Z-0701.2

HOUSE BILL 2391

State of Washington 65th Legislature 2018 Regular Session

By Representatives Orcutt and Fey; by request of Department of Natural Resources

Prefiled 01/05/18.

AN ACT Relating to the Washington plane coordinate system; amending RCW 58.20.110, 58.20.120, 58.20.130, 58.20.140, 58.20.150, 58.20.160, 58.20.170, 58.20.180, 58.20.190, 58.20.200, 58.20.210, and 58.20.220; and adding a new section to chapter 58.20 RCW.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

Sec. 1. RCW 58.20.110 and 1989 c 54 s 9 are each amended to read as follows:

Unless the context clearly requires otherwise, the definitions in this section apply throughout RCW 58.20.110 through 58.20.220 and 58.20.901:

(1) "((~~Committee~~)) NSRS" means the ((~~interagency federal geodetic control committee or its successor~~)) national spatial reference system or its successor;

(2) ((~~"GRS 80" means the geodetic reference system of 1980 as adopted in 1979 by the international union of geodesy and geophysics defined on an equipotential ellipsoid;~~

~~(3) "National geodetic survey"~~)) "NGS" means the national ocean service's national geodetic survey of the national oceanic and atmospheric administration, United States department of commerce, or its successor;

((~~(4) "Washington coordinate system of 1927" means the system of plane coordinates in effect under this chapter until July 1, 1990, which is based on the North American datum of 1927 as determined by the national geodetic survey of the United States department of commerce;~~

~~(5) "~~)) (3) "WPCS" means the Washington plane coordinate system ((~~of 1983" means~~)), the system of plane coordinates under this chapter ((~~based on the North American datum of 1983~~)) as determined by the ((~~national geodetic survey of the United States department of commerce~~)) NGS.

(4) "Metadata" means data that describes other data. For the purposes of this chapter, metadata means geodetic reference system utilized, applicable epoch, and date of observation at a minimum. Additional metadata is encouraged if it adds value.

Sec. 2. RCW 58.20.120 and 1989 c 54 s 10 are each amended to read as follows:

((~~Until July 1, 1990, the Washington coordinate system of 1927, or its successor, the Washington coordinate system of 1983, may be used in Washington for expressing positions or locations of points on the surface of the earth. On and after that date, the Washington coordinate system of 1983 shall be the designated coordinate system in Washington. The Washington coordinate system of 1927 may be used only for purposes of reference after June 30, 1990.~~)) The most recent system of plane coordinates, which has been established by NGS, based on the NSRS, and known as the WPCS, for defining and stating the positions or locations of points on the surface of the earth within the state of Washington shall be known as the "Washington plane coordinate system."

Sec. 3. RCW 58.20.130 and 1989 c 54 s 11 are each amended to read as follows:

The system of plane coordinates which has been established by ((~~the national geodetic survey~~)) NGS for defining and stating the positions or locations of points on the surface of the earth within the state of Washington is designated as the "Washington plane coordinate system ((~~of 1983~~))."

For the purposes of this system the state is divided into a "north zone" and a "south zone," along with a statewide "Washington Lambert zone."

The area now included in the following counties shall constitute the north zone: Chelan, Clallam, Douglas, Ferry, Island, Jefferson, King, Kitsap, Lincoln, Okanogan, Pend Oreille, San Juan, Skagit, Snohomish, Spokane, Stevens, Whatcom, and that part of Grant lying north of parallel 47° 30' north latitude.

The area now included in the following counties shall constitute the south zone: Adams, Asotin, Benton, Clark, Columbia, Cowlitz, Franklin, Garfield, that part of Grant lying south of parallel 47° 30' north latitude, Grays Harbor, Kittitas, Klickitat, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum, Walla Walla, Whitman and Yakima.

Sec. 4. RCW 58.20.140 and 1989 c 54 s 12 are each amended to read as follows:

As established for use in the north zone, the Washington plane coordinate system ((~~of 1983~~)) shall be named, and in any land description in which it is used it shall be designated, the "Washington plane coordinate system ((~~of 1983~~)), north zone."

As established for use in the south zone, the Washington plane coordinate system ((~~of 1983~~)) shall be named, and in any land description in which it is used it shall be designated, the "Washington plane coordinate system ((~~of 1983~~)), south zone." As established for use in the statewide Washington Lambert zone, the Washington plane coordinate system shall be named, and in any land description in which it is used shall be designated, the "Washington plane coordinate system statewide Washington Lambert zone."

Sec. 5. RCW 58.20.150 and 1989 c 54 s 13 are each amended to read as follows:

((~~"N" and "E" shall be used in labeling coordinates of a point on the earth's surface and in expressing the position or location of such point relative to the origin of the appropriate zone of this system, expressed in meters and decimals of a meter. These coordinates shall be made to depend upon and conform to the coordinates, on the Washington coordinate system of 1983, of the horizontal control stations of the national geodetic survey within the state of Washington, as those coordinates have been determined, accepted, or adjusted by the survey.~~)) (1) The plane coordinates of a point on the earth's surface, to be used in expressing the position or location of the point in the appropriate zone of the WPCS, shall

consist of two distances, expressed in feet and decimals of a foot or meters and decimals of a meter, along with the metadata of the observation. One of these distances, to be known as the "East x-coordinate," shall give the distance east of the Y axis; the other, to be known as the "North y-coordinate," shall give the distance north of the X axis. The Y axis of any zone shall be parallel with the central meridian of that zone. The X axis of any zone shall be at right angles to the central meridian of that zone.

(2) Height is the coordinate value of the vertical elements of the NSRS expressed as feet or meters, and identified as ellipsoid heights or orthometric heights.

Sec. 6. RCW 58.20.160 and 1989 c 54 s 14 are each amended to read as follows:

When any tract of land to be defined by a single description extends from one into the other of the north or south coordinate zones under RCW 58.20.130, the positions of all points on its boundaries may be referred to either of the zones (north or south), the zone which is used being specifically named in the description along with the metadata of the observations.

Sec. 7. RCW 58.20.170 and 1989 c 54 s 15 are each amended to read as follows:

The official geodetic datums to which geodetic coordinates, including, but not limited to, latitude, longitude, ellipsoid height, orthometric height, or dynamic height, are referenced within the state of Washington shall be as defined for the NSRS.

For purposes of more precisely defining the Washington plane coordinate system ((~~of 1983~~)), the following definition by the national geodetic survey is adopted:

The Washington plane coordinate system ((~~of 1983~~)), north zone, is a Lambert conformal conic projection ((~~of the GRS 80 spheroid~~)), having standard parallels at north latitudes 47° 30' and 48° 44', along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 120° 50' west of Greenwich and the parallel 47° 00' north latitude. This origin is given the coordinates: E = ((~~500,000~~)) 600,000 meters and N = ((~~0~~)) 100,000 meters.

The Washington coordinate system ((~~of 1983~~)), south zone, is a Lambert conformal conic projection ((~~of the GRS 80 spheroid~~)), having

standard parallels at north latitudes 45° 50' and 47° 20', along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 120° 30' west of Greenwich and the parallel 45° 20' north latitude. This origin is given the coordinates: E = ((~~500,000~~)) 600,000 meters and N = ((~~0~~)) 100,000 meters. The Washington plane coordinate system, statewide Washington Lambert zone, is a Lambert conformal conic projection, having standard parallels at north latitudes 46° 07' and 48° 25', along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 120° 50' west of Greenwich and the parallel 45° 15' north latitude. This origin is given the coordinates: E = 400,000 meters and N = 1,000,000 meters.

Sec. 8. RCW 58.20.180 and 1989 c 54 s 16 are each amended to read as follows:

Coordinates based on the Washington plane coordinate system ((~~of 1983~~)), purporting to define the position of a point on a land boundary, may be presented to be recorded in any public land records or deed records if the survey method used for the determination of these coordinates is established in conformity with standards and specifications prescribed by the interagency federal geodetic control committee, or its successor. ((~~These surveys shall be connected to monumented control stations that are adjusted to and published in the national network of geodetic control by the national geodetic survey and such connected horizontal control stations~~)) The method and source of the coordinates shall be described in the land or deed record. Standards and specifications of the ((~~committee~~)) NGS in force on the date of the survey shall apply. In all instances where reference has been made to such coordinates in land surveys or deeds, the scale and sea level factors shall be stated for the survey lines used in computing ground distances and areas, along with the metadata of the observations.

((~~The position of the Washington coordinate system of 1983 shall be marked on the ground by horizontal geodetic control stations which have been established in conformity with the survey standards adopted by the committee and whose geodetic positions have been rigorously adjusted on the North American datum of 1983, and whose coordinates have been computed and published on the system defined in RCW 58.20.110 through 58.20.220 and 58.20.901. Any such control station~~

~~may be used to establish a survey connection with the Washington coordinate system of 1983.~~))

Sec. 9. RCW 58.20.190 and 1989 c 54 s 17 are each amended to read as follows:

((~~Any conversion of coordinates between the meter and the United States survey foot shall be based upon the length of the meter being equal to exactly 39.37 inches.~~)) When the values are expressed in feet, the "U.S. survey foot" (one U.S. survey foot = 1200/3937 meters) shall be used as the standard foot for WPCS.

Sec. 10. RCW 58.20.200 and 1989 c 54 s 18 are each amended to read as follows:

The use of the term "Washington plane coordinate system ((~~of 1983~~))" on any map, report of survey, or other document, shall be limited to coordinates based on the Washington plane coordinate system ((~~of 1983~~)) as defined in this chapter.

Sec. 11. RCW 58.20.210 and 1989 c 54 s 19 are each amended to read as follows:

Whenever coordinates based on the Washington plane coordinate system ((~~of 1983~~)) are used to describe any tract of land which in the same document is also described by reference to any subdivision, line or corner of the United States public land surveys, the description by coordinates shall be construed as supplemental to the basic description of such subdivision, line, or corner contained in the official plats and field notes filed of record, and in the event of any conflict the description by reference to the subdivision, line, or corner of the United States public land surveys shall prevail over the description by coordinates.

Sec. 12. RCW 58.20.220 and 1989 c 54 s 20 are each amended to read as follows:

Nothing contained in this chapter shall require any purchaser or mortgagee to rely on a description, any part of which depends exclusively upon the Washington plane coordinate system ((~~of 1927 or 1983~~)).

NEW SECTION. **Sec. 13.** A new section is added to chapter 58.20 RCW to read as follows:

The provisions of this chapter shall not be construed to prohibit the appropriate use of other datums and other geodetic reference networks or systems.

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