Geospatial Data Management Policy Background

Policy: DATA-02: Geospatial Data Management

New, Update or Sunset Review?

Sunset Review.

What due diligence was conducted to determine the content of this policy/standard? If this is an update or sunset review, provide information as to what changes were made, if any, as well as reasons behind the policy/standard content.

There were no changes to this policy for the sunset review. It is expected that this might be wrapped into a larger Data Management Policy for the state, once developed. Until then, this policy will govern geospatial data management for the state.

What is the business case for the policy/standard?

The purpose of this policy is to protect the investments in geospatial data and to facilitate the efficient exchange of geospatial data across state government. This policy outlines the establishment of standards, guidelines and best practices for geospatial data, metadata, applications and services which agencies are responsible to follow.

What are the key objectives of the policy/standard?

Provide basic policy regarding minimal expectations for geospatial data shared at the state.

How does policy/standard promote or support alignment with strategies?

Enterprise IT Strategic Goal #2: Better Data, Better Decisions, Better Government, Better Washington; WaTech Strategic Plan – Data Driven Decisions.

What are the implementation considerations?

No implementation considerations. This is a continuation of existing policy.

How will we know if the policy is successful?

We will know this policy is successful if GIS data can be shared efficiently among state agencies.

DATA-02
State CIO Adopted: Month 1, 2025
TSB Approved: Month 1, 2025
Sunset Review: Month 1, 2028

Replaces:
Geospatial Data Management Policy 160
September 5, 2014

GEOSPATIAL DATA MANAGEMENT POLICY

See Also:
RCW 43.105.054 WaTech Governance
RCW 43.105.052 Powers and duties of agency—Application to higher education, legislature, and judiciary.
RCW 43.105.020 (22) "State agency"

1. **Agencies shall ensure that investments in geospatial technology are tracked and that geospatial data and services can be reused and discovered across all levels of government and by the public.**

2. **Agencies shall adhere to critical standards in the following four areas:**

    a. Interoperability. In lieu of specific hardware or software specifications, Washington adopts standards and policies that improve the ability of geospatial systems and organizations.

    b. Data Standards. Data standards are important to ensure data quality and accuracy while simplifying the exchange of data among state agencies, local, tribal, and federal users and data producers.

    c. Metadata. Metadata standards protect the investment in geospatial data by describing the purpose and use of the data so that the data can be used appropriately by other users and organizations.

    d. Data and Investment Reporting. Portfolio management is an essential piece for tracking current and planned investments in geospatial technology solutions. It allows organizations to manage their spatial investments of assets.

REFERENCES

1. Definition of Terms Used in WaTech Policies and Reports.

CONTACT INFORMATION

For questions about this policy, please email the WaTech Policy Mailbox.

Geodetic Control Data Standard Background

Policy: DATA-02-01-S: Geodetic Control Data Standard

New, Update or Sunset Review?

Sunset Review.

What due diligence was conducted to determine the content of this policy/standard? If this is an update or sunset review, provide information as to what changes were made, if any, as well as reasons behind the policy/standard content.

We are anticipating a change to the Geodetic Control from the federal agency, National Geodetic Survey (NGS) in 2026. This policy updates the language in the policy to reflect changes in the related RCW 58.20 and pushes the next sunset review to correspond with the expected federal changes.

What is the business case for the policy/standard?

These standards establish and reference Geodetic Control Data Standards for vertical datum, horizontal datum, and the state's coordinate system used for agency geospatial data, geographic information systems, and data exchanges.

What are the key objectives of the policy/standard?

- Align with federal standards.
- Improve data quality and accuracy.
- Simplify the exchange of geodetic control data among state agencies, local, tribal, state, and federal users and producers.

How does policy/standard promote or support alignment with strategies?

This policy aligns with RCW 58.20; Enterprise IT Strategic Goal #2: Better Data, Better Decisions, Better Government, Better Washington; WaTech Strategic Plan – Data Driven Decisions.

What are the implementation considerations?

This is a continuation of existing policy and standards. No implementation considerations at this time, but there is expected to be planning effort required once the federal standards have changed at the next sunset review.

How will we know if the policy is successful?

Publicly available GIS Data is provided in the appropriate coordinate system.

DATA-02-01-S
State CIO Adopted: Month 1 2023
TSB Approved: Month 1 2023
Sunset Review: Month 1 2023

WaTech
Washington Technology Solutions

Replaces:
IT Standard 161.01
Geodetic Control Data Standard
July 26, 2019

GEODETIC CONTROL DATA STANDARD

See Also:
RCW 43.105.054 WaTech Governance
RCW 43.105.020 (22) "State agency"

1. **Agencies will use the following Geodetic Control Data Standards for significant new or redesigned agency geospatial datasets, geographic information systems, and data exchanges. stated as a sentence.**

Geodetic Control	State Standard	Owner/ Primary Steward
Horizontal Datum	NAD 83/92 – North American Datum of 1983, with 91 adjustments	NGS
State Plane Coordinate System	Washington Coordinate System of 1983	DNR
Vertical Datum	NAVD 88 – North American Vertical Datum of 1988	NGS

2. **The North American Datum 1983 (NAD 83) with 1991 (NAD 83/91) adjustments will be the state standard for Horizontal Datum.**

    a. Reference datum and adjustments in metadata.

3. **The Washington Plane Coordinate System will be the coordinate system in Washington, per RCW 58.20.**

    a. The standard unit of measure is the U.S. Survey Foot.

    b. For conversion of coordinates between the meter and the United States survey foot, one foot equals 0.3048 meters, per RCW 58.20.185, Standard Value – one foot.

c. Use Washington Plane Coordinate System South Zone for Statewide Layers and for layers that are both in the South and North Zones. See FIPS: 4602; WKID: 2927.

d. Use South Zone for layers that are not in the North Zone. The area now included in the following counties will constitute the south zone:

    i. Adams
    ii. Asotin
    iii. Benton
    iv. Clark
    v. Columbia
    vi. Cowlitz
    vii. Franklin
    viii. Garfield
    ix. That part of Grant lying south of parallel 47 30′ north latitude
    x. Grays Harbor
    xi. Kittitas
    xii. Klickitat
    xiii. Lewis
    xiv. Mason
    xv. Pacific
    xvi. Pierce
    xvii. Skamania
    xviii. Thurston
    xix. Wahkiakum
    xx. Walla Walla
    xxi. Whitman
    xxii. Yakima

e. Use Washington Plane Coordinate System North Zone for layers that are not in the South Zone (FIPS: 4601; WKID: 2926). The area now included in the following counties will be considered the North Zone:

    i. Chelan
    ii. Clallam
    iii. Douglas

iv. Ferry
v. Island
vi. Jefferson
vii. King
viii. Kitsap
ix. Lincoln
x. Okanogan
xi. Pend Oreille
xii. San Juan
xiii. Skagit
xiv. Snohomish
xv. Spokane
xvi. Stevens
xvii. Whatcom
xviii. That part of Grant lying north of the parallel 47 30′ north latitude

4. **The North American Vertical Datum of 1988 (NAVD 88) will be the state standard for vertical datum.**

   a. National Geodetic Survey (NGS) Geodetic Tool Kit provides various free online interactive and downloadable software programs and tools for computing, converting, and adjusting geospatial data. See National Oceanic and Atmospheric Administration NGS http://www.ngs.noaa.gov/.

   b. VDatum is a free software tool designed to vertically transform geospatial data among a variety of tidal, orthometric, and ellipsoidal vertical datums. See National Oceanic and Atmospheric Administration VDatum http://vdatum.noaa.gov.

REFERENCES

1. Link to reference.
2. Definition of Terms Used in WaTech Policies and Reports.

CONTACT INFORMATION

- For questions about this policy, please email the WaTech Policy Mailbox.
- For technical assistance, please email confirmemail@watech.wa.gov.

Hydrography Data Standard Background

Policy: DATA-02-02-S: Hydrography Data Standard

New, Update or Sunset Review?

Update.

What due diligence was conducted to determine the content of this policy/standard? If this is an update or sunset review, provide information as to what changes were made, if any, as well as reasons behind the policy/standard content.

We reviewed federal standards and vetted the document through a pilot group with Ecology already focused on implementing the federal standard. We also brought it to the Geoportal Steering Committee for review and the Geographic Information Technology Committee for review prior to the regular governance cycles.

What is the business case for the policy/standard?

This update is needed to support agencies in transitioning to new federal standards. If we aren't meeting federal standards, we may not be eligible for federal grants. We want to be able to partner with federal agencies and tribes to manage natural resources in the state of Washington. These standards are being implemented across the country.

What are the key objectives of the policy/standard?

- Ensure agencies are supported with new federal guidelines.
- Help agencies with implementation plans.

How does policy/standard promote or support alignment with strategies?

Aligning our hydrography standards to federal standards supports WaTech's Data-Driven Outcomes Pillar, and the "Statewide Technology Leadership" goal because it leverages WaTech's central role to engage and support agencies in transition. It also supports the "Enable Customer Success Through Service Delivery" goal because alignment with federal standards will ensure services that rely on GIS data are

accurate. Accurate data supports informed decision-making based on real world data. Another added benefit is the ability for agencies to share data more easily and reduces redundant data and workflows.

What are the implementation considerations?

This standard is a phased implementation.

USGS will provide Washington State with some grants to help implement the federal guidelines. We need to find matching dollars.

State agency work will primarily be in non-urban areas, and we will need to partner with local governments in urban areas for coordination with stormwater systems.

We will implement standards watershed by watershed to update data sets incrementally.

How will we know if the policy is successful?

Specific: Agencies will implement new state hydrography standards by the time federal requirements are updated.

Measurable: We can measure the number of waivers to the standard and the progress on those waivers.

Achievable: WaTech will support Ecology, who will support agencies as the pilot agency for the new standards. Tools and support options are under development.

Relevant: Federal standards are a nationwide industry standard that support collaboration across state lines and with federal and tribal partners. The new standard aligns the hydrography data with the elevation data to provide more complete picture.

Timebound: We expect agencies need to be aligned by 2029 through incremental implementation.

Equitable: This standard is equitable because it ensures that the state can collaborate with federal and tribal partners. Additionally, accurate data supports informed decision making that can impact all communities, natural resources, and growth management.

DATA-02-02-S
State CIO Adopted: Month 1 2025
TSB Approved: Month 1 2025
Sunset Review: Month 1 2025

Replaces:
Hydrography Data Standard 161.03
July 26, 2019

WaTech
Washington Technology Solutions

See Also:
RCW 43.105.054 Information technology governance
RCW 43.105.020 (22) "State agency"

HYDROGRAPHY DATA STANDARD

1. **The U.S. Geological Survey (USGS) 3D Hydrography Program (3DHP) will be the data standard for all surface water (hydrography) geospatial datasets in Washington state.**

    a. 3DHP will be implemented incrementally.

    b. Agencies may continue to use the National Hydrography Dataset (NHD) until the 3DHP standards are implemented.

2. **The Washington State Department of Ecology (ECY) will publish the official state version of 3DHP for line work, points, areas, stream routing, and 3DHP defined attributes representing surface water hydrography. See the Washington State Hydrography Dataset Program.**

    a. Each published version will be identified by a unique version date. ECY will make retired versions available for use by stakeholders for no less than 2 years from the date of retirement.

    b. WaTech's guidelines will provide data set locations and best practices.

3. **Agencies must use the 3DHP for all existing and/or any newly designed or significantly redesigned agency geographic information systems.**

REFERENCES

1. Washington State Hydrography Dataset Program.
2. Definition of Terms Used in WaTech Policies and Reports.

CONTACT INFORMATION

- For questions about this standard, please email the WaTech Policy Mailbox.
- For technical assistance, please email gis@watech.wa.gov.

WaTech
Washington Technology Solutions

Next Gen 9-1-1 Geospatial Data Standard Background

Policy: DATA-02-05-S: NG9-1-1 Geospatial Data Standard

New, Update or Sunset Review?

Sunset Review.

What due diligence was conducted to determine the content of this policy/standard? If this is an update or sunset review, provide information as to what changes were made, if any, as well as reasons behind the policy/standard content.

There is no change to this policy aside from extending the sunset review date. This policy is in compliance with federal 911 data standards.

What is the business case for the policy/standard?

The Next Generation 9-1-1 (NG9-1-1) program is currently being implemented at state and county levels in Washington State to better incorporate emergency calls that do not use a traditional telephone landline to determine locations for response (e.g., voice over internet protocol, text messages, and smartphone locational information). To support the NG9-1-1 program, the National Emergency Number Association (NENA), an accredited Standards Development Organization (SDO), has developed data standards at a national level to coordinate data development/implementation efforts across local, county, state and international boundaries. Geographic Information System (GIS) data is included in these standards from NENA.

What are the key objectives of the policy/standard?

Maintain a well-functioning 911 system that is built to national standards.

How does policy/standard promote or support alignment with strategies?

Enterprise IT Strategic Goal #2: Better Data, Better Decisions, Better Government, Better Washington; WaTech Strategic Plan – Data Driven Decisions.

What are the implementation considerations?

Implementation occurs primarily at the local government level, with coordination from the Washington State 911 Program within the Military Department.

How will we know if the policy is successful?

Data submitted to the state 911 program is NENA compliant.

DATA-02-05-S
State CIO Adopted: Month 1, 2025
TSB Approved: Month 1, 2025
Sunset Review: Month 1, 2025

WaTech
Washington Technology Solutions

Replaces:
IT Standard 161.07
NG-9-1-1 Geospatial Data Standard
May, 2021

NEXT GEN 9-1-1 GEOSPATIAL DATA STANDARD

See Also:
RCW 43.105.054 Information technology governance
RCW 43.105.020 (22) "State agency"

1. **Agencies must adopt and use the latest National Emergency Number Association (NENA) Next Gen (NG) 9-1-1 GIS Data Model Standard.**

2. **These standards will apply once data is loaded into the Spatial Interface (SI) functions of the Emergency Services IP Network (ESInet) and require that all compatible Public Safety Answering Point (PSAP) environments incorporate NG9-1-1 data integration standards and associated capabilities.**

3. **The minimum datasets for the Spatial Interface are address navigation enabled street centerline, PSAP boundaries, Site/Structure Address Points (SSAP), Provisioning Boundary and emergency service zone boundaries for police, fire and medical.**

REFERENCES

1. Definition of Terms Used in WaTech Policies and Reports.
2. NENA NG9-1-1 GIS Data Model Standard.

CONTACT INFORMATION

For questions about this policy, please email the WaTech Policy Mailbox.