

HOUSE BILL REPORT

HB 2391

As Reported by House Committee On:
Agriculture & Natural Resources

Title: An act relating to the Washington plane coordinate system.

Brief Description: Concerning the Washington plane coordinate system.

Sponsors: Representatives Orcutt and Fey; by request of Department of Natural Resources.

Brief History:

Committee Activity:

Agriculture & Natural Resources: 1/17/18, 1/24/18 [DP].

Brief Summary of Bill

- Updates provisions and definitions related to the Washington plane coordinate system.

HOUSE COMMITTEE ON AGRICULTURE & NATURAL RESOURCES

Majority Report: Do pass. Signed by 13 members: Representatives Blake, Chair; Chapman, Vice Chair; Buys, Ranking Minority Member; Dent, Assistant Ranking Minority Member; Fitzgibbon, Lytton, Orcutt, Pettigrew, Robinson, Schmick, Springer, Stanford and Walsh.

Staff: Robert Hatfield (786-7117).

Background:

The Department of Natural Resources is required to provide a reference system to identify and preserve survey points. These survey points are widely used in land surveying, Geographic Information Systems (GIS) applications, and map production. This reference system is known as the Washington Coordinate System.

In 1945 Washington adopted, as part of the Washington Coordinate System, a federal reference system supported and maintained by the National Geodetic Survey (NGS). This system was known as the North American Datum of 1927 (NAD27). A new reference system

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based on the North American Datum of 1983, known as NAD83, was developed to reflect improved technology and accuracy. Since 1990 persons using the Washington Coordinate System have been required to use NAD83.

Using NAD83, the Washington Coordinate System provides a common language for identifying location coordinates that are expressed in terms of an "x" value (an east-west direction) and a "y" value (a north-south direction). The Washington Coordinate System requires that reference points be expressed in meters. These values expressed in meters, or converted to feet, can then be entered into a database and be shared with anyone who chooses to use the Washington Coordinate System.

The National Geodetic Survey is scheduled to provide a new, more accurate coordinate system beginning in 2022. At that time, NAD83 will no longer be supported.

Summary of Bill:

The following definitions are added to the law governing the Washington Coordinate System:

- "NSRS" means the National Spatial Reference System or its successor.
- "WPCS" means the Washington Plane Coordinate System, the system of plane coordinates as determined by the National Geodetic Survey (NGS).
- "Metadata" means, for purposes of the WPCS, the geodetic reference system utilized, the applicable epoch, the date of observation, and other metadata as appropriate.

The WPCS shall consist of the most recent system of plane coordinates established by the NGS for defining and stating the positions or locations of points on the surface of the earth within the state of Washington.

A statewide Washington Lambert zone is created within the WPCS, in addition to the existing north zone and south zone.

The official geodetic datums to which the geodetic coordinates are referenced within the State of Washington shall be as defined for the NSRS.

The statewide Washington Lambert zone within the WPCS is a Lambert conformal conic projection, having standards 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.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is passed.

Staff Summary of Public Testimony:

(In support) One of the roles of the Department of Natural Resources is to be in charge of coordinating the federal coordinate system. The federal coordinate system had its origins in the Jefferson administration and the coast survey that mapped the Atlantic coast. Washington now uses the federal coordinate system known as the North American Datum of 1983. Since government has entered the Global Positioning System era, there has been a realization that the globe is a little different than it was originally understood to be, related in part to plate tectonics. Parts of Western Washington are anywhere from 4 to 7 centimeters different from where they used to be. The bill is based on a model bill that has been introduced in other states. One benefit of the bill is that subsequent updates to the federal coordinate system will not require a subsequent update to the statute.

(Opposed) None.

Persons Testifying: Representative Orcutt, prime sponsor; and Patrick Beehler, Department of Natural Resources.

Persons Signed In To Testify But Not Testifying: None.