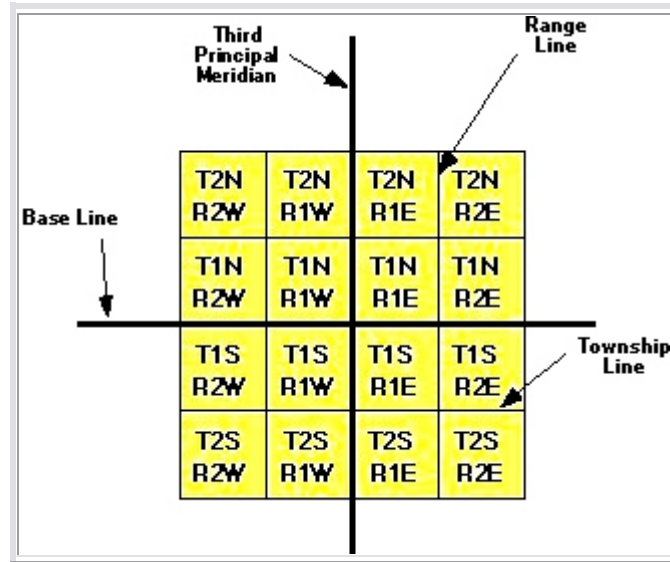


# The Public Land Survey system

Federal and state land management agencies use the Public Land Survey system to describe legal land locations. The nomenclature used in the Public Land Survey System to describe legal locations is Township, Range and Section.



Most states west of the Mississippi and north of the Ohio Rivers were surveyed after the Public Land Survey Law was passed in 1796. Thirty five initial points were established by astronomical observations. An initial point would be at the intersection of a **Base Line** and a **Principal Meridian** similar to the example above.

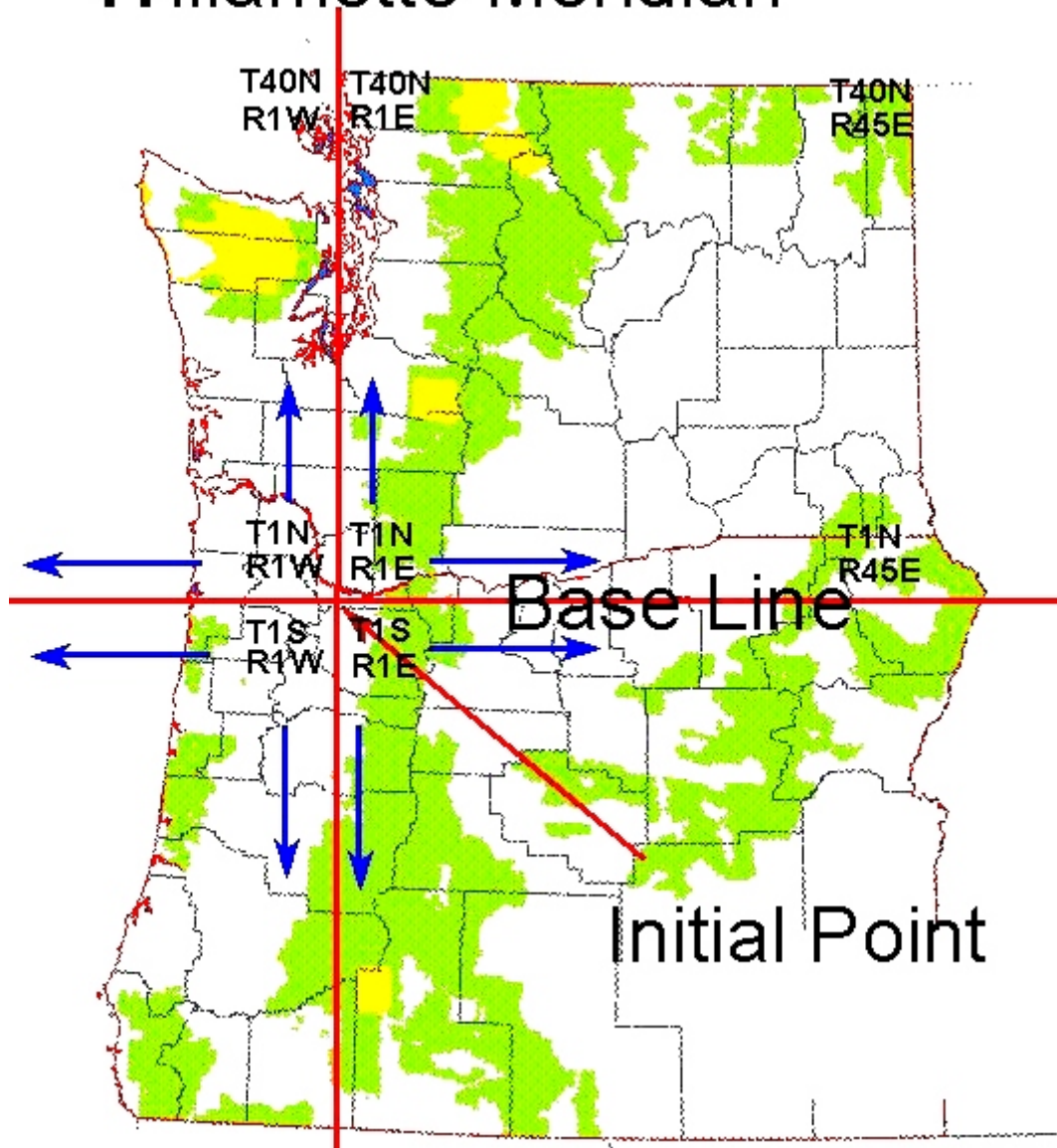
**Baselines** extend east and west through each initial point.

**Principal Meridians** extend north and south through each initial point.

North-South lines parallel to the Principal Meridian are called **Range Lines**. East-West lines parallel to the Base Line are called **Township Lines**.

T2N, R1E refers to Township 2 North of the Baseline and Range 1 East of the Principal Meridian.

# Willamette Meridian



The principal meridian and base line used for Washington and Oregon are shown above. Areas north of the base line are designated north townships (T1N, T2N, T3N, etc) while areas to the south are designated south townships (T1S, T2S, T3S, etc).

Areas east of the Willamette principal meridian are designated east ranges (R1E, R2E, R3E, etc) while areas west of the principal meridian are designated west ranges (R1W, R2W, R3W, etc).

**Range Numbers** are found at the top and bottom of topographic maps. They identify North-South bands of land. **Township Numbers** are found on the left and right sides of topographic maps. They identify East-West bands of land.

35	36	31	32	33	34	35	36	31	32
2	1	6	5	4	3	2	1	6	5
11	12	7	8	9	10	11	12	7	8
14	13	18	17	16	15	14	13	18	17
23	24	19	20	21	22	23	24	19	20
26	25	30	29	28	27	26	25	30	29
35	36	31	32	33	34	35	36	31	32
2	1	6	5	4	3	2	1	6	5

A township is divided by cardinal lines into 36 equal **Sections** of approximately 1 square mile each. Sections are numbered from 1 to 36. Section number 1 is found at the top right corner of the township; section number 36 is found at the bottom right corner of the township. Each section equals 640 acres or 80 chains on each side (a chain equals 66 feet). The color-coded chart on the left shows the numbering scheme used to identify individual sections within a township.

Townships and sections oftentimes are larger or smaller than 640 acres, especially where survey corrections have been made.

<b>NW 1/4 of NW 1/4</b>	<b>NE 1/4 of NW 1/4</b>	<b>NE 1/4 =160 acres</b>	
<b>SW 1/4 of NW 1/4</b>	<b>SE 1/4 of NW 1/4</b>		
<b>N 1/2 of SW 1/4</b>		<b>W 1/2 of SE 1/4</b>	<b>E 1/2 of SE 1/4</b>
<b>S 1/2 of SW 1/4</b>			

Each section can be further subdivided into quarter sections that equal 160 acres, or 40 chains per side. Quarter sections are not shown on topographic maps or field maps used by land management agencies.

A quarter section may be further subdivided into a quarter of a quarter section that equals 40 acres or 20 chains on each side.

A one-sixteenth division of a township is called a quarter of a quarter, as in the NW1/4 of the NW1/4 (shaded yellow in the example on the left). The descriptions are read from the smallest to the largest. For example.....NW1/4 NE1/4 S10 T16N R6W describes the legal location of the RAWS site on Minot Peak in Grays Harbor County.

