

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

May 5, 2021

2:01 p.m.

MEMBERS PRESENT

Representative Josiah Patkotak, Chair
Representative Zack Fields
Representative Calvin Schrage
Representative Sara Hannan
Representative George Rauscher
Representative Mike Cronk
Representative Ronald Gillham
Representative Tom McKay

MEMBERS ABSENT

Representative Grier Hopkins, Vice Chair

COMMITTEE CALENDAR

HOUSE BILL NO. 148

"An Act relating to the Alaska Coordinate System of 2022."

- MOVED HB 148 OUT OF COMMITTEE

HOUSE CONCURRENT RESOLUTION NO. 2

Supporting the Alaska Ocean Cluster in its mission, efforts, and vision for a vibrant coastal economy in the state, its promotion of a diversified and resilient state economy that creates value from ocean resources, and its building of a statewide integrated ecosystem of innovation and entrepreneurship relating to the state's ocean economy.

- MOVED HCR 2 OUT OF COMMITTEE

PREVIOUS COMMITTEE ACTION

BILL: HB 148

SHORT TITLE: ALASKA COORDINATE SYSTEM OF 2022

SPONSOR(S): REPRESENTATIVE(S) SHAW

03/24/21	(H)	READ THE FIRST TIME - REFERRALS
03/24/21	(H)	STA, RES
04/17/21	(H)	STA AT 3:00 PM GRUENBERG 120
04/17/21	(H)	Heard & Held

04/17/21 (H) MINUTE (STA)
 04/22/21 (H) STA AT 3:00 PM GRUENBERG 120
 04/22/21 (H) Moved HB 148 Out of Committee
 04/22/21 (H) MINUTE (STA)
 04/26/21 (H) STA RPT 6DP
 04/26/21 (H) DP: VANCE, CLAMAN, STORY, KAUFMAN,
 TARR, KREISS-TOMKINS
 05/05/21 (H) RES AT 1:00 PM BARNES 124

BILL: HCR 2

SHORT TITLE: SUPPORTING ALASKA OCEAN CLUSTER

SPONSOR(S): REPRESENTATIVE(S) STUTES

02/18/21 (H) READ THE FIRST TIME - REFERRALS
 02/18/21 (H) FSH, RES
 04/08/21 (H) FSH AT 10:00 AM GRUENBERG 120
 04/08/21 (H) Heard & Held
 04/08/21 (H) MINUTE (FSH)
 04/13/21 (H) FSH AT 10:00 AM GRUENBERG 120
 04/13/21 (H) Moved HCR 2 Out of Committee
 04/13/21 (H) MINUTE (FSH)
 04/14/21 (H) FSH RPT 4DP 2NR
 04/14/21 (H) DP: STORY, KREISS-TOMKINS, ORTIZ, TARR
 04/14/21 (H) NR: MCCABE, VANCE
 05/03/21 (H) RES AT 1:00 PM BARNES 124
 05/03/21 (H) Heard & Held
 05/03/21 (H) MINUTE (RES)
 05/05/21 (H) RES AT 1:00 PM BARNES 124

WITNESS REGISTER

REPRESENTATIVE LADDIE SHAW

Alaska State Legislature

Juneau, Alaska

POSITION STATEMENT: As prime sponsor, presented HB 148.

REECE WILLIAMS, Staff

Representative Laddie Shaw

Alaska State Legislature

Juneau, Alaska

POSITION STATEMENT: Presented the Sectional Analysis for HB 148 on behalf of Representative Shaw, prime sponsor.

GWEN GERVELIS, Surveys Manager

Division of Mining Land and Water

Department of Natural Resources

Anchorage, Alaska

POSITION STATEMENT: Provided information and answered questions during the hearing on HB 148.

JAKE MAXWELL, Board member
Alaska Society of Professional Land Surveyors
Anchorage, Alaska

POSITION STATEMENT: Testified in support of HB 148.

LEN STORY, Co-Chair of Legislative Affairs
American Council of Engineering Companies
Anchorage, Alaska

POSITION STATEMENT: Testified in support of HB 148.

JEREMY HURST, President
Alaska Society of Professional Land Surveyors
Anchorage, Alaska

POSITION STATEMENT: Testified in support of HB 148.

SARA PERMAN, Staff
Representative Louise Stutes
Alaska State Legislature
Juneau, Alaska

POSITION STATEMENT: Provided information and answered questions during the hearing on HCR 2 on behalf of Representative Stutes, prime sponsor.

JUSTIN STERNBERG, Program Director
Alaska Ocean Cluster
Anchorage, Alaska

POSITION STATEMENT: Provided information and answered questions during the hearing on HCR 2.

ACTION NARRATIVE

[2:01:34 PM](#)

CHAIR JOSIAH PATKOTAK called the House Resources Standing Committee meeting to order at 2:01 p.m. Representatives McKay, Fields, Cronk, Gillham, Hannan, Rauscher, and Patkotak were present at the call to order. Representative Schrage arrived as the meeting was in progress.

HB 148-ALASKA COORDINATE SYSTEM OF 2022

[2:02:06 PM](#)

CHAIR PATKOTAK announced that the first order of business would be HOUSE BILL NO. 148, "An Act relating to the Alaska Coordinate System of 2022."

[2:02:59 PM](#)

REPRESENTATIVE LADDIE SHAW, Alaska State Legislature, as prime sponsor, gave the sponsor statement, which read as follows [original punctuation provided]:

House Bill 148 revises Alaska Statute chapter 38.20, known as the Alaska Coordinate System, to reflect changes in the federal datum used as a base for the coordinate system and to allow for future updates. The system is comprised of rectangular plane coordinates used to define accurate positions or locations of points on the surface of the earth.

Currently, forty-eight states have adopted state plane coordinate systems into their statutes. This bill revises the Alaska Coordination System as an ongoing modernization of the U.S National Spatial Reference System to reduce the distortions present in the current system. In addition to improved zone locations, that will cover population and resources areas, a new statewide zone will be created for Alaska. This will reduce the distortion of the projection currently in use and improve the display of statewide geographic data.

This is an important and practical step for Alaska to adapt to this coordination system. Alaska will have the advantage of improvements in the geodetic positioning, and with the new gravity-based elevation. This will dramatically improve the ability to measure elevations in Alaska. This modernization effort will benefit scientists, surveyors, design professionals, GIS specialists, and the geospatial community. The improved coordinate system minimizes linear distortions and is designed to include population centers and resource development.

[2:04:27 PM](#)

REECE WILLIAMS, Staff, Representative Laddie Shaw, Alaska State Legislature, on behalf of Representative Shaw, prime sponsor,

presented the Sectional Analysis for HB 148, which read as follows [original punctuation included]:

Section 1 - Amends AS 38.20.010 to add a reference to the National Oceanic and Atmospheric Administration and the Alaska Coordinate System of 2022.

Section 2 - Repeals and reenacts AS 38.20.020 to remove references to the ten different zones currently listed in the statute, and states that the zone parameters of the Alaska Coordinate Systems are now the zone parameters defined by the NGS. Removing specific parameters ensures legislation will be accurate according to past, current, and future datums.

Section 3 - Amends AS 38.20.030 to add a reference to the "Alaska Coordinate System of 2022, Zone ..." for purposes of drafting land descriptions that use coordinate systems.

Section 4 - Amends AS 38.20.040 to add two references to "U.S. Survey" and one reference to the Alaska Coordinate System of 2022. Also added is an explanation that one U.S. Survey foot means the quotient of 1,200 and 3,937 meters. There are two standards used in the U.S. to convert between feet and meters. States such as Alaska support both feet and meters and legislate which feet-to-meters conversion they use. The U.S. survey foot is 1200/3937 meters, or .3048006096. The international foot is 0.3048 meters. The difference between the two conversions can become noticeable.

Section 5 - Repeals and reenacts AS 38.20.060 to remove the references to, and descriptions of, the ten different zones currently listed in the statute, and instead states that the characteristics of the zones of the Alaska Coordinate Systems are defined by the NGS. Removing specific zone descriptions ensures legislation will be accurate and relevant under past, current, and future datums.

Section 6 - Amends AS 38.20.090 to add a new subsection (c) stating that the use of the term "Alaska Coordinate System of 2022" on a map, report of the survey, or other document is limited to

coordinates based on the Alaska Coordinate System of 2022.

Section 7 - Amends AS 38.20.100 to add a reference to the "Alaska Coordinate System of 2022."

Section 8 - Amends AS 38.20.110 to add a reference to the "Alaska Coordinate System of 2022."

MR. WILLIAMS noted that Representative Shaw's office was recently made aware of language inconsistencies which may require amending.

[2:07:45 PM](#)

REPRESENTATIVE RAUSCHER asked for more details regarding the language which would need to be amended.

MR. WILLIAMS answered that Legislative Legal Service is adjusting language in HB 148 that relied on some outdated statutes.

[2:08:52 PM](#)

REPRESENTATIVE HANNAN asked for further information on the National Geodetic Survey (NGS) such as how often it's done, whether definitions change, and whether it's a static set of data that the National Oceanic and Atmospheric Administration (NOAA) always uses.

MR. WILLIAMS responded that the datum is a set of collected data, with a new set introduced only when enough data has been collected. He said that the next datum release after 2022 would be 50 years hence.

[2:10:51 PM](#)

GWEN GERVELIS, Surveys Manager, Division of Mining Land and Water, Department of Natural Resources (DNR), characterized HB 148 as "pretty straightforward legislation" to update the datum from that which was previously collected in 1983 and 1988. She explained that the NGS has been able to create a better map of the U.S. using new gravity-based datum, rather than the vertical and horizontal data sets used previously.

[2:12:21 PM](#)

REPRESENTATIVE HANNAN asked for more information on the significance on gravity-based data.

MS. GERVELIS replied that NGS flies "low-altitude gravity" over Alaska and collect gravity throughout the state. Normally, she explained, the elevation data is carried on the ground by foot, so the data in Alaska has been relatively sparse due to the lack of access. She said, "A lot of the communities throughout Alaska, especially along the coast, have local vertical datums that don't relate to anything, so by using a gravity-based elevation model we can bring all that together so everything in the state's going to line up a lot better." She noted that this type of mapping will be better for things such as flood mapping and tsunami warnings.

MS. GERVELIS, in response to a follow-up question from Representative Hannan, explained that gravity, like light, comes in waves, and is largely dependent on what's underground; an iron-rich mountain, she said, will have more gravity than tundra.

REPRESENTATIVE HANNAN expressed that this discussion highlights the importance of STEM (science, technology, engineering, and math) education.

[2:15:48 PM](#)

CHAIR PATKOTAK suggested a floor amendment for the section that needs conforming.

[2:16:03 PM](#)

JAKE MAXWELL, Board member, Alaska Society of Professional Land Surveyors (ASPLS), voiced support for HB 148 on behalf of the ASPLS and the Alaska Professional Design Council.

[2:16:40 PM](#)

MR. WILLIAMS introduced a short video explaining what a geodetic datum is.

[2:21:48 PM](#)

REPRESENTATIVE RAUSCHER asked why moving to "different technology" needs legislative approval, since there is no fiscal note attached to HB 148.

MR. WILLIAMS replied that the Alaska Coordinate System was originally brought into statute, so in order to update the system to be concurrent with the federal datum, the statute must be amended.

MS. GERVELIS explained that updating the statute allows all of the state agencies to use the same datum. She said there is no fiscal note because DNR does not believe there would be a cost to having all state agencies use the same datum.

REPRESENTATIVE RAUSCHER asked, "I guess everybody already has this process, and now we're just asking for permission to use it?"

MR. GERVELIS responded that this proposed legislation would allow all state agencies to be "on the same page" as far as using the same datum.

[2:23:46 PM](#)

REPRESENTATIVE FIELDS asked about the history of surveying.

MR. WILLIAMS replied with his understanding that the mapping initiative started in the early 1800s, with surveys being continually updated.

[2:24:20 PM](#)

REPRESENTATIVE SCHRAGE said that the data seems to be the property of the federal government, which makes it available for free to the individual states for accurate mapping.

MS. GERVELIS replied, "That's correct. All of the other states have this in their statutes as well, and NGS recognizes that all of them will have to make these changes."

[2:25:32 PM](#)

CHAIR PATKOTAK opened public testimony on HB 148.

[2:25:45 PM](#)

LEN STORY, Co-Chair of Legislative Affairs, American Council of Engineering Companies (ACEC), testified in support of HB 148. He noted that ACEC is an affiliate of the Alaska Professional Design Council, and that he is a member of the Alaska Society of Professional Land Surveyors and the National Society of

Professional Surveyors. He said that there are a couple of technical corrections needed on page 2, section 4 of the bill. He also clarified that moving to the 2022 datum also involves moving to a new measurement of the foot, from the "U.S. survey foot" to the "international foot"; as NGS is processing data and reporting positions in international feet, he said, the scale needs to match. He also noted that line 17 of the proposed legislation lists the North American Geodetic Control Network, which no longer exists; it's currently the National Spatial Reference System.

CHAIR PATKOTAK said that Representative Shaw and Mr. Williams would work to get the applicable language corrected.

[2:27:49 PM](#)

JEREMY HURST, President, Alaska Society of Professional Land Surveyors (ASPLS), testified in support of HB 148 and expressed his agreement with the comments made by Mr. Story.

[2:28:24 PM](#)

CHAIR PATKOTAK, after ascertaining that no one else wished to testify, closed public testimony on HB 148.

[2:28:37 PM](#)

REPRESENTATIVE HANNAN noted the technical specificity of the proposed legislation and the importance of having "the right amendments doing the right things."

MR. WILLIAMS said that he is working with Legislative Legal Services to clarify the changes. He pointed out that the National Spatial Reference System language has already been incorporated into the proposed legislation.

[2:29:51 PM](#)

REPRESENTATIVE RAUSCHER moved to report HB 148 out of committee with individual recommendations and the accompanying zero fiscal note.

[2:30:10 PM](#)

CHAIR PATKOTAK objected to give Representative Shaw an opportunity to provide closing comments.

REPRESENTATIVE SHAW noted that HB 148 would reduce distortion of the projection currently in use, as well as improve the display of statewide geographic data. He stressed that, considering the lack of a road system in Alaska, the proposed legislation would benefit the state.

[2:31:09 PM](#)

CHAIR PATKOTAK withdrew his objection. There being no further objection, HB 148 was reported out of the House Resources Standing Committee.

[2:31:21 PM](#)

The committee took an at-ease from 2:31 p.m. to 2:35 p.m.

HCR 2-SUPPORTING ALASKA OCEAN CLUSTER

[2:35:03 PM](#)

CHAIR PATKOTAK announced that the final order of business would be HOUSE CONCURRENT RESOLUTION NO. 2, "Supporting the Alaska Ocean Cluster in its mission, efforts, and vision for a vibrant coastal economy in the state, its promotion of a diversified and resilient state economy that creates value from ocean resources, and its building of a statewide integrated ecosystem of innovation and entrepreneurship relating to the state's ocean economy."

[2:35:35 PM](#)

SARA PERMAN, Staff, Representative Louise Stutes, Alaska State Legislature, on behalf of Representative Stutes, prime sponsor, explained that HCR 2 would acknowledge Alaska's unique position as a leader in the world's ocean economy, the value of which is set to double to \$3 trillion by 2030. She said that it would also recognize Alaska's contributions to diverse areas of industry and the state's capacity for growth in ocean-based areas such as mariculture and renewable industry. She explained that HCR 2 would also acknowledge the Alaska Ocean Cluster and its work in supporting the development and funding efforts of ocean-related enterprises, and that it's important to economic vitality that entrepreneurialism and the growth of new businesses is encouraged.

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JUSTIN STERNBERG, Program Director, Alaska Ocean Cluster, thanked the committee and noted his availability for future discussions.

[2:42:17 PM](#)

REPRESENTATIVE RAUSCHER moved to report HCR 2 out of committee with individual recommendations and the accompanying zero fiscal note. There being no objection, HCR 2 was reported out of the House Resources Standing Committee.

[2:42:54 PM](#)

The committee took an at-ease from 2:42 p.m. to 2:46 p.m.

[2:46:25 PM](#)

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 2:46 p.m.