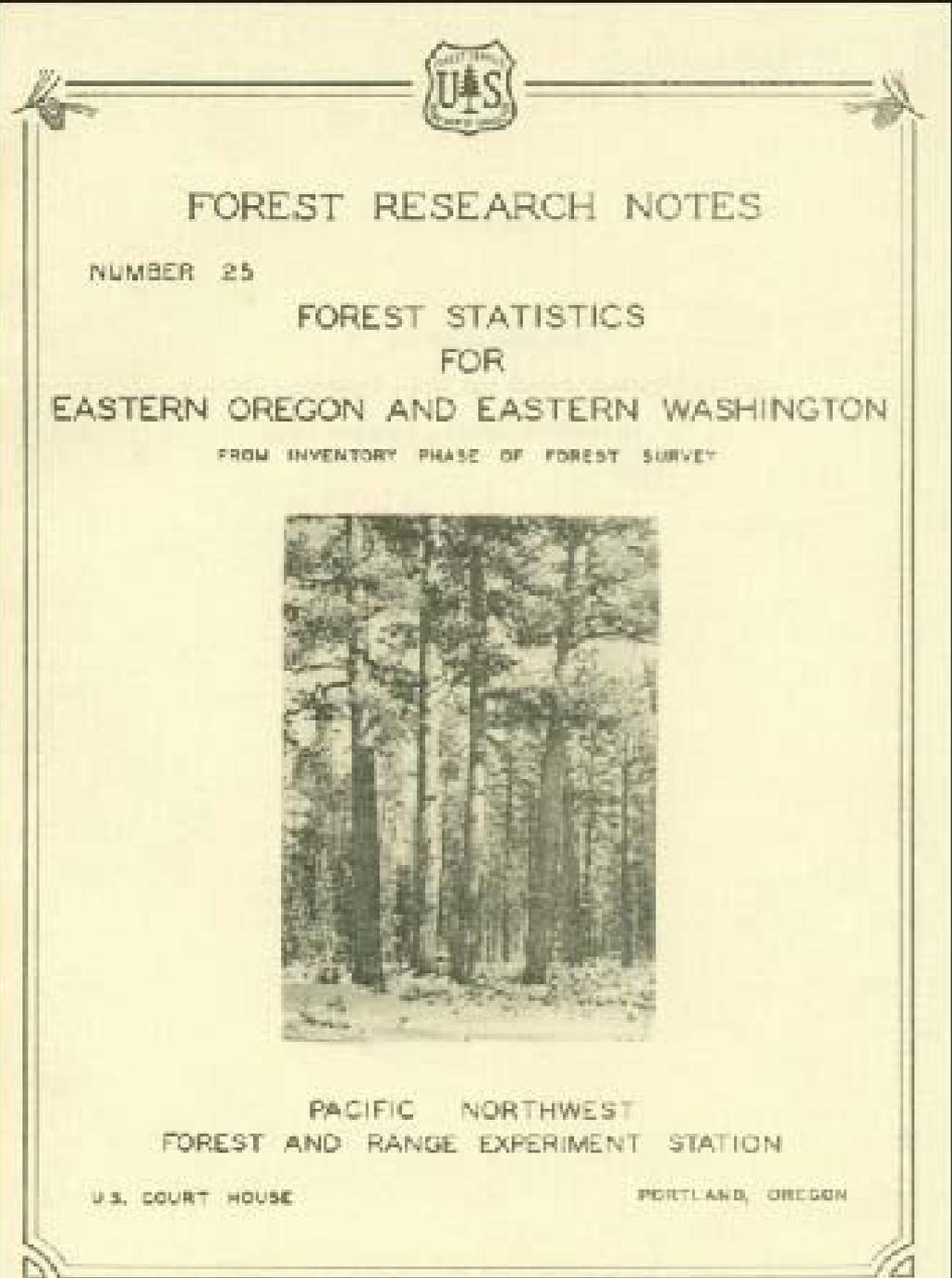
Made in Connection with the Forest Survey,
H. J. Andrews, in Charge, and Robert W. Cowlin, Assistant in Charge

C O N T E N T S

Introduction

Page
No.
1

1938
1st major report
for eastern OR
and WA



Life in the Forest Service in the 1930s

- **Promotions, hiring, and travel restricted**
- **Salaries frozen year after year**
- **Annual vacations eliminated**
- **“Hoover holidays” instituted – 2 days off per month without pay**
- **People made available via CCC and CWA, added resources but also “competed with” those on the payroll**
- **An 8-hour day was unheard of**

Questions?



