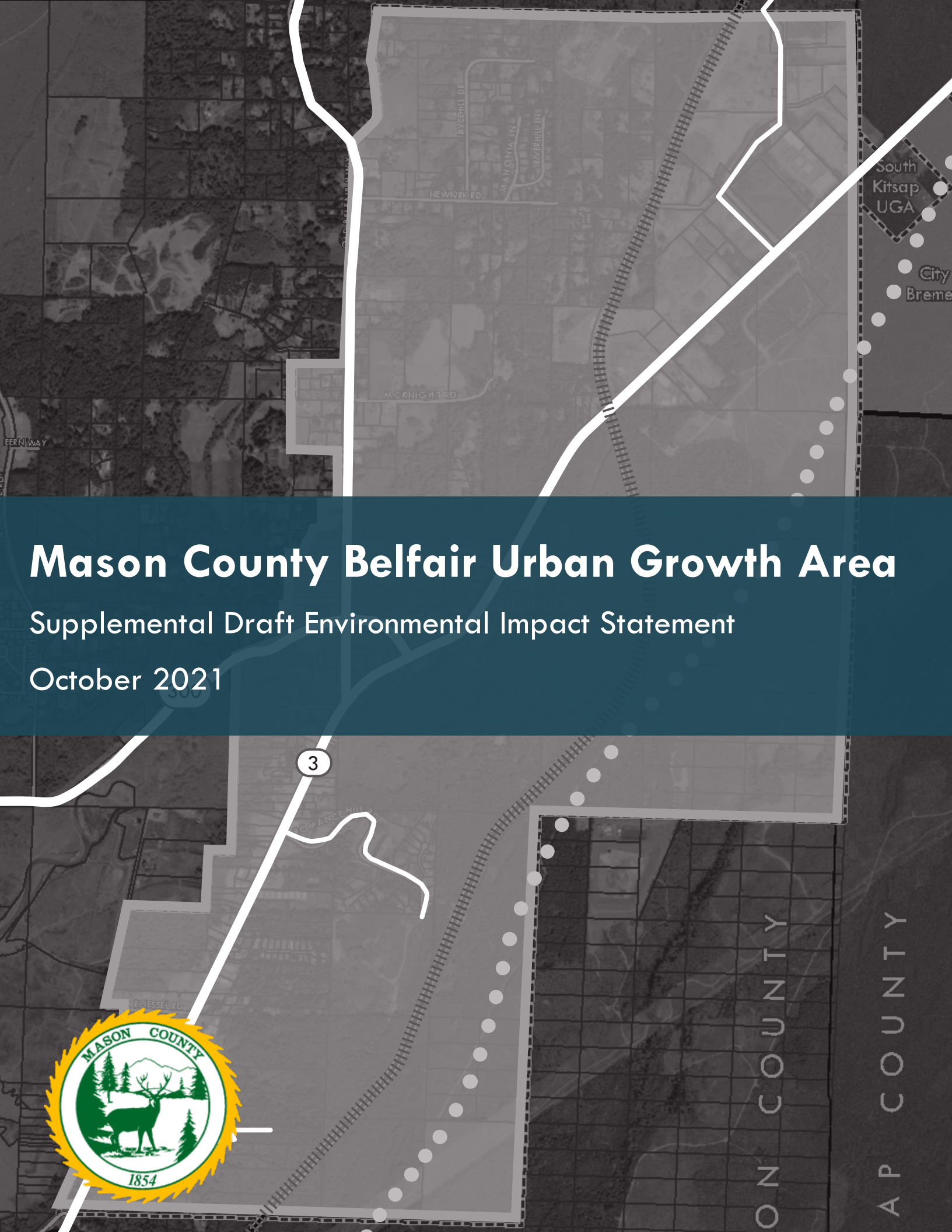

Mason County Belfair Urban Growth Area

Supplemental Draft Environmental Impact Statement

October 2021

BERK
STRATEGY ANALYSIS COMMUNICATIONS

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EPPARD vision

October 28, 2021

Subject: Belfair Urban Growth Area Planned Action *Supplemental Draft Environmental Impact Statement* (SDEIS)

Dear Reader:

The Belfair Urban Growth Area (UGA) is a long-standing urban unincorporated community in Mason County serving as a commercial hub for a broader community at the northern end of Hood Canal. SR 3 bisects the community and was recently widened, the County received a loan to further develop a sewer system, and a new state bypass route is pending. To guide growth that reflects the community's vision, Mason County proposes to establish a Planned Action Environmental Impact Statement (EIS) and ordinance for the Belfair UGA. In association with the Planned Action, the County proposes to update the Belfair UGA Plan, adopted in December 2004, and refresh the vision. Amendments to the Mason County Comprehensive Plan and Belfair zoning and environmental regulations would be needed to implement alternatives.

Mason County published the *Mason County Belfair UGA Draft Environmental Impact Statement* (DEIS) on April 29, 2021. The County accepted public comment on the document from April 29-June 7, 2021. Three alternatives were reviewed, including the "No Action" alternative, which reflects current growth targets. Alternative 2 is similar to the existing development capacity in the UGA. Alternative 3 reflects a higher growth scenario that would add residential, mixed use, and industrial park development to the UGA.

As a result of comments received from public agencies, interested tribes, and local citizens, Mason County determined that targeted additional SEPA analysis of the alternatives would be beneficial and would provide the public and decision makers with more complete information about the potential impacts of the Proposal. The Supplemental Draft EIS (SDEIS) reviews an Alternative 3 Hybrid, combining elements of Alternatives 2 and 3 of the Draft EIS. The SDEIS provides targeted analysis and clarifications regarding water resources, cultural resources, transportation, and utilities. The SDEIS also outlines mitigation measures that would apply to future planned action development.

The Supplemental Draft EIS provides for a public comment period. After the SDEIS comment period, a Final EIS will be prepared to respond to comments on the original Draft EIS and the Supplemental Draft EIS.

The key issues and options facing decision makers includes:

- Approval of the Belfair Subarea Plan Update and related consistency edits to the Comprehensive Plan;

- Approval of a planned action ordinance to help incentivize growth while mitigating impacts;
- Approval of consistency edits in the County code including zoning regulations to implement alternatives;
- Consideration of infrastructure investments to attract quality private investment and to serve new residents, employees, and visitors; and
- Funding strategies including SEPA mitigation fees.

The SDEIS document is available for download on the County's project website: https://www.co.mason.wa.us/community-services/belfair-eis.

A printed copy may be reviewed at Mason County Community Services offices by appointment (see Contact below). A printed copy may be requested at cost (see Contact below). A printed copy is also available for review at the North Mason Timberland Library; see https://www.trl.org/locations/north-mason for hours and requirements to meet COVID-19 pandemic conditions.

Agencies, affected tribes, and members of the public are invited to comment on the DEIS. The method and deadline for giving us your comments is:

Comment Period: Provide your written comments by **5 pm, November 29, 2021.**

Send to Contact: Kell Rowen, Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton WA 98584
(360) 427-9670 ext. 286
planning@co.mason.wa.us

Thank you for your interest in Belfair.

Sincerely,

Kell Rowen

Kell Rowen, Community Development Administrator, SEPA Responsible Official

Fact Sheet

Project Title

Belfair Urban Growth Area Subarea Plan Update and Planned Action

Proposed Action and Alternatives

The Belfair Urban Growth Area (UGA) is a long-standing urban unincorporated community in Mason County serving as a commercial hub for a broader community at the northern end of Hood Canal. SR 3 bisects the community and was recently widened, the County received a loan to further develop a sewer system, and a new state freight corridor route is pending. With these infrastructure investments facilitating travel between Kitsap and Mason Counties, a small-town quality of life, and natural environment assets, Belfair may soon experience a rapid increase in growth. The County proposes to update the Belfair UGA Plan, adopted in December 2004, and refresh the vision. The County also seeks to Planned Action ordinance for the Belfair UGA to facilitate growth that supports a community-based vision for Belfair. Amendments to the Mason County Comprehensive Plan and Belfair zoning and environmental regulations would be needed to implement alternatives.

The Draft EIS, published on April 29, 2021, considers a range of alternatives for implementation of the vision for Belfair:

- **Alternative 1 – No Action:** This alternative assumes no subarea plan update, zoning changes, or planned action would be adopted. Current plans and development regulations would remain in place, and growth under this alternative is assumed to be consistent with Mason County's adopted growth target for the Belfair UGA and recent development permit trends (480 new housing units and approximately 54,350 square feet of new employment space).
- **Alternative 2 – Moderate Growth:** Alternative 2 would exhibit a similar land use pattern as the No Action Alternative. To facilitate future growth in Belfair in support of a community-based vision for the UGA, Alternative 2 would allow up to 1,840 new housing units (4,450 new residents) and up to 1.19 million square feet of additional commercial/industrial space. Targeted zoning changes and minor changes to the UGA boundary would include:
    - Rezone the following sites to Public Facility (PF) to recognize their use for community facilities:

- Proposed North Mason Regional Fire Authority headquarters (490 NE Old Belfair Highway);
- Belfair Elementary School and Mary Theler Early Learning Center; and
- Belfair Wastewater and Water Reclamation Facility.
- Convert the existing Festival Retail (FR) zoning to Mixed Use (MU) for consistency with surrounding properties.
- Create a mixed-use node at the eastern end of Romance Hill Road in anticipation of a future Romance Hill connection to the SR 3 Freight Corridor bypass. This would be accomplished by expanding the existing MU zoning and rezoning nearby Medium Density Residential (R-5) properties to Multifamily Residential (R-10).
- Expand the UGA boundary by approximately 54.5 acres to include the Belfair Wastewater and Water Reclamation Facility, plus adjacent County-owned properties.
- Reduce the UGA by approximately 40.6 acres in the southeastern corner of the UGA to remove a property owned by Washington State Department of Natural Resources (DNR) that is unlikely to be developed and which is not readily accessible from the rest of the UGA.
- Develop consistency edits in the Mason County Comprehensive Plan and municipal code as needed.

- **Alternative 3 – Higher Growth:** Alternative 3 would exhibit a more intensive land use pattern than the No Action Alternative or Alternative 2. Zoning changes would be focused in the commercial/industrial center in the northeastern corner of the UGA and in the eastern residential and mixed-use portions of the UGA on the plateau. No major zoning changes are planned for Downtown Belfair. Alternative 3 represents a higher level of potential growth than Alternatives 1 or 2 and would allow up to 2,340 new housing units (5,670 new residents, similar to the 2005 County Comprehensive Plan population allocation) and up to 1.4 million square feet of additional commercial space. Zoning changes and UGA boundary revisions under Alternative 3 are as follows:
  - Incorporate the Public Facility (PF) and Festival Retail (FR) rezones described in Alternative 2.
  - Incorporate the UGA boundary revisions described in Alternative 2.
  - Create a mixed-use node at the eastern end of Romance Hill Road in anticipation of a future Romance Hill connection to the SR 3 Freight

Corridor bypass. This would be accomplished by expanding the existing MU zoning and rezoning nearby Medium Density Residential (R-5) properties to Multifamily Residential (R-10). Compared to Alternative 2, Alternative 3 would further expand the MU zone to the south along the proposed bypass route.

- Rezone approximately 94 acres of Single Family Residential (R-4) land north of Newkirk Road, east of Riverhill Lane, and west of the railroad to Medium Density Residential (R-5).
- Create a new zone, Master Planned Mixed Use (MP-MU) to encompass the land currently zoned for commercial and multifamily uses south of SR 3 and east of the railroad. This zone would allow a mix of commercial and residential uses with a focus on business/industrial park development and multifamily housing. Medium Density Residential (R-5) areas immediately to the south would be rezoned to R-10 to create a density buffer.
- Develop consistency edits in the Mason County Comprehensive Plan and municipal code as needed.

Additionally, this Supplemental Draft EIS considers an additional **Alternative 3 Hybrid,** which combines the features of Alternatives 2 and 3 and is within the range of the studied DEIS alternatives.

Proponent and Lead Agency

Mason County

Location

The proposal addresses the Belfair UGA, an approximately 4 square-mile area bounded at the northeastern boundary of the Mason County border with Kitsap County.

Tentative Date of Implementation

January 2022

Responsible Official & Contact Person

Kell Rowen, Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton WA 98584
(360) 427-9670 x 286
planning@co.mason.wa.us

Licenses or Permits Required

The updated UGA subarea plan and Planned Action would require action by the Board of County Commissioners to adopt both the subarea plan and Planned Action Ordinance. Board action would also be necessary to update the County Zoning Map and development regulations for the Belfair UGA consistent with the final subarea plan.

Authors and Principal Contributors to the EIS

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Date of Supplemental Draft EIS Issuance

October 28, 2021

Supplemental Draft EIS Comments

Comment Period

Mason County is requesting comments from members of the public, agencies, tribes, and all interested parties on the Supplemental Draft EIS from October 28 – November 29, 2021. Comments are due by **5:00 pm**, November 29, 2021.

All written comments should be directed to:

Kell Rowen, Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton WA 98584
(360) 427-9670 x 286
planning@co.mason.wa.us

Public Meeting

The Planning Advisory Commission will host an online public meeting on the Supplemental Draft EIS, Draft Planned Action Ordinance, Draft Subarea Plan Update, and associated amendments to the Mason County Comprehensive Plan and Belfair zoning regulations on **November 15, 2021 at 6:00 pm.**

See the project website for instructions for virtually attending the meetings. https://www.co.mason.wa.us/community-services/belfair-eis/.

Date of Final Action

January 2022

Location of Background Data

The Supplemental DEIS considers available information and evaluations including but not limited to:

- Mason County, Belfair/Lower Hood Canal Water Reclamation Facilities Plan Supplemental Information, Final Programmatic Environmental Impact Statement January 2007
- Washington Department of Transportation (WSDOT), SR 3 Belfair Bypass -- Revised Environmental Assessment, May 2013

Mason County has also coordinated with tribes and agencies with jurisdiction and environmental expertise and service providers in the preparation of the current DEIS.

Background information on the Subarea Plan Update and Planned Action EIS is available on the project website: https://www.co.mason.wa.us/community-services/belfair-eis/.

Availability of Supplemental Draft EIS

The Supplemental Draft EIS document is available for download on the County's project website: https://www.co.mason.wa.us/community-services/belfair-eis/. A printed copy may be reviewed at Mason County Community Services, 615 W Alder Street, Shelton WA 98584 offices between 8 a.m. and 4:30 p.m. Please note we are closed for lunch between noon and 1:00 p.m.

A printed copy may be requested at cost (see Contact Person above).

A printed copy is also available for review at the North Mason Timberland Library; see https://www.trl.org/locations/north-mason for hours and requirements to meet COVID-19 pandemic conditions.

Distribution List

Federal and Tribal Agencies

Naval Base Kitsap

Skokomish Indian Tribe

Squaxin Island Tribe

State and Regional Agencies

Olympic Region Clean Air Agency

Peninsula Regional Transportation Planning Organization

Washington Department of Archaeology and Historic Preservation

Washington Department of Commerce

Washington Department of Ecology

Washington Department of Fish and Wildlife

Washington Department of Health

Washington Department of Natural Resources

Washington Department of Transportation

Adjacent Jurisdictions

City of Bremerton

City of Shelton

Kitsap County

Services, Utilities, and Transit

Belfair Water District

Mason County PUD 1

Mason County PUD No. 3

Mason Transit

North Mason Fire District

North Mason School District

Port of Allyn

Community Organizations and Individuals

Economic Development Council

North Mason Chamber of Commerce

Olympia Master Builders

Salmon Center

The Hub

Persons participating in scoping activities, responding to the Draft EIS comment period, and providing contact information.

Media

Kitsap Sun

Shelton-Mason County Journal

Contents

Exhibits

1 Summary

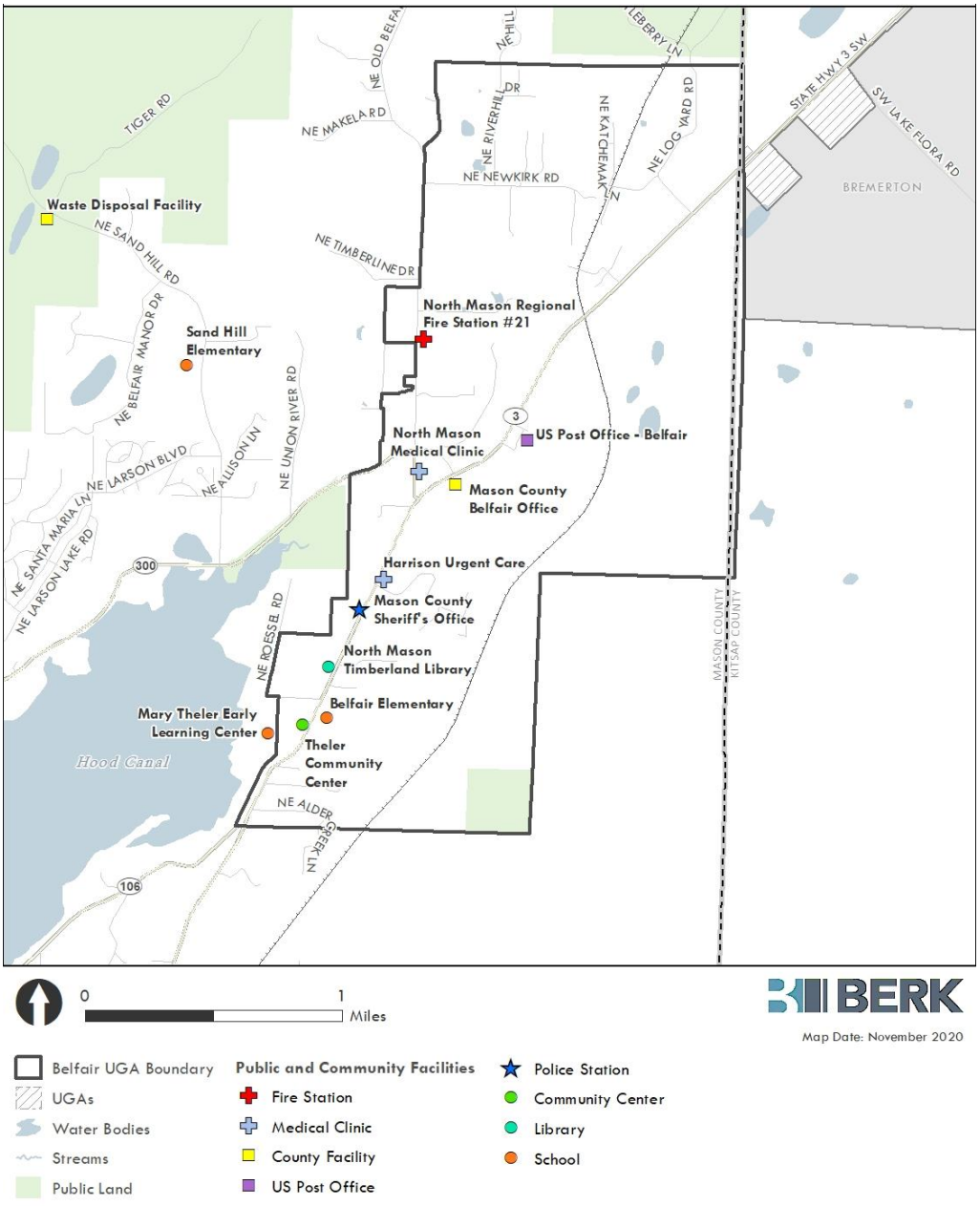
1.1 Purpose

The Belfair Urban Growth Area (UGA) is a long-standing urban unincorporated community in Mason County serving as a commercial hub for a broader community at the northern end of Hood Canal. SR 3 bisects the community and was recently widened, the County received a loan to further develop a sewer system, and a new state freight corridor route is pending. With these infrastructure investments facilitating travel between Kitsap and Mason Counties, a small-town quality of life, and natural environment assets, Belfair may soon experience a rapid increase in growth. The County seeks to develop a Planned Action Environmental Impact Statement (EIS) and ordinance for the Belfair UGA. In association with the Planned Action, the County intends to update the Belfair UGA Plan, adopted in December 2004, and refresh the vision. With a planned action and subarea plan update, Mason County desires to facilitate growth that supports a community-based vision for Belfair.

1.2 Study Area

The Belfair UGA encompasses nearly 4 square miles at the northeastern corner of Mason County, bounded on the east by the Mason-Kitsap County boundary and centered on the intersection of SR 3 and SR 300. The Union River valley lies to the west of the UGA, flowing into Lynch Cove and Hood Canal to the southwest. The UGA location is shown in Exhibit 1-1.

Exhibit 1-1. Planning Area Vicinity



Sources: Mason County, 2020; BERK, 2020.

1.3 Planning Process and Public Comment Opportunities

This EIS has been developed in conjunction with public engagement opportunities.

During summer 2020 a public engagement plan was developed. At the same time, information was collected and existing conditions in the study area were

described. In August and September 2020, stakeholder interviews were conducted followed by a scoping process and community meeting, and survey in November and December 2020. This provided an opportunity for public and agency comments on the contents and alternatives evaluated in this EIS. During preparation of the Draft EIS, additional engagement occurred through targeted outreach to interested State agencies, Tribal Historic Preservation Officers (THPOs), and local service providers to inform the description of existing conditions and analysis of impacts.

Mason County published a Draft EIS in April 2021 and accepted public comment on the document from April 29-June 1, 2021 and extended the comment period to June 7 to allow for more comment opportunity on both the scope and contents of the Draft EIS; the notice of extended Draft EIS comment is provided in Appendix A. As a result of comments received from public agencies, interested tribes, and local citizens, Mason County determined that targeted additional SEPA analysis of the Draft EIS alternatives with regard to specific topics would be beneficial and would provide the public and decision makers with more complete information about the potential impacts of the Proposal.

This Supplemental Draft EIS supplements the Belfair UGA Draft EIS published on April 29, 2021 and provides additional analysis of issues identified in comments on the Draft EIS, as well as specific revisions to the text of the Draft EIS. A 30-day comment period has been established with this Draft Supplemental EIS to support the public review process of the Proposal (see Fact Sheet).

Full documentation of all public comments received with the original Draft EIS and this Supplemental Draft EIS, and associated responses will be included in the Final EIS.

This Supplemental Draft EIS has been published with a separate 30-day comment period, and the Planning Advisory Commission and Board of County Commissioners will hold meetings and eventually hearings and deliberations in November 2021-January 2022.

Responses to comments on both the Draft EIS and this Supplemental Draft EIS will be developed and a Final EIS published allowing a decision on the Subarea Plan, related Comprehensive Plan amendments, and the Planned Action Ordinance in early 2022.

1.4 Objectives and Alternatives

SEPA calls for a statement of project objectives, around which alternatives can be developed and evaluated. Following are objectives based on the 2004 Belfair Plan and the County intent to facilitate growth that fits the vision of the area.

- Facilitate growth reflective of a community-supported vision. Consider and include a Planned Action Ordinance for some or all of the UGA.
- Focus new growth in the area from SR 3 east to the SR 3 Freight Corridor bypass.
- Support and enhance Belfair as a hub for the broader community.
- Provide opportunities for clustered development that provides housing choices and recreation/open space.
- Refresh the 2004 Belfair UGA Plan, while advancing key plan themes:
    - Promote natural environment conservation and sustainability. Care for the land and natural resources which area critical to the community's economic health and long-term sustainability.
    - Support an economically diverse center. Diversify the economy to include industrial, professional, service, and tourist-based businesses.
    - Promote community identity and well-designed growth. Create focal points.
    - Develop new residential development to create neighborhoods, not just housing.
    - Encourage multimodal transportation connections.

The Draft EIS considered a range of alternatives for implementation of the vision for Belfair:

- **Alternative 1 – No Action:** This alternative assumes no subarea plan update, zoning changes, or planned action would be adopted. Current plans and development regulations would remain in place, and growth under this alternative is assumed to be consistent with Mason County's adopted growth target for the Belfair UGA and recent development permit trends (480 new housing units and approximately 54,350 square feet of new employment space).
- **Alternative 2 – Moderate Growth:** Alternative 2 would exhibit a similar land use pattern as the No Action Alternative. To facilitate future growth in Belfair in support of a community-based vision for the UGA, Alternative 2 would allow up to 1,840 new housing units (4,450 new residents) and up to 1.19 million square feet of additional commercial/industrial space. Targeted zoning changes and minor changes to the UGA boundary would include:
    - Rezone the following sites to Public Facility (PF) to recognize their use for community facilities:

- Proposed North Mason Regional Fire Authority headquarters (490 NE Old Belfair Highway);
- Belfair Elementary School and Mary Theler Early Learning Center; and
- Belfair Wastewater and Water Reclamation Facility.
- Convert the existing Festival Retail (FR) zoning to Mixed Use (MU) for consistency with surrounding properties.
- Create a mixed-use node at the eastern end of Romance Hill Road in anticipation of a future Romance Hill connection to the SR 3 Freight Corridor bypass. This would be accomplished by expanding the existing MU zoning and rezoning nearby Medium Density Residential (R-5) properties to Multifamily Residential (R-10).
- Expand the UGA boundary by approximately 54.5 acres to include the Belfair Wastewater and Water Reclamation Facility, plus adjacent County-owned properties.
- Reduce the UGA by approximately 40.6 acres in the southeastern corner of the UGA to remove a property owned by Washington State Department of Natural Resources (DNR) that is unlikely to be developed and which is not readily accessible from the rest of the UGA.
- Develop consistency edits in the Mason County Comprehensive Plan and municipal code as needed.

- **Alternative 3 – Higher Growth:** Alternative 3 would exhibit a more intensive land use pattern than the No Action Alternative or Alternative 2. Zoning changes would be focused in the commercial/industrial center in the northeastern corner of the UGA and in the eastern residential and mixed-use portions of the UGA on the plateau. No major zoning changes are planned for Downtown Belfair. Alternative 3 represents a higher level of potential growth than Alternatives 1 or 2 and would allow up to 2,340 new housing units (5,670 new residents, similar to the 2005 County Comprehensive Plan population allocation) and up to 1.4 million square feet of additional commercial space. Zoning changes and UGA boundary revisions under Alternative 3 are as follows:
  - Incorporate the Public Facility (PF) and Festival Retail (FR) rezones described in Alternative 2.
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Corridor bypass. This would be accomplished by expanding the existing MU zoning and rezoning nearby Medium Density Residential (R-5) properties to Multifamily Residential (R-10). Compared to Alternative 2, Alternative 3 would further expand the MU zone to the south along the proposed bypass route.

- Rezone approximately 94 acres of Single Family Residential (R-4) land north of Newkirk Road, east of Riverhill Lane, and west of the railroad to Medium Density Residential (R-5).
- Create a new zone, Master Planned Mixed Use (MP-MU) to encompass the land currently zoned for commercial and multifamily uses south of SR 3 and east of the railroad. This zone would allow a mix of commercial and residential uses with a focus on business/industrial park development and multifamily housing. Medium Density Residential (R-5) areas immediately to the south would be rezoned to R-10 to create a density buffer.
- Develop consistency edits in the Mason County Comprehensive Plan and municipal code as needed.

Additionally, this Supplemental Draft EIS considers an additional **Alternative 3 Hybrid,** which combines the features of Alternatives 2 and 3 and is within the range of the studied DEIS alternatives.

1.5 Key Issues and Options

Key issues facing decision makers include:

- Approval of updates to the Belfair UGA Plan, including updated recommendations for ongoing implementation.
- Approval of a Planned Action Ordinance (PAO) to help incentivize growth while minimizing impacts. The final PAO may apply to the entire UGA or only a portion of it.
- Approval of zoning code updates to implement the Preferred Alternative.

1.6 Summary of Impacts and Mitigation Measures

The following sections present a consolidated summary of impacts and mitigation measures identified in the Draft EIS and this Supplemental Draft EIS. The Supplemental Draft EIS Chapter 3 addresses Water Resources, Utilities, and Transportation, and updates to these topics are addressed in corresponding topics below.

1.6.1 Earth

How did we analyze Earth?

Available literature, surveys, and studies were used to evaluate potential impacts to Earth associated with changes from each alternative on the geology, topography, soils, and geologically hazardous areas throughout the study area. The different proposed population and commercial development growth under each action alternative was compared to the No Action Alternative to analyze the potential impacts.

What impacts did we identify?

Impacts common to all alternatives include development within geologically hazardous areas, the greatest risk being associated with development in the landslide and erosion hazard areas. These impacts will be minimized by the implementation of Mason Country critical areas regulations for geologically hazardous areas.

What is different between the alternatives?

Population density and commercial space are anticipated to increase with each alternative. The proposed changes in development zones within the Belfair UGA would increase building and population density within otherwise undeveloped areas, including areas within geologically hazardous areas. The action alternatives would increase the ability to combine stormwater infrastructure into an effective, collaborative system that minimizes impacts to earth.

Alternative 3 Hybrid would have the same overall development area footprint as the other action alternatives, and impacts related to earth resources are anticipated to be similar to the other action alternatives.

What are some solutions or mitigation for impacts?

All alternatives are expected to attract development within existing geologically hazardous areas. The Belfair UGA will comply with applicable local environmental regulations and apply reasonable and prudent measures to reduce significant adverse impacts. Potential measures to mitigate adverse impacts of specific projects within the study area, as well as avoidance and minimization measures that would be part of these projects, will be refined through final design and permitting of each project.

Were any significant unavoidable adverse impacts identified?

Under all proposed alternatives, any redevelopment or new development will require compliance with all applicable regulations to avoid, minimize, or mitigate any impacts to geologically hazardous areas. Redevelopment or new development will also need to meet grading and buffer requirements to adjacent properties from erosion and landslide hazards. Therefore, no significant unavoidable adverse impacts are anticipated on the earth under any of the proposed alternatives.

1.6.2 Water Resources

How did we analyze Water Resources?

Water resources were identified by evaluating the presence and extent of wells and groundwater, surface water, wetlands, and frequently flooded areas, as well as identifying known water quality issues within the study area through a review of literature and publicly available databases. Potential impacts were identified by evaluating changes associated with each alternative.

What impacts did we identify?

Impacts common all alternatives include increased water withdrawals, increased peak stream flow velocities and streambank erosion, reduced stream baseflow, increased contamination associated with impervious surface runoff, and impacts to streams, wetlands, and buffers. Future water demand generated by growth from the Alternatives could also impact stream baseflows in the area due to pumping from Belfair Water District wells. These impacts will be minimized by implementation of stormwater and development requirements, as well as critical area regulations.

What is different between the alternatives?

While all alternatives would increase growth and development in otherwise undeveloped areas, the action alternatives would generate greater areas of impervious surface and have higher population densities. The action alternatives would also have greater rates of redevelopment and associated stormwater retrofits that would improve water quality and runoff treatment in currently developed areas. Under all alternatives, Belfair Water District No. 1 would eventually serve the entire study area, and increased pumping from water district wells could reduce baseflows for the Union River and Coulter Creek. Alternative 3 would be likely to result in the greatest reduction, and Alternative 1 the least reduction. Alternative 3 Hybrid would likely result in baseflow reductions greater than Alternative 2, but less than Alternative 3.

What are some solutions or mitigation for impacts?

Mason County will comply with applicable federal, state, and local environmental regulations and apply reasonable mitigation measures to reduce significant adverse impacts. During redevelopment or new development under all alternatives, opportunities exist to strategically reduce impervious surfaces, employ low impact development techniques, and restore native vegetation to improve the conditions of the natural environment in these spaces.

The surface water runoff volume from development areas is expected to increase under all the alternatives because the proposed development will increase the total area of impervious surfaces. However, development projects will be required to install stormwater facilities that control flow rates and treat stormwater pollutants prior to discharge to receiving water bodies. For redevelopment projects, this would be an overall improvement (relative to existing conditions in developed areas) for older developments that do not currently have modern stormwater management facilities.

The Mason County Plan 2036 (Mason County, 2017) includes policies and objectives related to the environment and public services that emphasize limiting groundwater and surface water use through water conservation strategies including education, reuse, and recycling. Ongoing fish passage barrier removal projects help to mitigate the habitat connectivity disruptions that may result from low flows in streams.

The County has committed to support water quality monitoring efforts and protection of environmentally sensitive areas (Mason County, 2017). The County could consider monitoring streams for changes in flow rates and habitat limiting factors influenced by reduced stream flows. This monitoring could inform conservation efforts and other measures to mitigate negative impacts to environmental resources, such as water reuse and restrictions on water use.

The draft Subarea Plan policies can be amended to address both water quality and water quantity.

The draft Planned Action Ordinance would require connection to a public water system. As described in the impact analysis, the deeper wells used by Belfair Water District are less likely to impact stream flows than the shallower wells used by private systems.

Were any significant unavoidable adverse impacts identified?

Under all proposed alternatives, any redevelopment or new development will require compliance with all applicable regulations to avoid, minimize, or mitigate any impacts to critical areas including wetlands, streams, buffers, and CARAs. Redevelopment or new development will also need to meet stormwater

requirements to protect surface and groundwater from increased flow or water quality impacts. Therefore, no significant unavoidable adverse impacts are anticipated on the water resources under any of the proposed alternatives.

Based on hydrogeologic analysis and flow calculations described above, the additional groundwater withdrawal expected for Alternatives 2 and 3 is likely to reduce streamflow in the Union River and Coulter Creek more than stream flow would be reduced by Alternative 1. During periods of high natural stream flow, the percent reduction resulting from groundwater withdrawal for the UGA is very small for either stream. During periods of low flow (as represented by the minimum instream flow in the calculations above), the percent reduction is greater, but still less than 3 percent reduction in stream flow.

By following the mitigation measures listed above, no significant unavoidable adverse impacts to stream flow or tribal water rights are expected.

1.6.3 Plants and Animals

How did we analyze Plants and Animals?

The presence and extent of Fish and Wildlife Conservation Areas, and fish presence and fish passage barriers within the study area were identified through a review of existing literature and publicly available databases. Changes associated with each alternative were identified and evaluated to determine the level of impact on plants and animals.

What impacts did we identify?

Under all alternatives, new development and redevelopment within the Belfair UGA would reduce native vegetation and increase the density of humans and their pets, which disturb plants and animals. These impacts would be minimized by following critical area regulations for Fish and Wildlife Conservation Areas and implementing appropriate Open Space design for recreation.

What is different between the alternatives?

The action alternatives would increase the development area, removing more native vegetation to make space for new development. All new stream crossings would be required to be fish passable per state guidelines. As the density increases, redevelopment of existing crossings that are fish barriers may be required to accommodate the growth, improving fish passage through the watersheds. Alternative 3 Hybrid would have the same overall development area footprint as the other action alternatives, and impacts related to plants and animals are anticipated to be similar to the other action alternatives.

What are some solutions or mitigation for impacts?

All alternatives are expected to increase the density of people and development within critical areas and/or buffers. Mason County will comply with applicable federal, state, and local environmental regulations and apply reasonable mitigation measures to reduce significant impacts. Avoidance, mitigation, and potential measures to mitigate adverse impacts of specific projects within the study areas will be refined through final design and permitting of each project. During redevelopment or new development under all alternatives, opportunities exist to restore native vegetation to improve the conditions on plants and animals in these spaces.

Were any significant unavoidable adverse impacts identified?

Under all proposed alternatives, any redevelopment or new development will require compliance with all applicable regulations to avoid, minimize, or mitigate any impacts to critical areas including wetlands, streams, buffers, and FWHCA. Redevelopment or new development will also need to meet stream crossing guidelines to maintain fish access. Therefore, no significant unavoidable adverse impacts are anticipated on the plants and animals under any of the proposed alternatives.

1.6.4 Land Use Patterns

How did we analyze Land Use Patterns?

Chapter 3.4 – Land Use Patterns evaluates the type, amount, and pattern of land uses proposed under each alternative and compares these changes would compare to existing conditions. Chapter 3.4 also evaluates the alternatives based on compatibility of adjacent land uses, ability to provide reasonable transitions between high-impact and lower-impact uses, and consistency with state goals and adopted County plans.

What impacts did we identify?

All studied alternatives would be consistent with the goals of the Growth Management Act and would provide adequate land capacity to meet adopted Mason County growth targets for the Belfair UGA.

Under all alternatives, Belfair will experience additional housing and employment growth as new development occurs in the UGA. This would result in a gradual increase in the intensity of the land use pattern in the area as vacant land is developed and some redevelopable properties are converted to higher-intensity uses.

What is different between the alternatives?

- Alternative 1 – No Action would represent the lowest intensity change from existing conditions; no changes to zoning or the UGA subarea plan would be adopted.
- Alternative 2 would enable full development of the eastern portions of the Belfair UGA, which are currently largely undeveloped. This area would be converted to moderate-density single-family residential development, as well as some amount of multifamily residential development. Alternative 2 assumes that most of the future residential development in the UGA would occur in these undeveloped areas on the eastern plateau, along with limited higher-density multifamily development along the SR 3 corridor.
- Alternative 3 would represent a substantial increase in development intensity in Belfair, as well as changes to the overall land use pattern.
    - Alternative 3 would create a new Master Planned Mixed Use (MP-MU) zone in the commercial-industrial node at the northeastern edge of the UGA and rezone adjacent Medium Density Residential properties to Multifamily Residential. These zoning changes would increase the overall development intensity in this location and allow a different mix of uses focused on business/industrial park development.
    - Alternative 3 would expand the mixed-use zoning at the eastern end of Romance Hill Road in anticipation of a future Romance Hill connection to the SR 3 Freight Corridor bypass.
    - Alternative 3 would rezone approximately 94 acres of Single Family Residential (R-4) land north of Newkirk Road, east of Riverhill Lane, and west of the railroad to Medium Density Residential (R-5) to create additional single-family residential development opportunities in the northern UGA.
- Alternative 3 Hybrid would represent approximately 2.8% less housing capacity and 7.7% less commercial/industrial space than Alternative 3. The land use and zoning pattern would be the same as Alternative 3, except as follows:
    - The 94-acre area of Single Family Residential (R-4) zoning north of Newkirk Road, east of Riverhill Lane, and west of the railroad would retain existing zoning R-4 instead of being rezoned to Medium Density Residential (R-5).

  - The mixed-use node proposed at the eastern end of Romance Hill Road would match the zoning and extent included in Alternative 2, which covers and smaller area than Alternative 3.

- Alternatives 2, 3, and 3 Hybrid would also amend the UGA boundary to include the adjacent wastewater treatment facility and remove undevelopable state-owned property in the southeastern portion of the UGA. These changes would be consistent with the intent of the UGA as a center for urban development.

What are some solutions or mitigation for impacts?

- The adopted 2004 Belfair UGA Plan established land use principles and site and building design guidance; the updated UGA Plan will include similar guidance and establish design guidelines for the MP-MU zone to maintain compatibility with surrounding areas.
- Upon selection of a Preferred Alternative, population allocations in the Comprehensive Plan should be amended to match updated growth levels and utility plans.
- The Comprehensive Plan and zoning should be amended to fully integrate changes to the Belfair UGA Plan and associated development regulations, including addition of the Public Facility and Master Planned Mixed Use zones to Title 17 of the Mason County Code.

Were any significant unavoidable adverse impacts identified?

Under all Alternatives, vacant land in the Belfair UGA would gradually be developed, and underutilized properties would be converted to higher-intensity uses, in keeping with the long-established vision Belfair as the economic center of northern Mason County. The Action Alternatives would represent a substantial increase in population and employment over current conditions, and some short-term land use incompatibilities may occur as new development occurs. With implementation of the mitigation measures described above, no significant unavoidable adverse impacts to land use patterns are anticipated.

1.6.5 Aesthetics

How did we analyze Aesthetics?

Chapter 3.5 – Aesthetics evaluates the scale and visual quality of development that would potentially occur under each of the alternatives, including effects on community character, views, light and glare, and shading conditions.

What impacts did we identify?

Under all alternatives, the UGA would experience gradual growth, primarily through development of vacant land, though some conversion of underutilized properties to more intense uses could also occur. This additional growth would result in a more urban community character as development intensity increases. Growth would also result in taller buildings, depending on the alternative, and increased ambient light and glare from exterior building illumination and additional vehicle traffic.

What is different between the alternatives?

- Alternative 1 – No Action: Due to the relatively low level of growth anticipated, future community character, building heights, and light and glare conditions are likely be similar to existing conditions.
- Alternative 2 would primarily result in changes to community character and light and glare conditions in the eastern portion of the UGA on the plateau as this area is currently mostly undeveloped. Alternative 2 would not include any changes to allowed building heights or other changes to development regulations; changes in aesthetic conditions would primarily result from conversion of vacant land, additional vehicle traffic, and a greater overall level of development in the UGA.
- Alternative 3 represents the highest level of growth of the alternatives. Similar to Alternative 2, visual changes would occur in the currently undeveloped eastern plateau, as well as the northeastern commercial-industrial node. Establishment of the new MP-MU zone in this area would allow for greater building heights than currently allowed and more intense commercial and multifamily development than currently allowed.
- Alternative 3 Hybrid would have a development and zoning pattern similar to Alternative 3, including associated changes to building height and visual conditions, though several areas of the UGA would retain their existing zoning and not develop to the same intensity as anticipated under Alternative 3.

What are some solutions or mitigation for impacts?

- The adopted 2004 Belfair UGA Plan established land use principles and site and building design guidance; the updated UGA Plan will include similar guidance and establish design guidelines for the MP-MU zone to maintain compatibility with surrounding areas.
- The updated Belfair UGA Plan will maintain design guidelines for existing zones, including standards for pedestrian connections, building façade

treatments, and streetscape design.

- All development in Belfair is subject to building design requirements established in MCC 17.30, which are intended to reduce bulk and visual mass, add visual interest, and ensure that development addresses the human scale and retains small-town character.
- Design concepts for public gathering space and pedestrian-oriented features from the Festival Retail zone should be incorporated into the Mixed Use zone, specifically applicable in downtown Belfair and in the Romance Hill mixed use node.
- Building design, site design, landscaping, and dimensional standards for the Master Planned Mixed Use zone that are consistent with the existing Mixed Use zone should be established.
- Landscaping and tree retention standards should be established for major transportation corridors in the UGA (SR 3, Romance Hill Road, and the SR3 Freight Corridor) to maintain existing mature vegetation and preserve visual character in these areas as development occurs.
- Additional standards for the MP-MU zone should be established to ensure adequate screening and separation between industrial park development and residential land uses, both within the MP-MU zone and on adjacent residential properties.

Were any significant unavoidable adverse impacts identified?

Under all Alternatives, undeveloped and underutilized properties in the Belfair UGA would gradually be converted for development. Alternatives 2 and 3 would represent a more substantial increase in the intensity of development, and irrevocable changes to visual character would occur as large areas of vacant land are converted to urban development over time. Additional urban growth is consistent with the purpose of Belfair as a designated urban growth area and with the vision of Belfair as an economic center expressed in the Belfair UGA Plan. With implementation of existing development regulations and design standards and the mitigation measures recommend above, no significant unavoidable adverse aesthetic impacts are anticipated.

1.6.6 Historic and Cultural Resources

How did we analyze Historic and Cultural Resources?

To analyze Historic and Cultural Resources, a baseline inventory of known historic and cultural resources located in the Belfair UGA and immediate vicinity (i.e., one-

mile buffer) was established by accessing the secure side of WISAARD (Washington Information System for Architectural and Archaeological Records Data), which is the Washington State Department of Archaeology and Historic Preservation (DAHP) online GIS map tool and searchable database of cultural resources.

All WISAARD GIS layers were reviewed for cultural resource and environmental information, including four that returned pertinent results: Archaeology Sites; Cemetery Sites; Cultural Resource Surveys; and Inventories (i.e., a dataset in the Property layer of built environment properties that includes historic register designations). Additional layers with pertinent information included General Land Office (GLO) Features and the statewide Predictive Model for archaeological resources. The types and locations of recorded resources were summarized as were the risk levels indicated by the statewide Predictive Model.

What impacts did we identify?

Impacts to Historic and Cultural Resources from each of the three alternatives were analyzed by considering two categories of historic and cultural resources: below-ground (e.g., archaeological sites) and above-ground (e.g., historic buildings). Generally speaking, ground disturbance represents one of the greatest impacts to below-ground resources. Impacts to above-ground resources, in comparison, are generally considered to be anything affecting the characteristics that make them eligible for historic registers.

Cultural resources located in areas with a high rate of development and redevelopment activities, such as those located in the Belfair UGA and subject to the proposed Alternatives, are at risk of destruction and even permanent loss if impacts are not considered prior to project implementation. Inadvertent discoveries during project implementation often result in the destruction of cultural resources and then in costly response efforts. The information the resources could have conveyed cannot be recovered, and the communities that value them cannot replace them. Cultural resources are finite and irreplaceable making pre-project planning particularly important.

In the absence of pre-project planning, project proponents are at risk of violating applicable cultural resource regulations, which can result in civil and criminal penalties.

What is different between the alternatives?

Alternative 1 (No Action) assumes no subarea plan update, zoning changes, or planned action would be adopted, and current plans and development regulations would remain in place. Impacts to historic and cultural resources, therefore, would be similar in nature to the impacts described above (e.g., ground disturbance) but

greater in degree (e.g., increased land use with no improvement in planning efforts for considering impacts to historic and cultural resources).

Alternative 2 (Moderate Growth) involves a similar land use pattern as the No Action Alternative with targeted zoning changes to accommodate additional growth and minor changes to the UGA boundary. Impacts to historic and cultural resources, therefore, would again be similar to Alternative 1 in nature (e.g., ground disturbance) but greater in degree (e.g., increased land use with targeted zoning changes and minor changes to the UGA boundary). The degree of impact would be reduced if the zoning changes included improved planning efforts for considering impacts to historic and cultural resources, such as those described in the mitigation measures below.

Alternative 3 (Higher Growth) involves a more intensive land use pattern than the No Action Alternative or Alternative 2. Impacts to historic and cultural resources, therefore, would be similar to Alternative 2 in nature (e.g., ground disturbance) but greater in degree (e.g., more intensive land use pattern with zoning changes focused in the northeastern and eastern areas). The degree of impact would be reduced if the zoning changes included improved planning efforts for considering impacts to historic and cultural resources, such as those described in the mitigation measures below.

Alternative 3 Hybrid would have the same overall development area footprint as the other action alternatives, and impacts related to historic and cultural resources are anticipated to be similar to the other action alternatives.

What are some solutions or mitigation for impacts?

Proactive consideration of impacts to cultural resources results in more effective identification, planning, and protection than reactive responses to inadvertent discoveries during project implementation. A well-designed and implemented pre-project cultural resource review process is the most effective way to avoid, minimize, or mitigate adverse impacts.

Incorporated Plan Features

Countywide Planning Policies in the Mason County Comprehensive Plan would apply to all alternatives and include:

- 13.1 Support the efforts of the Mason County Historic Preservation Commission created to identify and actively encourage the conservation of Mason County's historic resources (MCC 17.40).
- 13.2 Identify and encourage the preservation of lands, sites, and structures that have historical or archeological significance through enforcement of

regulations that implement the State's goals and objectives for historic preservation at the local level.

Regulations, Commitments, Other Potential Mitigation Measures

Considering the possible impacts to historic and cultural resources prior to project implementation, particularly ground disturbance, is one of the most effective ways to mitigate impacts. Pre-project consideration of impacts can be accomplished through both planning-level processes and project-level review, as appropriate. Suggested planning- and project-level measures are described below. Other mitigation measures that encourage preservation of historic and cultural resources include tax incentives, protective easements, and acquisition.

Per State law, the following apply to *all* actions at *all* times:

- Washington State law (RCW 27.53 and 27.44) protects archaeological resources (RCW 27.53) and Indian burial grounds and historic graves (RCW 27.44) located on both the public and private lands of the State.
- An archaeological excavation permit issued by the Washington State Department of Archaeology and Historic Preservation (DAHP) is required in order to disturb an archaeological site.
- Knowing disturbance of burials/graves and failure to report the location of human remains are prohibited at all times (RCW 27.44 and 68.60).

Planning-Level Processes

Consideration of potential impacts to historic and cultural resources (both below-ground and above-ground) can be facilitated through the following planning efforts; these will provide efficiencies over an exclusively project-level approach, although the planning-level scenario would include the project-level review process that follows. Option One would apply to the County Comprehensive Plan as a whole, while Option Two would apply to more discrete actions, such as the Planned Action Ordinance under consideration here.

- **Option One:** Incorporate a Cultural Resource Management Plan (**CRMP**) into the Comprehensive Plan. The CRMP would include a pre-project cultural resource review process to be conducted by a qualified professional and **standard inadvertent discovery language (SIDL)** to ensure compliance with all applicable cultural resource regulations.
- **Option Two:** Establish a **local ordinance** or **development regulations** addressing pre-project review; standard inadvertent discovery language (SIDL) to be included on all permits; and a **data-sharing agreement** or **user agreement** for qualified individuals from DAHP.

- **For *all* projects, either Option:**

  Include standard inadvertent discovery language (SIDL) on all related permits (compliance with RCW 27.53, 27.44).

Standard Inadvertent Discovery Language (SIDL)

Even when available information suggests a low probability of encountering cultural resources, it is never possible to guarantee they will not be encountered during project activities; therefore, the following standard inadvertent discovery language (SIDL) should be followed at *all* times on the public and private lands of the State per RCW 27.44 and 27.53:

- Should **human remains** be discovered during project activities, work in the area of the discovery should be stopped immediately, the area secured, and the coroner/medical examiner (Mason County Coroner 360.426.4441) and local law enforcement (Mason County Sheriff 360.275.4467, ext. 313) notified as per State law.
- Should **cultural resources** (e.g., artifacts made of stone, bone, antler, or shell; archaeological deposits such as shell midden; archaeological features such as hearths or post holes) be discovered during project activities, work in the area of the discovery should be stopped immediately, the area secured, and the Department of Archaeology and Historic Preservation (360.586.3065) notified as per State law.

Project-Level Review

Conducting a pre-project cultural resource review is one of the most effective ways to mitigate impacts to historic and cultural resources. Exemptions could be considered (e.g., exempt for above-ground resources if less than 45 years old *and* not eligible for or listed in any historic register or survey). If the project is not exempt, a cultural resource review would be conducted.

A "decision tree" for both above-ground and below-ground resources can be used to determine the appropriate level of investigation and, if necessary, mitigation. In all cases, permits should be conditioned at a minimum with standard inadvertent discovery language (SIDL) in order to ensure compliance with all applicable cultural resource regulations. A proposed decision tree for pre-project cultural resource review in the Belfair UGA is included at Draft EIS Chapter 3.6.3. It is anticipated that Mason County would lead any necessary pre-project cultural resource review and would consult with DAHP and affected Tribes at specific points in the process. Collaboration among responsible parties would be necessary, including on the determination of whether on-the-ground surveys are necessary, which when required would be the responsibility of the project

applicant. The Decision Tree would be applied to each proposed action in the UGA as a more comprehensive supplement to other review tools, including the more generalized Statewide Predictive Model.

Were any significant unavoidable adverse impacts identified?

The primary significant adverse impacts to historic and cultural resources could result from failing to establish a required cultural resource review process for the project-level phase. This impact can be avoided by establishing such a review process as identified in mitigation measures.

Cultural resources located in areas with a high rate of development and redevelopment activities, such as those located in the Belfair UGA and subject to the proposed Alternatives, are at risk of destruction and even permanent loss if impacts are not considered prior to project implementation. Inadvertent discoveries during project implementation often result in the destruction of cultural resources and then in costly response efforts. The information the resources could have conveyed cannot be recovered, and the communities that value them cannot replace them. Cultural resources are finite and irreplaceable making pre-project planning particularly important. A well-designed and implemented pre-project cultural resource review process is the most effective way to avoid, minimize, or mitigate adverse impacts.

1.6.7 Public Services

How did we analyze Public Services?

Chapter 3.7 – Public Services evaluates the potential impacts of each alternative on the ability to provide adequate services to support future development, including Police, Fire, Parks and Recreation, Schools, and Power. The EIS evaluated whether the alternatives would negatively reflect emergency response (increased response times or increases in demand beyond operational capabilities), reduce access to park and open space facilities, negatively impact school facility availability for new students, or be inconsistent with future power system plans and capabilities.

What impacts did we identify?

Under all Alternatives, increased population and employment growth in the Belfair UGA would generate additional demand for public services, including police, fire protection, emergency medical services, parks and recreation, and schools. Based on establish level of service standards, future growth in the Belfair area would result in the potential need for additional emergency response staffing, additional parks and recreation facilities, and additional school resources to serve new

students. Additional growth in the Belfair UGA would also create additional demand for power, provided by Mason County PUD #3.

What is different between the alternatives?

The impacts of the Draft EIS alternatives for each public service type are presented below. Alternative 3 Hybrid would represent approximately 2.8% less housing capacity and 7.7% less commercial/industrial space than Alternative 3. As such, impacts to public services for this alternative are anticipated to be greater than Alternative 2 and less than Alternative 3.

Police

The Mason County Sheriff maintains a population-based level of service, so increased population in the Belfair UGA would require additional staffing, as follows:

- **Alternative 1 – No Action:** 1 additional Sheriff deputy.
- **Alternative 2:** 3.8 additional Sheriff deputies.
- **Alternative 3:** 4.8 additional Sheriff deputies.

Fire

Based on current population levels and rates of calls for fire and emergency medical services, growth under the alternatives would increase calls for service and require additional staffing and resources on the part of North Mason Regional Fire.

- **Alternative 1 – No Action:** 142 additional calls (5.5% increase)
- **Alternative 2:** 524 additional calls (20.2% increase)
- **Alternative 3:** 669 additional calls (25.7% increase)

Parks and Recreation

Based on Parks and Recreation LOS standards adopted by Mason County, increased population under the alternatives will increase the need for parks in the area. The County specifies LOS standards for Neighborhood Parks, Community Parks, Regional Parks, and Natural/Open space. Combined needs for all park types are presented by alternative below:

- **Alternative 1 – No Action:** 20.2 acres
- **Alternative 2:** 74.7 acres
- **Alternative 3:** 95.4 acres

Schools

Student enrollment associated with population growth in Belfair would vary by alternative. Based on current enrollment rates in the North Mason School District, the alternatives would increase enrollment at local schools as follows:

- **Alternative 1 – No Action:** 182 students (7.6% increase)
- **Alternative 2:** 698 students (29.1% increase)
- **Alternative 3:** 889 students (37.0% increase)

Power

The Draft EIS does not include precise forecasts of power consumption for each alternative, but power demand increases with residential and commercial development. As such, Alternative 1 – No Action would result in the least increase in demand for power of the three alternatives, and Alternative 3 would generate the greatest increase in demand.

What are some solutions or mitigation for impacts?

- The existing 2004 Belfair UGA Plan includes recommendations for bolstering recreation opportunities in Belfair, including new parks, open space, and a trail network. Little progress has been made in implementing these recommendations since the plan was adopted, and the updated UGA Plan maintains the original plan's recommendations for construction of a new regional park in the northeastern portion of the UGA, implementation of a trail network, and construction of neighborhood parks in conjunction with new residential development on the eastern plateau.
- PUD 3 requires all 115 kV Transmission facilities and most 15 kV Main Distribution Feeders to be installed overhead. High density residential distribution facilities are primarily installed underground. Relocation of existing utilities, where feasible, should come at the expense of the requesting entity. In most cases, trenching, restoration, and/or directional drilling is also to be provided by the requesting entity.
- The County should coordinate closely with North Mason Regional Fire on future development plans in Belfair, especially development of the eastern plateau, to ensure adequate and timely access for emergency vehicles.
- The County should consider that Planned Actions demonstrate substantial consistency with Subarea Plan parks, recreation, and open space conceptual plans. The County could also consider the establishment of parks or fee in lieu or impact fees to fund the acquisition and development of park and recreation facilities in the Belfair vicinity to meet growth-related demand

under the Action Alternatives.

- The County should require that planned actions consult with the School District and ensure adequate school capacity. If there is a lack of facilities to serve the development, the County could coordinate with the School District and consider the establishment of school impact fees to help fund future capital needs of the North Mason School District associated with future growth in the Belfair UGA.
- The PUD intends to work closely with Mason County Public Works and Washington State Department of Transportation to secure utility access over and under Highway 3 through Belfair in various locations. The same is true for utility access across the United States Navy Railroad in the area. All effort should be given to expedite utility easements.
- Coordination for joint trenching with other public utilities in the area such as Belfair Water District and Mason County Wastewater should be utilized for Dig Once principles and efficient construction practices. Advanced notification for projects even in planning stages is requested.
- Additional PUD 3 infrastructure will be needed to provide adequate service to this area: 115 kV, high voltage transmission lines (overhead), 15 kV distribution feeders (overhead and underground), and 15 kV distribution line extensions (primarily underground) should be expected and planned throughout the area.

Were any significant unavoidable adverse impacts identified?

The development capacity proposed under all alternatives would increase demand for all public services. With the implementation of UGA plan recommendations, adopted codes and regulations, and the application of proposed mitigation measures (including capital investments for energy supply and distribution), no significant unavoidable adverse impacts to public services are anticipated.

1.6.8 Utilities

How did we analyze Utilities?

Water

Water was analyzed by comparing the expected average daily water demand for each alternative to the future average daily demand described in the draft 2020 Comprehensive Water System Plan and the existing available water rights for Belfair Water District No. 1 (Belfair Water District). Expected average daily

water demand was calculated based on assumptions related to residential and commercial water given the expected increases in residential units and commercial square footage for each alternative.

Wastewater

Wastewater was analyzed by comparing the expected average daily wastewater generation for each alternative to the projections in the Draft 2021 General Sewer Plan (BHC 2021). Expected average daily wastewater generation for Alternatives 1, 2, and 3 were calculated using assumptions related to residential and commercial sewer generation in the GSP given the expected increases in residential units and commercial square footage for each alternative.

Wastewater was also analyzed with regard to nitrogen loading in the effluent from the Water Reclamation Facility and potential adverse effects on water quality in the watershed.

Stormwater

Stormwater was analyzed by reviewing the impact of development and redevelopment on stormwater flow and water quality for each alternative, as projected by the 2018 Belfair UGA Basin Plan.

What impacts did we identify?

Water

Increases in average daily water demand due to the three alternatives are expected to be within existing water rights of Belfair Water District. The growth associated with Alternatives 2 and 3 are larger than the growth projections currently being used for water system planning, so the capital costs for system improvements may be higher than is currently forecast by the Belfair Water District. The Belfair Water District anticipates growth could exceed current district plans; the District intends to update their plans within a period of up to three years to address the growth and capacity that may be encountered to ensure there is adequate capacity to serve. The district anticipates that Alternative 2 levels of growth may be more likely to be addressed in future plans at this time. (Dale Webb, 2021)

Wastewater

Both action alternatives exceed the projected wastewater generation in the GSP and would require expansion of spray field capacity and construction of a new wastewater treatment facility.

Stormwater

Under all alternatives, stormwater generation is expected to increase as the amount of impervious surface increases due to development and redevelopment. These increases in stormwater generation may cause capacity issues in the existing stormwater conveyance system which could lead to increased flooding for portions of the stormwater system.

What is different between the alternatives?

Water

While the estimated drinking water demand calculated for Alternative 1 was within the projected future demand described in the draft 2020 Comprehensive Water System Plan, the expected demand for Alternatives 2 and 3 exceeded this value by 68 percent and 102 percent, respectively.

Wastewater

Alternative 1, the No Action Alternative, is expected to slightly exceed planned spray field capacity by 2036 but is not expected to exceed the Belfair Water Reclamation Facility (WRF) capacity.

The Alternative 2 would result in average annual wastewater generation that is approximately 220% of the 2040 estimate in the GSP and would require construction of an additional wastewater treatment plant. Planning for the plant would need to begin when wastewater generation reaches the 0.425 MGD, which is project to be in 2032.

Alternative 3 would result in average annual wastewater generation that is approximately 270% of the 2040 estimate in the GSP and would require construction of an additional wastewater treatment plant. Planning for the plant would need to begin when wastewater generation reaches the 0.425 MGD, which is project to be in 2031.

Under the action alternatives, nitrogen concentration of effluent is anticipated to remain the same as current conditions, though overall nitrogen loads would increase proportionally to increases in effluent flow. As a result, Alternative 3 would produce the greatest increase in nitrogen loads, and Alternative 1 would produce the least. Alternative 3 Hybrid represents approximately 2.8% less housing capacity and 7.7% less commercial/industrial space than Alternative 3, so it would fall within the range of the DEIS action alternatives.

Stormwater

Unlike Alternative 1, Alternatives 2 and 3 could provide a better opportunity for the planning and construction of regional conveyance or flow control due to denser or more organized development that could occur under these alternatives.

What are some solutions or mitigation for impacts?

Water

Belfair Water District No. 1 has identified capital projects to be constructed during the next 20 years, including system-wide projects, water supply and source projects, storage facility projects, booster pump station projects, and distribution projects. These projects do not include projects related to new development as these are funded by developers through connection fees. The growth projections and associated increases in water demand for Alternatives 2 and 3 should be reviewed by the Belfair Water District to confirm that they will be able to provide adequate water supply if growth is consistent with these alternatives. The Planned Action Ordinance could phase development levels based on the provision of infrastructure and adequate water above 0.33 MGD.

Wastewater

However, the County should consider the expected increases to wastewater generation, particularly for Alternatives 2 and 3, relative to their ongoing GSP update to identify necessary capital improvement projects and evaluate the adequacy of current funding mechanisms. The Planned Action Ordinance could phase development levels based on the provision of infrastructure, spray field capacity of 0.237 MGD, and adequate wastewater treatment capacity above 0.5 MGD.

As part of future Water Reclamation Facility improvements, which will be necessary within the next 20 years, Mason County should consider alternatives to sprayfield application of reclaimed water, including distribution to other portions of the UGA with large irrigation demands or industrial facilities with high toilet flushing demand.

Stormwater

To account for increased stormwater flow and pollution due to increased impervious areas, the County could evaluate opportunities for regional facilities and other capital improvement projects, some of which are identified in the Belfair UGA 2018 Basin Plan.

Currently, the County does not charge a utility fee or connection fee for stormwater. The County could consider implementing a funding mechanism to plan, design, construct, and maintain the stormwater system in the Belfair UGA.

Were any significant unavoidable adverse impacts identified?

With the mitigation measures described above, no significant unavoidable adverse impacts are expected. However, the Planned Action Ordinance could phase development to if needed to ensure adequate water and wastewater infrastructure.

1.6.9 Transportation

How did we analyze Transportation?

Transportation impacts were evaluated consistent with the methods of the Belfair Mobility Plan 2018, Mason County Transportation Element 2016 and SR 3 Freight Corridor Planning Study 2020. The transportation analysis includes 2040 traffic forecasts and an evaluation of roadway network operations, non-motorized and transit facilities. Transportation impacts of the Alternatives were identified based on the WSDOT and Mason County thresholds of significance.

What impacts did we identify?

Transportation demands for all modes would be increased with the Action Alternatives compared to the No Action Alternative. The SR 3 and SR 3 Freight Corridor study intersections would be most impacted by the Alternatives. Additional non-motorized connections would be needed north and south of the Romance Hill Road connector to support development with the Action Alternatives. In addition, there could be need for additional transit service and/or park-and-ride facilities with growth associated with the Alternatives.

What is different between the alternatives?

The Action Alternatives would generate approximately 3,300 to 3,700 more weekday PM peak hour trips than the No Action Alternative. As a result of the higher trip generation, it is anticipated that increases in traffic volumes, delays and travel times would be higher with the Action Alternatives compared to the No Action Alternative; Alternative 3 Hybrid would fall within the range of the DEIS action alternatives.

What are some solutions or mitigation for impacts?

The impacts of the Alternatives are similar resulting in similar mitigation measures. The transportation analysis highlights the need for planned but unfunded

improvements including non-motorized and roadway capacity along SR 3 and the SR 3 Freight Corridor with all Alternatives. Additional capacity improvements at study intersections such as roundabouts and turn lanes would support growth projected with the Action Alternatives. Frontage improvements would help complete the non-motorized network and as developments are reviewed the County should consider additional connections to expand the non-motorized system especially in the northern portion of the UGA. The County does not currently have a traffic impact fee program; therefore, consideration may be given to implementing a development fee per trip to support implementation of the needed capacity improvements within the study area.

Were any significant unavoidable adverse impacts identified?

The Action Alternatives would allow for additional growth in the study area beyond what would occur with the No Action Alternative. There are no significant unavoidable adverse impacts identified with the No Action Alternative. With the Action Alternatives and implementation of the proposed mitigation measures, there would be significant and unavoidable impacts at SR 3/Ridgepoint Boulevard and SR 3 Freight Corridor/E Alta Drive intersections. The SR 3 Freight Corridor/E Alta Drive intersection would only have significant unavoidable adverse impacts with application of a LOS C standard.

2 Proposal and Alternatives

2.1 Introduction and Purpose

The Belfair Urban Growth Area (UGA) is a long-standing urban unincorporated community in Mason County serving as a commercial hub for a broader community at the northern end of Hood Canal. SR 3 bisects the community and was recently widened, the County received a loan to further develop a sewer system, and a new state freight corridor bypass route is pending. With these infrastructure investments facilitating travel between Kitsap and Mason Counties, a small-town quality of life, and natural environment assets, Belfair may soon experience a rapid increase in growth. The County seeks to develop a Planned Action Environmental Impact Statement (EIS) and ordinance for the Belfair UGA. In association with the Planned Action, the County intends to update the Belfair UGA Plan, adopted in December 2004, and refresh the vision. With a planned action and subarea plan update, Mason County desires to facilitate growth that supports a community-based vision for Belfair.

The Draft EIS addressed three alternatives:

- **Alternative 1- No Action.** This alternative would make no changes to existing zoning or UGA boundaries, and no planned action or subarea plan updates would be adopted. The No Action Alternative assumes growth consistent with adopted plans and regulations.
- **Alternative 2 – Moderate Growth.** This alternative would have a similar land use pattern as the No Action Alternative, but with additional mixed use and multifamily residential development at the eastern end of Romance Hill Road, near the future connection to the SR 3 Freight Corridor bypass. The UGA would be amended to include the Belfair Wastewater and Water Reclamation Facility and to exclude undevelopable State-owned land in the southeastern corner of the UGA. Alternative 2 assumes up to 1,837 new housing units (4,441 new residents) and up to 1,185,834 square feet of additional commercial space.
- **Alternative 3 – Higher Growth.** This alternative would exhibit a more intensive land use pattern than the No Action Alternative or Alternative 2,

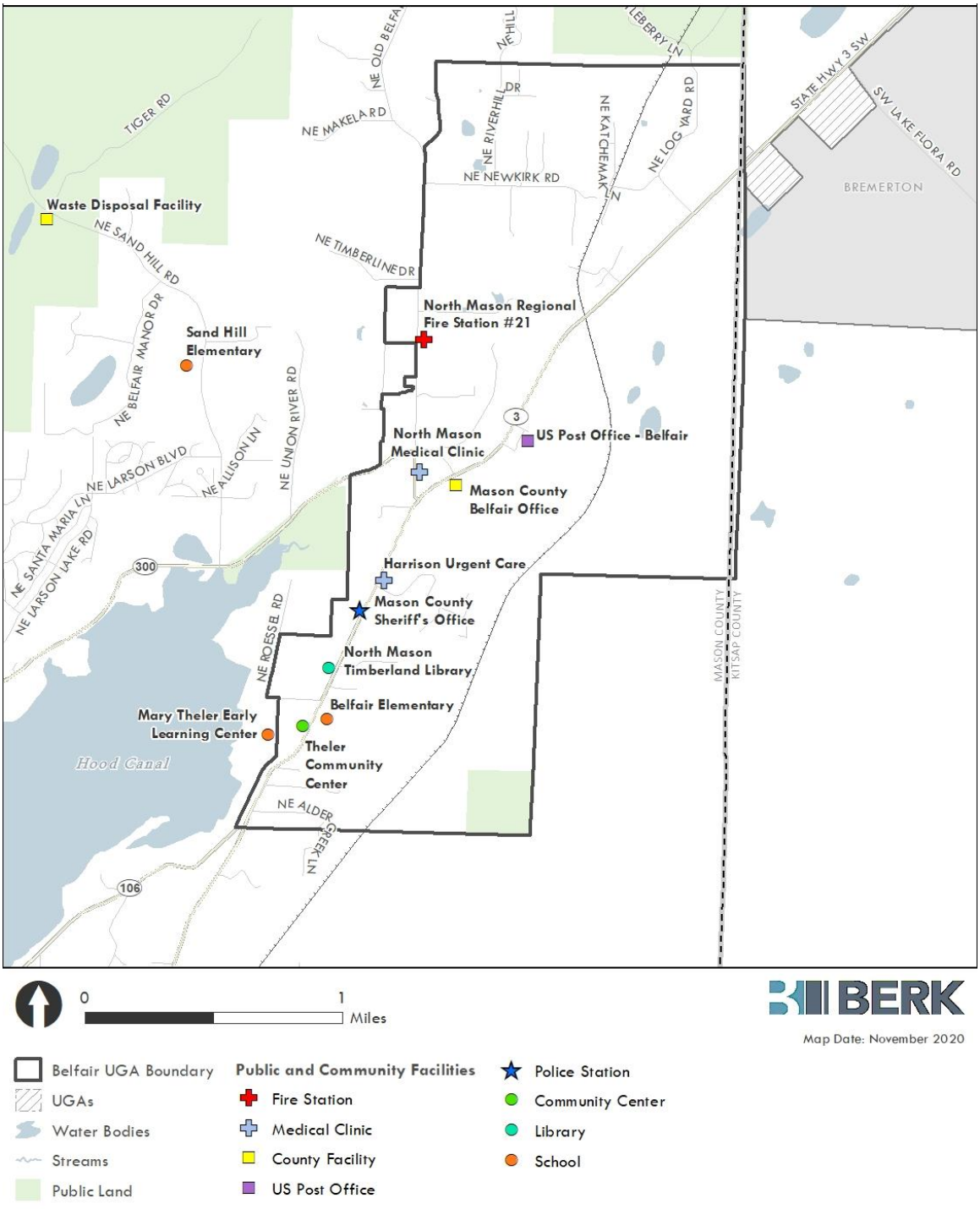
specifically in the northeastern commercial corridor, where a new Master Planned Mixed Use (MP-MU) zone would be created to allow increased capacity for commercial, industrial, and multifamily residential development. The UGA boundary would be amended in the same manner as Alternative 2, and Alternative 3 would allow up to 2,340 new housing units (5,669 new residents) and up to 1,438,852 square feet of additional commercial space.

This Supplemental Draft EIS addresses a hybrid alternative among the range of alternatives addressed in the Draft EIS issued on April 29, 2021.

2.2 Description of the Study Area

The Belfair UGA encompasses nearly 4 square miles at the northeastern corner of Mason County, bounded on the east by the Mason-Kitsap County boundary and centered on the intersection of SR 3 and SR 300. The Union River valley lies to the west of the UGA, flowing into Lynch Cove and Hood Canal to the southwest. The UGA location is shown in Exhibit 2-1.

Exhibit 2-1. Planning Area Vicinity



Sources: Mason County, 2020; BERK, 2020.

2.3 SEPA Process

An EIS is an informational document that provides the County, public, and other agencies with environmental information to be considered in the decision-making process. It also allows the public and government agencies to comment on proposals and alternatives. An EIS describes:

- proposed actions and alternatives;
- existing conditions of the study area;
- impacts that may occur if an alternative were implemented;
- mitigation measures to reduce or eliminate adverse impacts; and
- potential significant, unavoidable, and adverse impacts.

Mason County published a scoping notice and also advertised a virtual meeting during a 21-day scoping period as described in the Planning Process below.

Mason County published a Draft EIS in April 2021 and accepted public comment on the document from April 29-June 1, 2021 and extended the comment period to June 7 to allow for more comment opportunity on both the scope and contents of the Draft EIS; the notice of extended Draft EIS comment is provided in Appendix A. As a result of comments received from public agencies, interested tribes, and local citizens, Mason County determined that targeted additional SEPA analysis of the Draft EIS alternatives with regard to specific topics would be beneficial and would provide the public and decision makers with more complete information about the potential impacts of the Proposal.

This Supplemental Draft EIS supplements the Belfair UGA Draft EIS published on April 29, 2021 and provides additional analysis of issues identified in comments on the Draft EIS, as well as specific revisions to the text of the Draft EIS. A 30-day comment period has been established with this Draft Supplemental EIS to support the public review process of the Proposal (see Fact Sheet).

Full documentation of all public comments received with the original Draft EIS and this Supplemental Draft EIS, and associated responses will be included in the Final EIS.

This Supplemental Draft EIS is organized to provide the information to the public, agencies, and decision makers in the following chapters:

- Chapter 1 Summary
- Chapter 2 Proposal and Alternatives
- Chapter 3 Supplemental Impact Analysis and Mitigation
- Chapter 4 Draft EIS Clarifications and Corrections

- Chapter 5 Acronyms
- Chapter 6 References
- Chapter 7 Appendices

The Draft EIS examined a No Action Alternative addressing the current Comprehensive Plan and existing zoning regulations for the area. The No Action Alternative is required to be evaluated by SEPA. Two Action Alternatives were also addressed that vary land use, growth, zoning, and other features. The Action Alternatives mix and match features of land use and zoning shared during scoping. This Chapter 2 summarizes the Draft EIS Alternatives and provides a description of a new Alternative 3 Hybrid alternative developed based on feedback from the Mason County Planning Advisory Commission during their review of the Draft EIS.

A summary of the Draft EIS and Supplemental Draft EIS analysis is provided in Chapter 1.

2.4 Planning Process

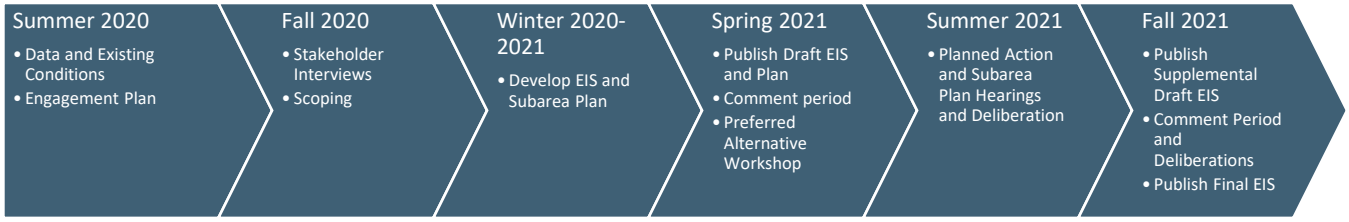
During summer 2020 a public engagement plan was developed. At the same time, information was collected and existing conditions in the study area were described. In August and September 2020, stakeholder interviews were conducted followed by a scoping process and community meeting, and survey in November and December 2020. This provided an opportunity for public and agency comments on the contents and alternatives evaluated in this EIS. Results of scoping are included in Draft EIS Appendix A available at the project website.

In April 2021 a Draft Planned Action EIS and Subarea Plan amendments were published with a minimum 30-day comment period, which was extended to 39 days. The Mason County Planning Advisory Commission held meetings and public hearings during the comment period to accept public testimony and deliberate.

This Supplemental Draft EIS has been published with a separate 30-day comment period, and the Planning Advisory Commission and Board of County Commissioners will hold meetings and eventually hearings and deliberations in October-December 2021.

Responses to comments on both the Draft EIS and this Supplemental Draft EIS will be developed and a Final EIS published allowing a decision on the Subarea Plan, related Comprehensive Plan amendments, and the Planned Action Ordinance by the end of 2021. See the overall process summarized in Exhibit 2-2.

Exhibit 2-2. Belfair Planned Action EIS Process



2.5 Objectives and Alternatives

2.5.1 Objectives

SEPA calls for a statement of project objectives, around which alternatives can be developed and evaluated. Following are objectives based on the 2004 Belfair Plan and the County intent to facilitate growth that fits the vision of the area.

- Facilitate growth reflective of a community-supported vision. Consider and include a Planned Action Ordinance for some or all of the UGA.
- Focus new growth in the area from SR 3 east to the SR 3 Freight Corridor.
- Support and enhance Belfair as a hub for the broader community.
- Provide opportunities for clustered development that provides housing choices and recreation/open space.
- Refresh the 2004 Belfair UGA Plan, while advancing key plan themes:
  - Promote natural environment conservation and sustainability. Care for the land and natural resources which area critical to the community's economic health and long-term sustainability.
  - Support an economically diverse center. Diversify the economy to include industrial, professional, service, and tourist-based businesses.
  - Promote community identity and well-designed growth. Create focal points.
  - Develop new residential development to create neighborhoods, not just housing.
  - Encourage multimodal transportation connections.

2.5.2 Alternative 1 – No Action

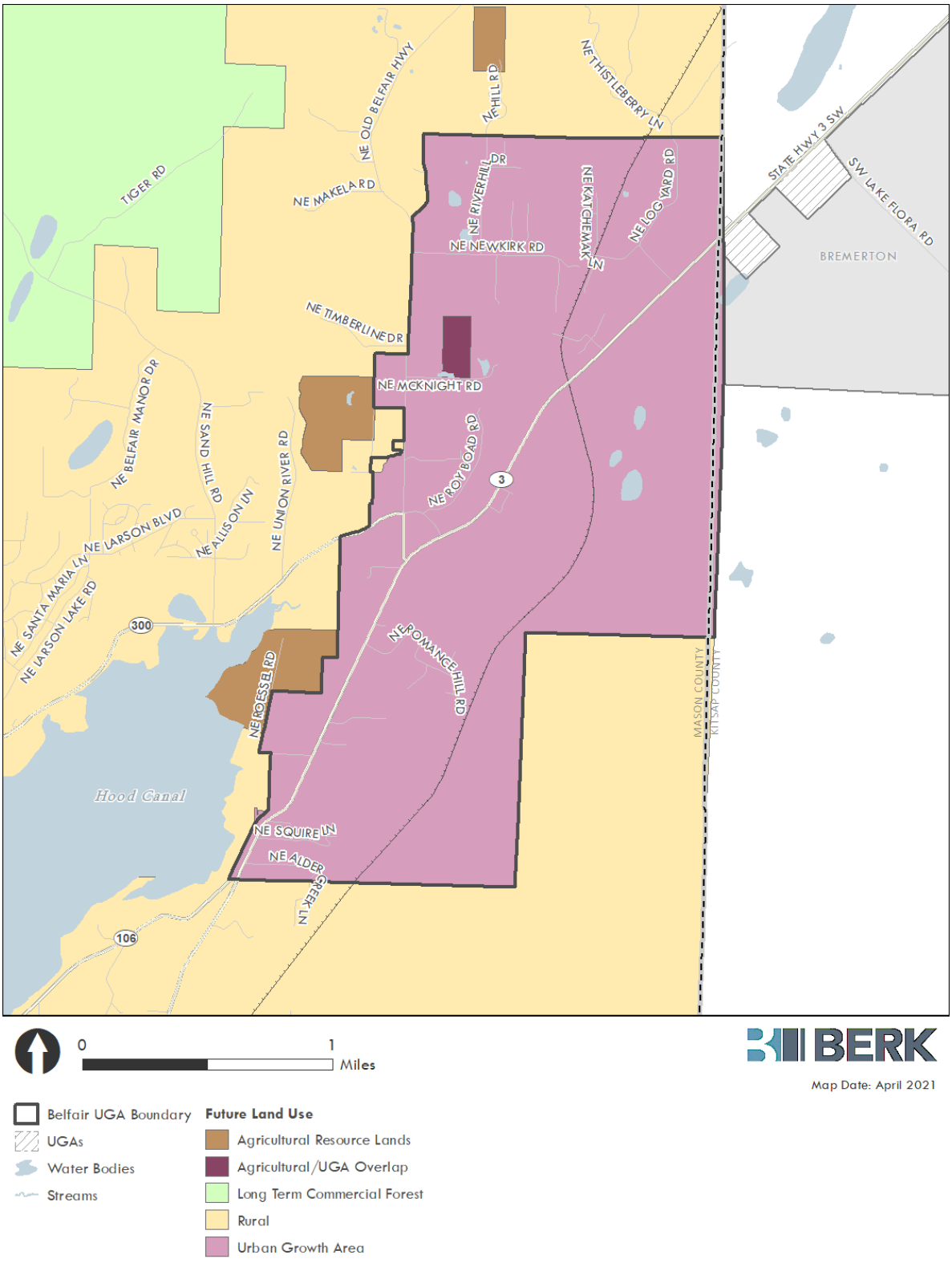
SEPA requires evaluation of a "No Action" Alternative. For the purposes of this EIS, the No Action Alternative assumes growth consistent with adopted plans and

regulations. Alternative 1 – No Action assumes that no subarea plan update, zoning changes, or planned action would be adopted, and current plans and development regulations would remain in place. Growth under the No Action Alternative is assumed to be consistent with Mason County's adopted growth target for the Belfair UGA and recent trends in development permits. The combined Allyn/Belfair 2016-2020 target is 1,730 persons from 2016-2036. There is no jobs target in the Mason County Comprehensive Plan, but the plan assumes 0.7% annual growth in employment. Accounting for growth since 2016-2020 the remaining target is about 1,459. If assuming permits in the pipeline develop, the Belfair share of the target would be about 479 dwellings and 1,200 population.

Based on a land capacity estimate, there is room for about 1,809 dwellings and 4,381 persons, as well as 1.17 million square feet of commercial and industrial space. For the purposes of this alternative and to establish a lower bookend, the pipeline population and housing of 479 dwellings and 1,200 persons is assumed for the EIS evaluation, and employment space growth of 0.7% is evaluated for jobs. This rate of growth equates to approximately 54,342 square feet of employment space growth between 2020 and 2036.

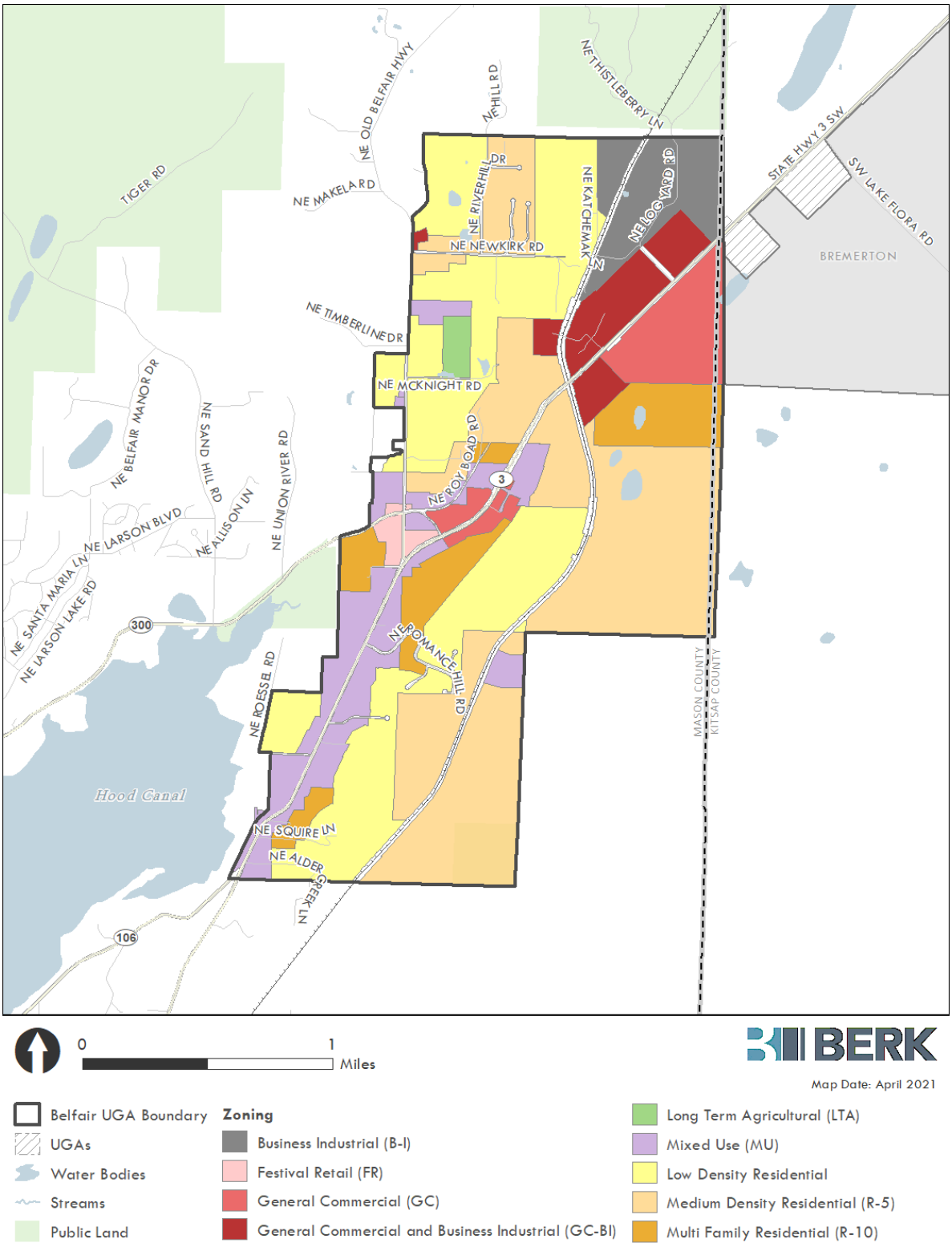
The Comprehensive Plan maps Belfair as a UGA. See Exhibit 2-3. Current zoning is more detailed. See Exhibit 2-4.

Exhibit 2-3. Belfair Comprehensive Plan Future Land Use Map



Source: Mason County GIS, 2021.

Exhibit 2-4. Belfair No Action Zoning



Source: Mason County GIS, BERK 2020.

2.5.3 Alternative 2 – Moderate Growth

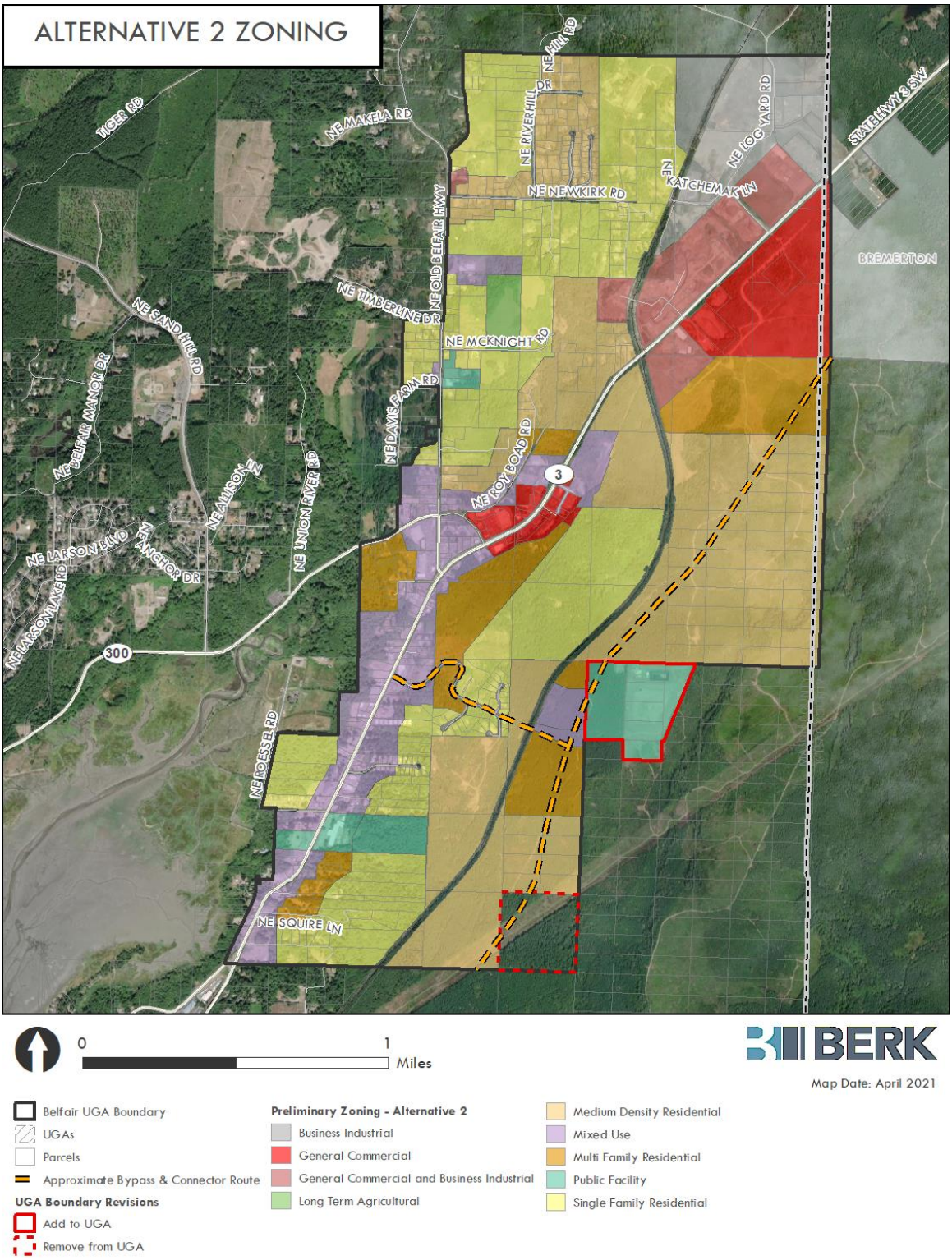
Alternative 2 would exhibit a similar land use pattern as the No Action Alternative, with targeted zoning changes to accommodate additional growth and minor changes to the UGA boundary, as follows:

- Rezone the following sites to Public Facility (PF) to recognize their use for community facilities:
  - Proposed North Mason Regional Fire Authority headquarters (490 NE Old Belfair Highway) and the adjacent existing NMRFA headquarters station at 460 NW Old Belfair Highway;
  - Belfair Elementary School and Mary Theler Early Learning Center; and
  - Belfair Wastewater and Water Reclamation Facility.
- Convert the existing Festival Retail (FR) zoning to Mixed Use (MU) for consistency with surrounding properties.
- Create a mixed-use node at the eastern end of Romance Hill Road in anticipation of a future Romance Hill connection to the SR 3 Freight Corridor bypass. This would be accomplished by expanding the existing MU zoning and rezoning nearby Medium Density Residential (R-5) properties to Multifamily Residential (R-10).
- Expand the UGA boundary by approximately 54.5 acres to include the Belfair Wastewater and Water Reclamation Facility, plus adjacent County-owned properties.
- Reduce the UGA by approximately 40.6 acres in the southeastern corner of the UGA to remove a property owned by Washington State Department of Natural Resources (DNR) that is unlikely to be developed and which is not readily accessible from the rest of the UGA.

The zoning and UGA boundary revisions for Alternative 2 are illustrated in Exhibit 2-5.

To facilitate future growth in Belfair in support of a community-based vision for the UGA, Alternative 2 would allow up to 1,837 new housing units (4,441 new residents) and up to 1,185,834 square feet of additional commercial space.

Exhibit 2-5. Proposed Zoning – Alternative 2



Sources: Mason County, 2020; BERK, 2021.

2.5.4 Alternative 3 – Higher Growth

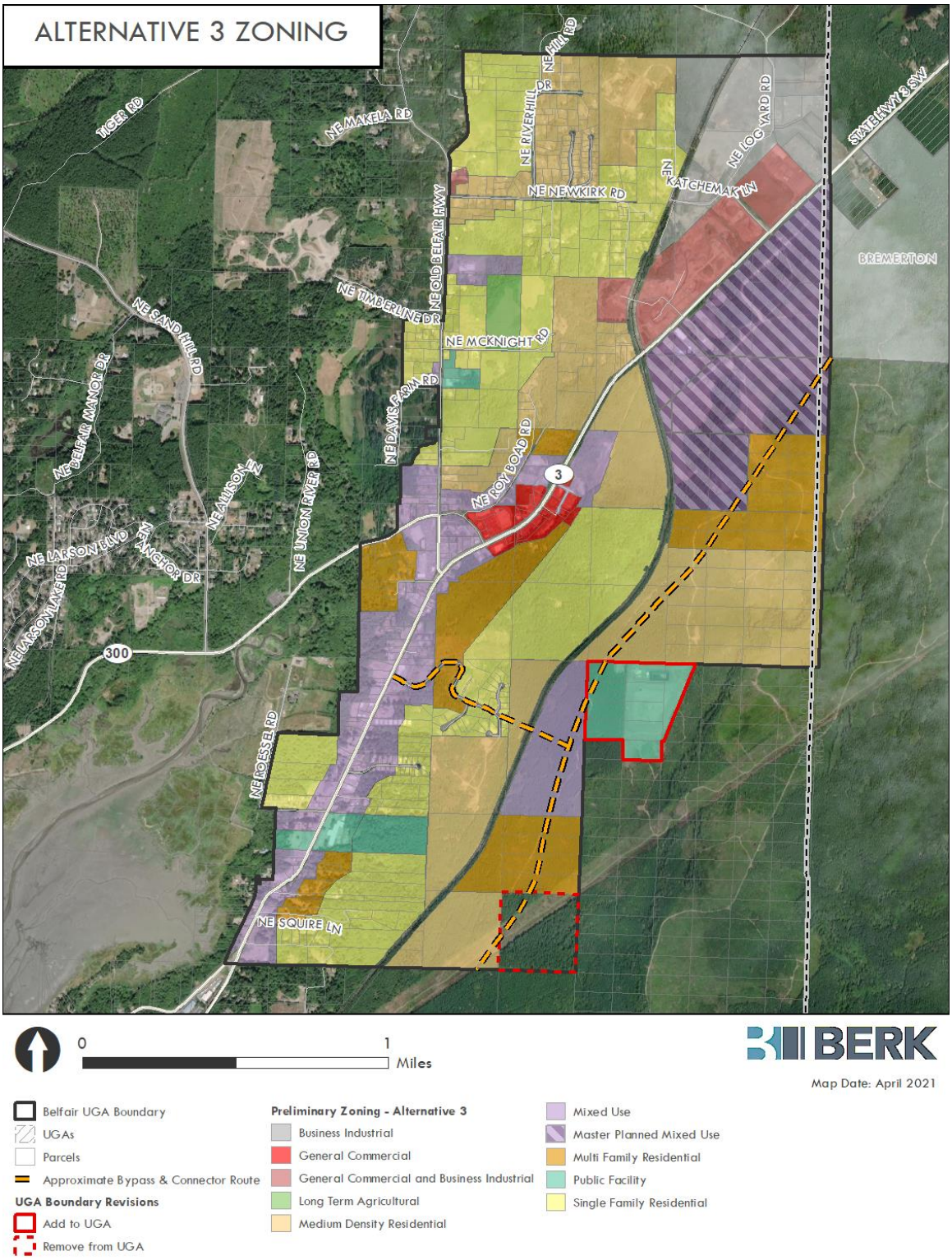
Alternative 3 would exhibit a more intensive land use pattern than the No Action Alternative or Alternative 2. Zoning changes would be focused in the commercial/industrial center in the northeastern corner of the UGA and in the eastern residential and mixed-use portions of the UGA on the plateau. No major zoning changes are planned for Downtown Belfair. Zoning changes and UGA boundary revisions under Alternative 3 are as follows:

- Incorporate the Public Facility (PF) and Festival Retail (FR) rezones described in Alternative 2.
- Incorporate the UGA boundary revisions described in Alternative 2.
- Create a mixed-use node at the eastern end of Romance Hill Road in anticipation of a future Romance Hill connection to the SR 3 Freight Corridor bypass. This would be accomplished by expanding the existing MU zoning and rezoning nearby Medium Density Residential (R-5) properties to Multifamily Residential (R-10). Compared to Alternative 2, Alternative 3 would further expand the MU zone to the south along the proposed bypass route.
- Rezone approximately 94 acres of Single Family Residential (R-4) land north of Newkirk Road, east of Riverhill Lane, and west of the railroad to Medium Density Residential (R-5).
- Create a new zone, Master Planned Mixed Use (MP-MU) to encompass the land currently zoned for commercial and multifamily uses south of SR 3 and east of the railroad. This zone would allow a mix of commercial and residential uses with a focus on business/industrial park development and multifamily housing. Medium Density Residential (R-5) areas immediately to the south would be rezoned to R-10 to create a density buffer.

The zoning and UGA boundary revisions for Alternative 3 are illustrated in Exhibit 2-6.

Alternative 3 represents a higher level of potential growth than Alternatives 1 or 2 and would allow up to 2,340 new housing units (5,669 new residents) and up to 1,438,852 square feet of additional commercial space.

Exhibit 2-6. Proposed Zoning – Alternative 3



Sources: Mason County, 2020; BERK, 2021.

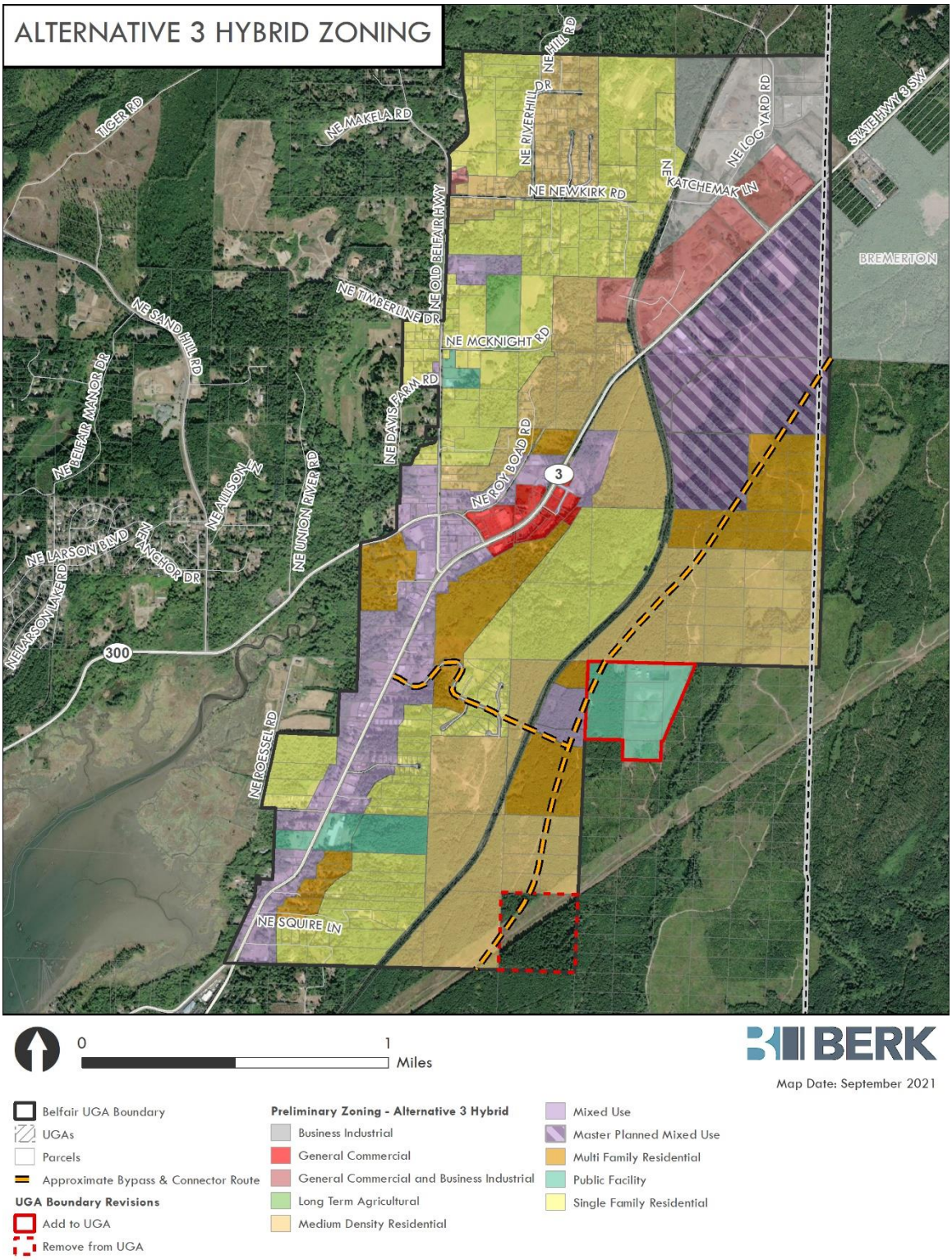
2.5.5 Alternative 3 Hybrid

Alternative 3 Hybrid combines the higher growth potential of Alternative 3 with some of the features of Alternative 2. The Alternative 3 Hybrid was developed based on feedback from the Planning Advisory Commission and public testimony. The zoning and UGA boundaries proposed for Alternative 3 Hybrid are the same as Alternative 3, except as follows:

- The 94-acre area of Single Family Residential (R-4) zoning north of Newkirk Road, east of Riverhill Lane, and west of the railroad would retain existing zoning R-4 instead of being rezoned to Medium Density Residential (R-5).
- The mixed-use node proposed at the eastern end of Romance Hill Road would match the zoning and extent included in Alternative 2, which covers and smaller area than Alternative 3.

The zoning and UGA boundary revisions for Alternative 3 Hybrid are illustrated in Exhibit 2-7. Alternative 3 Hybrid would represent a higher level of growth potential than Alternatives 1 or 2, but lower than Alternative 3. It would allow up to 2,274 new housing units (5,509 new residents) and up to 1,328,708 square feet of additional commercial space.

Exhibit 2-7. Proposed Zoning – Alternative 3 Hybrid



Sources: Mason County, 2020; BERK, 2021.

2.5.6 Summary of Alternatives

Exhibit 2-8 provides a summary of the growth levels anticipated under each of the alternatives.

Exhibit 2-8. Summary of Alternatives Land Use and Growth Mix

	NO ACTION	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 3 HYBRID
Housing Units	**478**	**1,834**	**2,340**	**2,274**
Single-Family	144	1,078	841	917
Townhome/Multiplex	0	210	582	511
Multifamily	334	544	916	511
Population	**1,200**	**4,441**	**5,669**	**5,509**
Commercial Space (sq ft)	**54,342**	**1,185,834**	**1,438,852**	**1,328,708**
Industrial	19,564	421,990	735,867	735,867
Office	17,389	381,922	382,102	327,030
Retail	17,389	381,922	320,883	265,812

Source: BERK, 2021.

A comparison of Alternative Features is provided in Exhibit 2-9.

Exhibit 2-9. Comparison of Alternative Features

FEATURE	No Action	Alternative 2	Alternative 3	Alternative 3 Hybrid
Zoning Map Changes for Compatibility / Clarity	No change	X	X	X
Zoning Map Changes addressing increased job and housing density along bypass	No change		X	X
UGA Changes for Public Lands	No change	X	X	X
Planned Action	None	X	X	X
Subarea Plan Refresh and Associated Comprehensive Plan Amendments	No change	X	X	X

Source: BERK 2021.

3 Supplemental Impact Analysis and Mitigation

This chapter includes supplemental impact analysis and mitigation measures for the following topics:

- Section 3.1 Water Resources
- Section 3.2 Utilities
- Section 3.3 Transportation

This chapter summarizes public comments received that prompted additional SEPA review and provides additional analysis of the alternatives. Additional mitigation measures for identified impacts are listed as necessary.

3.1 Water Resources

3.1.1 Summary of Draft EIS Comments Received

The Squaxin Island Tribe and the Skokomish Tribe are concerned that the increased water demand in the Belfair UGA will impact their senior water rights within WRIA 14 and WRIA 15, which includes Union River and Coulter Creek.

Specific comments and questions addressed in this section are listed below:

- If there is more growth in Belfair, then the increased pumping of Belfair area wells is likely to specifically affect the Union River, while rural dispersed growth would affect multiple creeks as well as the Union River. Has the County done any hydro-geologic analysis to ascertain impacts with different well pumping scenarios?
- The County has not produced any definitive surface and/or groundwater studies to provide hydro or hydro-geologic information that evidences or shows that there is physically enough water resource availability to facilitate either Alternative 2 or Alternative 3.
- Quantify the different impacts to groundwater (and therefore Union River and Coulter Creek) that result from additional pumping in Alternatives 1, 2, and 3 of the Draft EIS.

3.1.2 Supplemental Impact Analysis

Thresholds of Significance

The thresholds of significance utilized in this impact analysis include:

- The potential to reduce groundwater recharge or impact aquifer water quality due to mismanaged or poorly designed mitigation measures in the Belfair UGA.
- The potential to negatively affect streamflow and surface water quality as a result of groundwater withdrawal or generation of stormwater runoff in the Belfair UGA.

Minimum in-stream flows in state rules are considered in the thresholds.

The focus of this analysis is the Belfair Urban Growth Area (UGA) since the proposal is to update the Belfair Subarea Plan (see SEPA Objectives in Chapters 1 and 2). The County's Comprehensive Plan addresses the rural growth pattern, and the County can consider the balance of growth in its next periodic review. However, the County is focusing growth in the Belfair UGA per GMA to put it where more services and infrastructure are available or can be made available, and to limit sprawl and retain rural character.

Impacts Common to All Alternatives

In 2021, Pacific Groundwater Group (PGG) completed a hydrogeologic analysis to estimate likely hydrogeologic impacts to stream baseflows ("streamflow capture") due to increased pumping from Belfair Water District No. 1 wells. See Appendix B. Capture estimates for Union River and Coulter Creek are provided in Exhibit 3-1.

Exhibit 3-1. Estimated Annual Pumping Impacts on Union River and Coulter Creek for Belfair Wells 1/2 and Well 4

Stream	Capture As a Percent of Pumped Volume	
	Wells 1/2 [a]	Well 4 [b]
Union River	25.1%	45.3%
Coulter Creek	21.3%	19.2%

Source: PGG, 2021

[a] *A linear capture response was defined for Wells 1/2 pumping at rates between 139 and 300 gpm.*

[b] *A linear capture response was defined for Well 4 pumping at rates between 100 and 400 gpm.*

Low flow periods in streams result in impacts to habitat connectivity, degradation of forage area, potential aquatic species mortality, and reduced water quality. The minimum instream flows (WAC 173-515-030) for Union River and Coulter Creek are used in this analysis to evaluate the impact of well pumping on streamflow during low flow periods.

The Belfair Water District No. 1 has five wells that provide water to the Belfair UGA:

- **Well 1:** Well 1 is located west of Highway 3 near Hood Canal and Well 2. Well 1 has an instantaneous water right quantity of 150 gpm. Well 1 is used as a primary well (Stantec, 2021).
- **Well 2:** Well 2 is located west of Highway 3 near Hood Canal and Well 1. The water right for Well 2 is supplemental to Well 1. Well 2 is used as an emergency well because it produces sand during startup (Stantec, 2021).
- **Well 4:** Well 4 is located in the uplands near Union River. It has an instantaneous water right quantity of 600 gpm. Currently, Well 4 is only pumped at approximately 100 gpm (Stantec, 2021). Along with Well 1, Well 4 is a primary source of drinking water for the Belfair Water District No. 1.
- **Well 3:** Well 3 is located on Hummingbird Lane near Well 5. The water right for Well 3 is supplemental to Well 1. Well 3 produces fine blue clay particles when

operated and is not cost-effective to operate. Therefore, Well 3 is a supplemental well and is not frequently used (Stantec, 2021).

- **Well 5:** Well 5 is located on Hummingbird Lane near Well 3. Well 5 does not currently have a pump and is not permitted for municipal supply (PGG, 2021).

The Belfair Water District No. 1 2020 Comprehensive Water System Plan (Stantec, 2021) includes a water right evaluation which identifies Wells 1 and 4 as the primary wells, and discussion with Belfair Water District No. 1 (Dale Webb, Pers. Comm.) indicates that withdrawal is split between Well 1 and Well 4 until the capacity of Well 1 is exceeded. These assumptions are used to estimate the impact of groundwater pumping on Union River and Coulter Creek.

Estimated annual pumping impacts from Belfair Wells 1 and 4 are shown in Exhibit 3-2. The modeling effort described above did not quantitatively evaluate pumping from Wells 3 and 5 (which is currently a non-producing well [Stantec, 2021]), but included a qualitative analysis of these wells which assumes that because the wells are located south of the other wells, the majority of water pumped from these wells is likely to come from marine sources (groundwater beneath Hood Canal and Case Inlet) and streams further south of the study area, rather than from the Union River and Coulter Creek (PGG, 2021). Therefore, it is assumed that the greatest impact to Coulter Creek and Union River results from groundwater pumping of Wells 1 and 4.

Exhibit 3-2. Groundwater Pumping Impacts on Streamflow

Metric	Baseline Conditions (2020)	Alternative 1 (2036)	Alternative 2 (2036)	Alternative 3 (2036)
Total water demand (MGD) [a]	0.13	0.23	0.55	0.66
Groundwater from Each Well (MGD) [b]				
Well 1	0.065	0.115	0.216	0.216
Well 4	0.065	0.115	0.334	0.444
Groundwater Pumped from Union River (MGD) [c]				
Well 1	0.016	0.029	0.054	0.054
Well 4	0.029	0.052	0.151	0.201

Metric	Baseline Conditions (2020)	Alternative 1 (2036)	Alternative 2 (2036)	Alternative 3 (2036)
Groundwater Pumped from Coulter Creek (MGD) [c]				
Well 1	0.014	0.024	0.046	0.046
Well 4	0.012	0.022	0.064	0.085
Anticipated decrease in flow due to pumping (cfs)				
Union River	0.085	0.150	0.382	0.474
Coulter Creek	0.049	0.087	0.205	0.244
Minimum Instream Flow (cfs) [d]				
Union River	20			
Coulter Creek	13			
Percent of Minimum Instream Flow Withdrawn By Wells 1 and 4				
Union River	0.43%	0.75%	1.91%	2.37%
Coulter Creek	0.38%	0.67%	1.57%	1.88%
Percent of Minimum Instream Flow Withdrawn By Wells 1 and 4 Under Alternatives 2 and 3 when Compared to Alternative 1 [e]				
Union River	NA	NA	1.16%	1.62%
Coulter Creek	NA	NA	0.91%	1.21%

[a] *One hundred percent of the total water demand is assumed to come from Wells 1 and 4.*

[b] *Withdrawal is assumed to be split between Well 1 and Well 4 until the 150 gpm maximum flow capacity of Well 1 (Stantec, 2021), is exceeded. When demand exceeds 150 gpm, the remainder is assumed to be pumped from Well 4.*

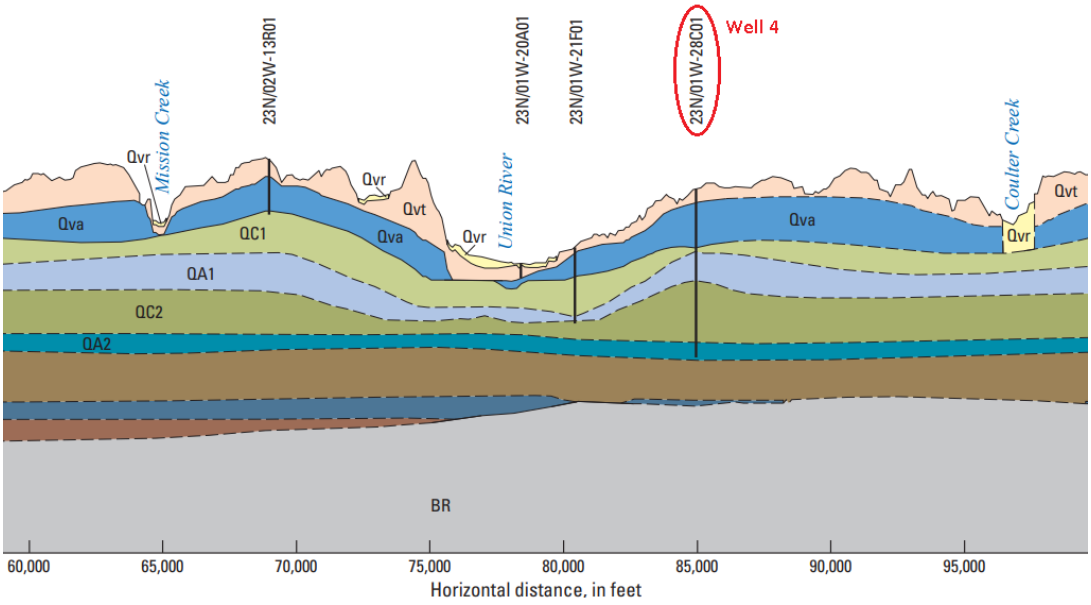
[c] *Well capture rates from modeling performed by PGG (PGG, 2021).*

[d] *Source: WAC 173-515-030.*

[e] *Calculated by subtracting the percent reduction in streamflow for Alternative 1 from Alternatives 2 and 3 respectively.*

In general, the Belfair Water District wells, such as Well 4, are deeper than private wells. A deeper well will generally have more impact on marine waterbodies and less on streams in comparison to a shallow well installed in the same location (Glenn Mutti-Driscoll, Pers. Comm). Exhibit 3-3 shows the relative depth of Well 4 compared to nearby wells in the Union River valley not owned by the water district, based on USGS review of well monitoring logs.

Exhibit 3-3. Hydrogeologic Sections, Kitsap Peninsula, West-Central Washington from the Hydrogeologic Framework, Groundwater Movement, and Water Budget of the Kitsap Peninsula, West-Central Washington



Source: USGS, 2014.

Alternative 1 – No Action

Under Alternative 1, groundwater pumping may reduce minimum instream flow for Union River and Coulter Creek 0.75% and 0.67% respectively.

Alternative 2 – Moderate Growth

Under Alternative 2, groundwater pumping may reduce the minimum instream flow for Union River and Coulter Creek 1.91% and 1.57% respectively. This represents a 1.16% and 0.91% reduction in minimum instream flow for Union River and Coulter Creek when compared to Alternative 1.

Alternative 3 – Higher Growth

Under Alternative 3, groundwater pumping may reduce the minimum instream flow for Union River and Coulter Creek 2.37% and 1.88% respectively. This represents a

1.62% and 1.21% reduction in minimum instream flow for Union River and Coulter Creek when compared to Alternative 1.

Alternative 3 Hybrid

Alternative 3 Hybrid would represent approximately 2.8% less housing capacity and 7.7% less commercial/industrial space than Alternative 3. As such, water demand, associated groundwater pumping, and associated impacts would be greater than Alternative 2 and less than Alternative 3.

3.1.3 Mitigation Measures

Incorporated Plan Features

The Draft Subarea Plan published with the Draft EIS includes recommendations related to critical areas and water quality and quantity. In response to public comments received on the Draft EIS and the supplemental analysis contained in this chapter, the following revisions to relevant draft polices are proposed:

- P-1: Expand stream corridor, wetlands, and critical areas protection
  - The preliminary zoning recommendations call for lower densities in most of these areas. Maintain and enforce the current critical areas ordinance. Proposed regulations and design guidelines also encourage clustering of development to protect these resources. See Water Quality Recommendations below for additional measures to protect water quality and stream integrity.
- W-2: Undertake a program of local water quality ~~detention~~ facilities to reduce pollutants in local streams and in the canal and detention and infiltration facilities (where feasible) to improve flow rates in streams.
- W-3: Continue current collaborative, inter-agency efforts to monitor and upgrade water quality and quantity.
- W-4: Encourage an education and volunteer program encouraging local residents and property owners to adopt "best practices" regarding stream and wetland maintenance and low impact development.

Critical area regulations are meant to protect streams and fish. Low impact development is mean to reduce impervious surfaces and limit ground disturbance.

Regulations and Commitments

The Mason County Plan 2036 (Mason County, 2017) includes policies and objectives related to the environment and public services that emphasize limiting groundwater and surface water use through water conservation strategies including education,

reuse, and recycling. Ongoing fish passage barrier removal projects help to mitigate the habitat connectivity disruptions that may result from low flows in streams.

The County has committed to support water quality monitoring efforts and protection of environmentally sensitive areas (Mason County, 2017). The County could consider monitoring streams for changes in flow rates and habitat limiting factors influenced by reduced stream flows. This monitoring could inform conservation efforts and other measures to mitigate negative impacts to environmental resources, such as water reuse and restrictions on water use.

Other Proposed Mitigation Measures

Potential mitigation options for County consideration are listed below:

- The County should consider making connection to a public water system a condition of planned action approval. This would reduce the number of new private wells installed in the UGA; as described in the impact analysis, the deeper wells used by Belfair Water District are less likely to impact stream flows than the shallower wells used by private systems.

3.1.4 Significant Unavoidable Adverse Impacts

Based on hydrogeologic analysis and flow calculations described above, the additional groundwater withdrawal expected for Alternatives 2 and 3 is likely to reduce streamflow in the Union River and Coulter Creek more than stream flow would be reduced by Alternative 1. During periods of high natural stream flow, the percent reduction resulting from groundwater withdrawal for the UGA is very small for either stream. During periods of low flow (as represented by the minimum instream flow in the calculations above), the percent reduction is greater, but still less than 3 percent reduction in stream flow.

By following the mitigation measures listed above, no significant unavoidable adverse impacts to stream flow or tribal water rights are expected.

3.2 Utilities

3.2.1 Summary of Draft EIS Comments Received

The Squaxin Island Tribe asked questions about the impact of expanding the Belfair Water Reclamation Facility (WRF) on groundwater, surface water, and water quality of Coulter Creek and its tributaries, which are Treaty Resources of the Tribe. The Tribe noted past violations of the State Reclaimed Water Permit No. ST-6224 (permit) for Nitrogen and other parameters and the planned increase in sprayfield capacity discussed in the GSP and the Draft EIS.

Specific comments and questions addressed in this supplemental analysis are listed below:

- Quantify the current nitrogen load released through the pond and sprayfield into the watershed.
- Quantify the future nitrogen load released through the pond and sprayfield into the watershed under Alternatives 1, 2, and 3.
- What are the County's plans to decrease the number of violations at the Belfair WRF and improve treatment?
- What are alternatives to only expanding the sprayfield? Forestry irrigation is a way to use wastewater, but forestry in Western Washington does not require irrigation. While improving wastewater treatment, could the WRF fully infiltrate reclaimed water in new locations or reuse it inside the Belfair UGA?

A discussion of WRF effluent concentration violations and existing and expected Nitrogen loads, and Wastewater Utility plans for improved performance are presented below.

3.2.2 Supplemental Impact Analysis

Thresholds of Significance

Utilities were analyzed by considering how the proposed alternatives, including changes in population, dwelling units, and jobs would affect water demand, wastewater generation, and the quantity of stormwater runoff. Stormwater quality is discussed in the Water Resources section.

For the purposes of this EIS, alternatives would be considered to result in significant impacts on utilities if there are:

- Inconsistencies with utility system planned growth and capital plans.

Alternatives would be considered to result in significant impacts on utilities if they would cause the frequency of permit violations to increase. Permit limitations for reclaimed water are provided in Exhibit 3-4.

Exhibit 3-4. Belfair WRF Reclaimed Water Limitations

Parameter	Average Monthly [a]	
Flow	0.125 MGD	Reclaimed Water Production
Reclaimed Water - Prior to Disinfection		
Parameter	Average Monthly [a]	Sample Maximum [b]
Turbidity	0.2 NTU	0.5 NTU
Disinfected – Reclaimed Water		
Parameter	Average Monthly [a]	Average Weekly [c]
BOD_5	20 mg/L	30 mg/L
TSS	30 mg/L	45 mg/L
Dissolved Oxygen	Shall be measurably present in effluent at all times	
Parameter	Average Monthly [a]	Sample Maximum [b]
Total Nitrogen as N	10 mg/L	15 mg/L
Parameter	7-day Median [d]	Sample Maximum [e]
Total Coliform	2.2 MPN/100 mL	23 MPN/100 mL
pH	Shall be between 6.0 and 9.0 standard units at all times	

Source: State Reclaimed Water Permit No. ST-6224
[a] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
[b] The sample maximum is defined as the value not to be exceeded by any single sample.
[c] The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
[d] The median number of total coliform organisms in the reclaimed water after disinfection shall not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.
[e] The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.

Past Performance of the WRF and Plans for Improved Performance.

Historic violations of the reclaimed water limitations of the Permit are shown in Exhibit 3-5.

Exhibit 3-5. Belfair WRF Permit Violations

Parameter	Statistic	Total Violations [a]	Violations per year
Flow	Average Monthly	3	0.3
Turbidity	Average Monthly	1	0.1
Dissolved Oxygen	Sample Maximum	14	1.4
Nitrogen	Average Monthly	14	1.4
	Sample Maximum	17	1.7
Total Coliform	7-day Median	124	12.4
	Sample Maximum	2	0.2
pH	Sample Maximum	3	0.3

[a] *Total number of violations include 'Numeric Effluent Violations' and 'Exceedance of Design Criteria' categories (Ecology 2021) Violations for incorrect recording or sample-not-collected are not shown here.*

Mason County has developed a plan to correct existing plant deficiencies which includes improved staffing levels and training, improvements to operations and maintenance, and implementation of the following maintenance-related activities outlined in the GSP's capital improvement plan:

- **Feed Forward Pump Repairs:** Rebuild three non-functioning feed forward pumps.
- **Process Monitoring Equipment Replacement & Aeration System Repairs:** Replace the following process monitoring and aeration system equipment:
  - Dissolved oxygen probes in the pre-aeration and anoxic basins.
  - Control panel screens with sun exposure damage. Sun mitigation measures, such as sunshields, will also be installed.
  - Membrane bioreactor screen and controller.
  - Two airflow actuators located on the aeration branch piping that feeds both pre-aeration basins.
  - Repair hole in damaged airflow pipe for the diffusers in the active pre-aeration basin.
- **Annual Membrane Replacement Cost:** Annual capital recovery cost to replace the microfiltration membrane units on a 10-year cycle.

- **Current WRF Maintenance Items:** Replace the following non-functional equipment:
  - Worn and leaking mechanical seals on process pumps.
  - Full rebuild of all mixers and yearly maintenance to extend life of rebuild.
  - Expansion joints on all waste-activated sludge pumps with UV damage.

These measures are expected to reduce the rate of violations during future WRF operations (Richard Dickinson, Pers. Comm.).

Impacts Common to All Alternatives

Due to the County's plan to address existing plant deficiencies described above, the rate of violations is expected to decrease during future WRF operations and is not expected to be impacted by development proposed under Alternatives 1, 2, or 3 or the Alternative 3 Hybrid that is in the range of Alternatives 2 and 3.

Exhibit 3-6 shows the existing and future nitrogen loads released through the pond and sprayfield. The median average monthly nitrogen concentration since the WRF began operation in 2012 is 5.0 mg/L (Ecology 2021). This historic monthly median value was assumed to apply to future WRF performance. Because the Nitrogen concentration expected for future conditions is the same as baseline conditions, expected increases in Nitrogen load are proportional to expected increases in flow.

Exhibit 3-6. Growth of Median Annual Nitrogen Load Among Alternatives

Metric	Baseline Conditions (2020)	GSP (2040)	Alternatives (2036)		
			1	2	3
Spray Field Flow (MGD) [1]	0.067	0.322	*0.246*	*0.723*	*0.860*
Median Annual Nitrogen Load (lb/year) [2]	*935*	*4,502*	*3,448*	*10,117*	*12,035*
Allowable Annual Nitrogen Load (lb/year) [3]	2,035	9,793	*7,501*	*22,008*	*26,181*

[1] *Spray field flow calculated using assumptions in the GSP (Mason County 2021)*

[2] *Median annual nitrogen load calculated using the spray field flow rate and the median average monthly Nitrogen concentration from 2012 through 2021 (Ecology 2021)*

[3] *Allowable annual nitrogen load calculated using the spray field flow rate and the allowable average monthly Nitrogen concentration from 2012 through 2021 (Ecology 2021)*

Alternative 1 – No Action

Alternative 1 represents the smallest expected increase in Nitrogen load from the WRF to the sprayfield.

Alternative 2 – Moderate Growth

Alternative 2 has a moderate expected increase in Nitrogen load from the WRF to the sprayfield.

Alternative 3 – Higher Growth

Alternative 3 has the greatest expected increase in Nitrogen load from the WRF to the sprayfield.

Alternative 3 Hybrid

Alternative 3 Hybrid would represent approximately 2.8% less housing capacity and 7.7% less commercial/industrial space than Alternative 3. As such, effluent flows and associated impacts would be greater than Alternative 2 and less than Alternative 3.

3.2.3 Mitigation Measures

Incorporated Plan Features

See Section 3.1.3 regarding water quality.

Regulations and Commitments

See Chapter 3.8.3 of the Draft EIS for a complete description of applicable State, Federal, and local regulations that govern utilities and water quality.

Other Proposed Mitigation Measures

Aside from sprayfield application, reclaimed water can be applied in infiltration facilities to replenish groundwater, used for irrigation, or used to flush toilets in commercial and industrial buildings, or for similar purposes (Ecology 2021). The geologic conditions around the WRF include a thick layer of glacial till (impermeable soil) near the ground surface (Ecology 2012), which limits the feasibility of infiltration near the WRF. Review of regional geology (PGG 2021) does not indicate infiltration is a promising strategy for reclaimed water use because most permeable geologic units have factors that limit their utility as an infiltration receptor:

- Shallow groundwater in areas where permeable soils are near surface water bodies.
- Slope stability concerns in areas where permeable soils are near steep slopes.

- Relatively small, isolated geographic areas where the surficial impermeable soils are relatively thin (i.e., less than 10 feet thick) and underlying permeable soils are thick (i.e., greater than 50 feet thick) (PGG 2021).

Under all Alternative, Mason County would need to begin planning for WRF expansion within the next 20 years. As part of those expansion plans, Mason County could consider the following:

- More detailed, site-specific, review of geographic areas where surficial impermeable soils are thin and underlying permeable soils are thick.
- Economic feasibility of reclaimed water distribution to areas of the UGA that have large irrigation demands (e.g., future regional parkland) or commercial and industrial areas where toilet flushing demand may be large depending on uses (e.g., north end of UGA).

Consideration of these options should be considered in the context of potential impacts of groundwater withdrawals described in Section 3.1.

3.2.4 Significant Unavoidable Adverse Impacts

With implementation of the County's planned corrective actions, no significant unavoidable adverse impacts are expected.

3.3 Transportation

3.3.1 Summary of Draft EIS Comments Received

Washington State Department of Transportation

WSDOT provided comments on the Mason County Belfair Urban Growth Area Draft EIS, April 2021 related to non-motorized facilities, planned improvements, and proposed mitigation measures. The comments recommended consideration of some additional non-motorized facilities and access improvements along SR 3 as well as refinements to the proposed mitigation and associated recommended trip fee.

3.3.2 Supplemental Impact Analysis

The following supplemental impact analysis addresses the WSDOT comments as well as provides updated trip generation estimates for the Alternative 3 Hybrid.

Impacts Common to All Alternatives

Roadway Network

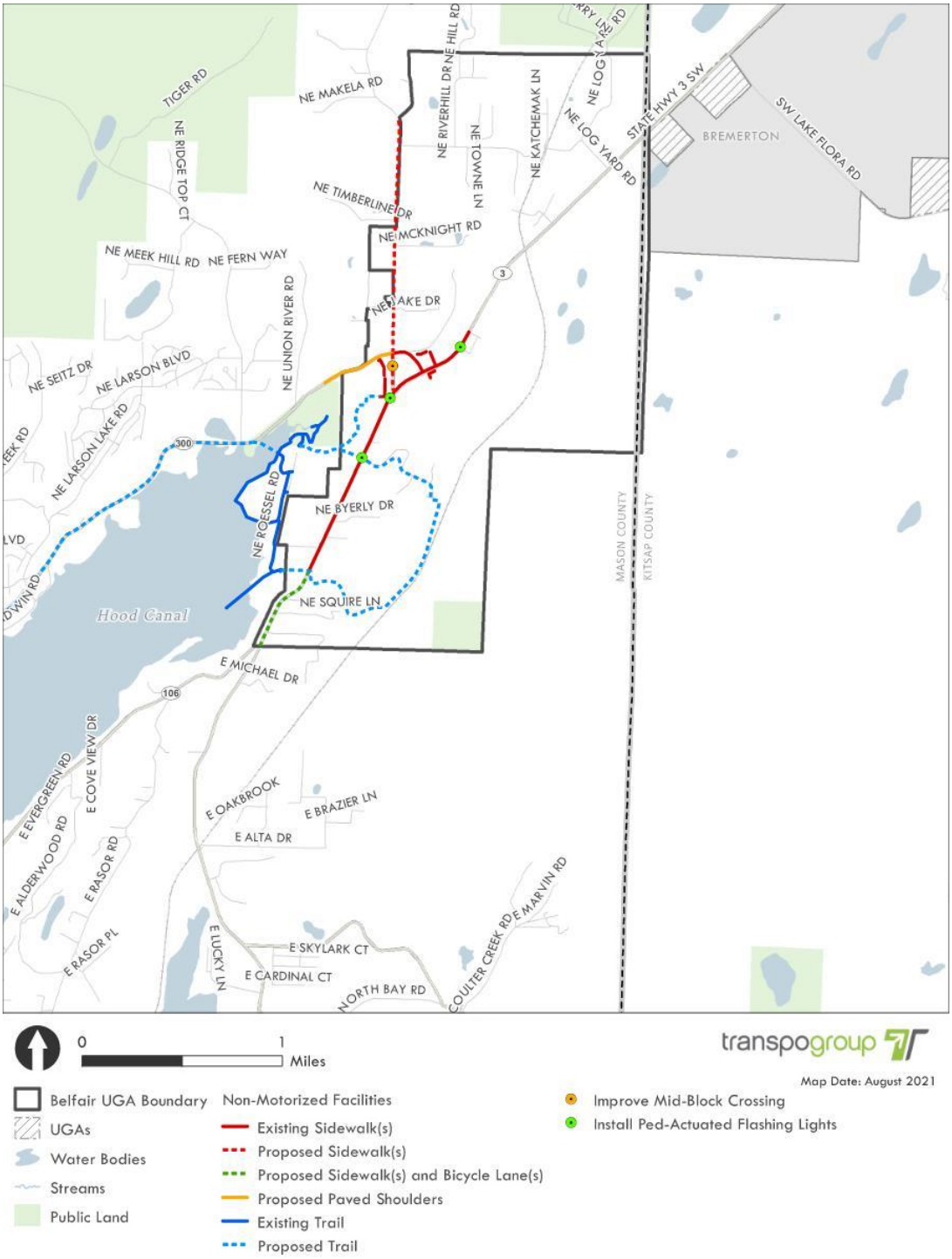
The SR 3 Widening and Safety Project Phase 3 identified in the Draft EIS would consider safety improvements including access management such as consolidating and narrowing driveways, providing shared access, and driveway restrictions. In addition, as redevelopment or new development occurs along the corridor Mason County will require a site-specific traffic study to review site access and localized impacts including safety and access management.

Pedestrian and Bicycle Network

Exhibit 3-7 identifies the non-motorized network for the Alternatives. The non-motorized network is modified to include extending the sidewalk and bicycle lane from its current terminus on SR 3 near milepost 25.39 south to SR 106 at milepost 24.91. In addition, a trail would connect along SR 300 to the downtown business district.

Non-motorized facilities will not be provided along the SR 3 Freight Corridor. Non-motorized facilities parallel to the corridor would be provided through frontage improvements or other County improvements to enhance the Belfair UGA multimodal connections.

Exhibit 3-7. Existing and Planned Non-Motorized Facilities



Source: Belfair Mobility Plan 2018, Transpo 2021.

Alternative 3 Hybrid

Alternative 3 Hybrid trip generation was based on trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017). The trip generation associated with Alternative 3 Hybrid is summarized in Exhibit 3-8, and additional detail is provided in Appendix C.

Exhibit 3-8 Alternative 3 Hybrid Weekday PM Peak Hour Trips

	In	Out	Total[1]
Alternative 3 Hybrid	1,756	1,698	3,454
No Action	232	187	419
Net New Trips	1,524	1,511	3,035

Source: Transpo Group, 2021.

Alternative 3 Hybrid would generate less net new trips than Alternatives 2 and 3 due to the slight decrease in residential land use and increase in commercial uses resulting in more interaction between uses within the UGA. The Alternative 3 Hybrid transportation impacts would be consistent with those identified in the Draft EIS for Alternatives 2 and 3.

3.3.3 Mitigation Measures

Incorporated Plan Features

See the Draft EIS Chapter 3.9.3 for a list of incorporated plan features that would reduce or offset potential transportation impacts of the alternatives.

Regulations and Commitments

See the Draft EIS Chapter 3.9.3 for a list of regulations and commitments that govern development in the Belfair UGA and would reduce or offset potential transportation impacts of the alternatives.

Other Proposed Mitigation Measures

Access management will be considered along SR 3 as redevelopment or new development occurs as part of the site-specific traffic study or improvements related to the SR 3 Widening and Safety Project Phase 3. Access management could include consolidating driveways, sharing driveways, narrowing driveways, restricting access and/or other measures to improve safety and reduce conflicts along the corridor.

Capacity Improvements

Through coordination with WSDOT, refinements have been made to the capacity improvements including:

- **SR 3/NE Clifton Road.** Consideration of a single lane roundabout with southbound and eastbound right-turn lanes or signal modifications to improve intersection operations.
- **SR 3/Ridgepoint Boulevard.** A single lane roundabout to improve intersection operations.

Policy and Program Considerations

Traffic Impact Fee or Transportation Benefit District

In order to fund improvements needed with the Alternatives, the County should consider a traffic impact fee or fee per trip program or transportation benefit district. New development requiring a building permit would pay a fee, which could be based on the number of new weekday PM peak hour trips generated by the development. A proportional fee estimate for the Alternatives has been determined based on the capacity improvements described in the Draft EIS and the previous section as well as consideration of non-motorized improvements that support the UGA but would not be constructed as part of required frontage improvements. Appendix C provides detail related to planning level cost estimates, proportional share by Alternative and estimated fee per trip. Exhibit 3-9 provides a summary of the estimated fee per trip for the Alternatives.

Exhibit 3-9 Estimated Fee Per Trip by Alternative

	Total Weekday PM Peak Hour Trips	Total Proportional Mitigation Cost (Million $)	Fee Per Trip
Alternative 1 – No Action	419	$12.9	$30,700
Alternative 2	4,101	$18.1	$4,413
Alternative 3	3,771	$17.8	$4,721
Alternative 3 Hybrid	3,454	$17.0	$4,915

Source: Transpo Group, 2021.

3.3.4 Significant Unavoidable Adverse Impacts

As described in the Draft EIS, the Action Alternatives would allow for additional growth in the study area beyond what would occur with the No Action Alternative. There are no significant unavoidable adverse impacts identified with the No Action Alternative. With the Action Alternatives and implementation of the proposed mitigation measures, there would be significant and unavoidable impacts at SR 3/Ridgepoint Boulevard and SR 3 Freight Corridor/E Alta Drive intersections. The SR 3 Freight Corridor/E Alta Drive intersection would only have significant unavoidable adverse impacts with application of a LOS C standard.

4 Draft EIS Clarifications and Corrections

This chapter provides clarifications and corrections to the Draft EIS. Changes are presented in the order of the Draft EIS Chapters and subsections, and text that has been added, modified, or deleted is shown in strikeout/underline format. Clarifications and corrections are based on new information and/or in response to comments received on the Draft EIS. This chapter is intended to provide targeted clarifications or revisions to the DEIS, primarily in response to agency or tribal public comments that prompted additional analysis. This chapter is not intended to respond to every public comment received on the DEIS; full documentation of all comments received on the Draft EIS and this Supplemental Draft EIS, as well as associated responses, will be documented in the Final EIS.

Chapter 3 - Environment, Impacts, and Mitigation

Chapter 3.2 – Water Resources

Comment – Ken Van Buskirk

Mason County received public comment regarding characterization of Critical Aquifer Recharge Areas (CARAs) in the Belfair UGA and surrounding area. The comment requested that the Draft EIS provide more specific information about how much of the UGA falls within a designated CARA and that EIS maps show the full extent of CARAs located in the surrounding area, rather than only the portions that fall within the Belfair UGA.

Response

Revised text of Draft EIS Chapter 3.2.1 – Affected Environment (page 3-10) is presented below with additional information on the percentage of the UGA is classified as CARA.

3.2.1 Affected Environment

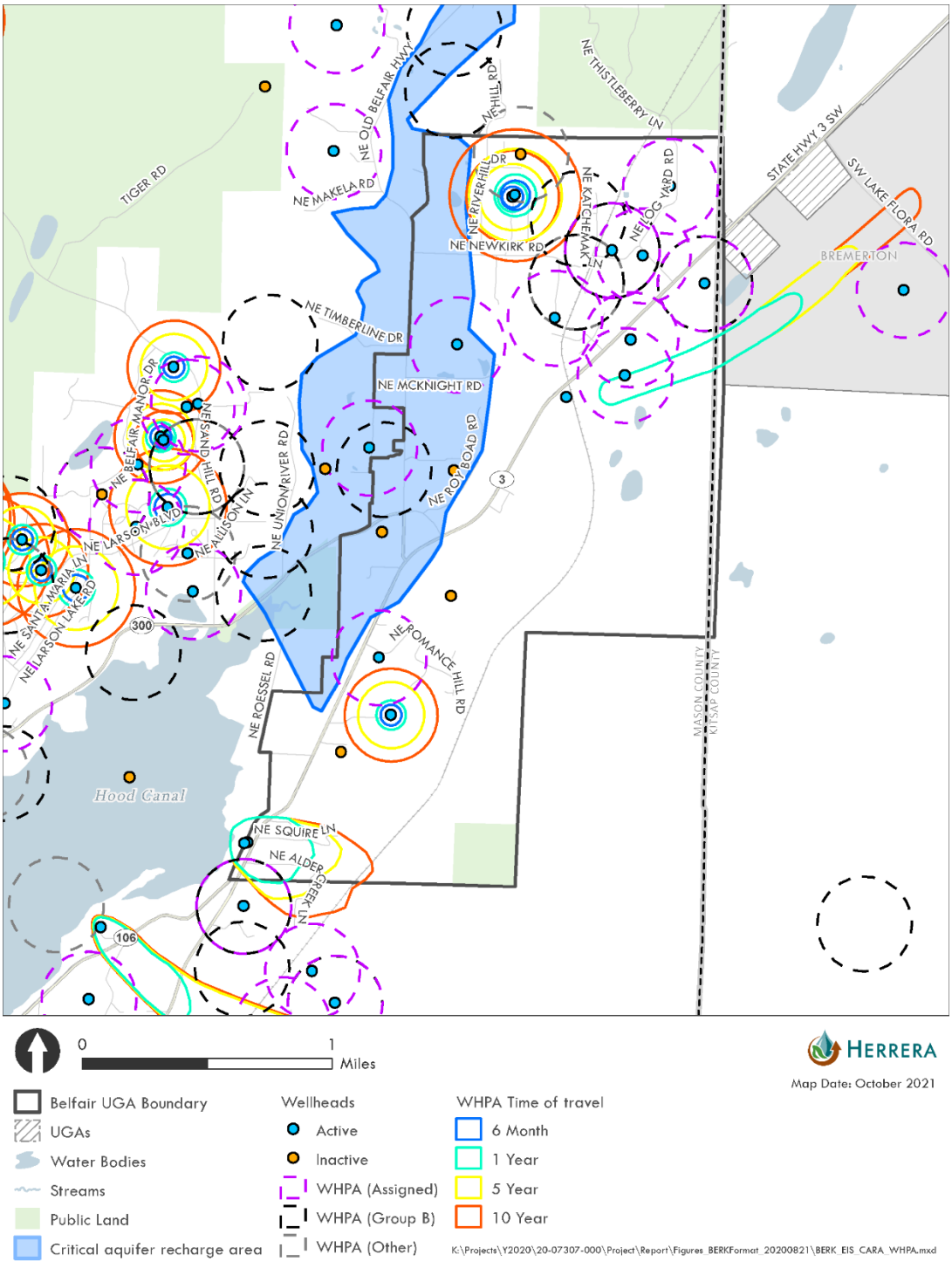
Wells and Groundwater

Most Belfair residents get their drinking water either from municipal, private, or community wells. Low-lying areas along the Union River in the northwest side of the UGA have been designated as Critical Aquifer Recharge Areas (CARAs); CARAs are areas that are considered critical for recharging aquifers used for potable water sources. The CARA along the Union River spans much of the urbanized portion of the UGA Exhibit 3-3 (16 percent of the UGA).

There are also fourteen public water supply wells in the UGA that have designated wellhead protection zones (WHPA; Exhibit 3-3). Between the CARAs and wellhead protection areas (WHPAs), a large portion of the UGA is within an area where groundwater resources are important and must be protected.

Draft EIS Exhibit 3-3 (page 3-11) is also amended to clarify the extent of CARAs outside the Belfair UGA. The revised figure is presented below.

Exhibit 3-3. CARA WHPA



Source: Mason County GIS, Herrera 2020.

Chapter 3.6 – Historic and Cultural Resources

Mason County received several public comments on the Draft EIS specifically related to historic and cultural resources. This section summarizes and responds to those comments. A revised version of DEIS Chapter 3.6 incorporating the described changes is included as Appendix D.

Designation of the Waterwheel Site as an Archaeology Site

Comment – Ken Van Buskirk

Mr. Van Buskirk commented that the Belfair Waterwheel Site should not be listed as an archaeological in DEIS Exhibit 3-22 because it was not built until the 1950's, and the waterwheel was constructed only for decorative purposes, and its historical significance has been misrepresented.

Response

Based on local informants and diagnostic artifacts, the site form for the Waterwheel Site (45MS197) suggests a Site Type of "Historic hydroelectric" and a Site Age-Dates of "ca. 1910-1920s." Additional information brought forward during the comment period may clarify the date (1950s) and purpose (decorative related to a trout pond). A site form update is recommended during which the information can be assessed. The site will still meet the State's definitions of "archaeological site" per RCW 27.53.030.3 ("a geographic locality in Washington, including but not limited to, submerged and submersible lands and the bed of the sea within the state's jurisdiction, that contains archaeological objects") and "archaeological object" per RCW 27.53.030.2 ("an object that comprises the physical evidence of an indigenous and subsequent culture, including material remains of past human life, including monuments, symbols, tools, facilities, and technological by-products").

A footnote has been added to Exhibit 3-22 in the revised DEIS Chapter 3.6 (Appendix D) to clarify that there is conflicting site information regarding the Waterwheel site and that a site form update is recommended.

Administration of Proposed Decision Tree Mitigation Measure

Comment – Stephanie Neil

Ms. Neil provided comment on the DEIS, requesting additional information on the administration of the proposed mitigation measures for Historic and Cultural Resources, specifically who would administer the decision tree and who would review project proposals to determine whether a cultural resources desktop review or survey is necessary.

Response

The proposed Decision Tree assumes the County will conduct the pre-project cultural resource review. It is written for entities that may not employ staff specifically trained in cultural resource management. At certain points in the process, the County will consult with DAHP and affected Tribes. Collaboration among responsible parties will be necessary, including on the determination of whether an on-the-ground survey is necessary to be conducted by the planned action applicant. The intent is to apply the Decision Tree to each proposed action in the UGA as a more comprehensive supplement to other review tools, including the more generalized Statewide Predictive Model.

Appendix D contains a revised version of the DEIS Chapter 3.6; additional language has been added to the discussion of mitigation measures in Chapter 3.6.3 under "Project-Level Review" (page 3-77) to clarify the County's role in administering the Decision Tree and leading pre-project cultural resources review.

Disclosure of Cultural Resource Site Locations

Comment – Squaxin Island Tribe Cultural Resources Department

The Squaxin Island Tribe provided comment on the Draft EIS, asking that the description and location of cultural resource sites be removed from Chapter 3.6, as this information is protected by State law.

Response

Appendix D contains a revised version of the DEIS Chapter 3.6. Exhibit 3-22 and Exhibit 3-24, which list Archaeological Sites and Cultural Resource Surveys located or performed within the Belfair study area, have been amended to remove location information. Exhibit 3-22 has been amended to remove the "Location" column, which identified whether the listed site was located within the Belfair UGA or within the one-mile buffer study area. Similarly, Exhibit 3-24 has been amended to remove the headings indicating whether the listed cultural resource survey was conducted within the UGA or within the one-mile buffer study area.

Chapter 3.8 – Utilities

The Squaxin Island Tribe provided comment on the Draft EIS, requesting that the DEIS quantify how much wastewater will be sent from the Puget Sound Industrial Center (PSIC) to the Belfair Water Reclamation Facility (WRF).

In September 2021, additional data was gathered related to expected employment population increase due to growth of the Puget Sound Industrial Center (PSIC). While a portion of the expected PSIC employee population is included in DEIS estimates of future wastewater generation for planning purposes, whether the WRF will receive wastewater from PSIC is uncertain. In response to the tribe's request for clarification on PSIC wastewater flows,

Exhibit 4-1. PSIC Projected Wastewater Flow Increases

Metric	Alternatives 1, 2, and 3 (2036)
PSIC employment population increase	1,463
Increase in average annual flow (MGD) from PSIC	0.073

Source:

Previously, a linear interpolation was used to estimate the PSIC employment population in 2036 using values of 0 in 2020 and 1,950 in 2040. This estimation method was revised to use a value of 0 in 2024, which is the assumed rate of connection to PSIC (Michael Lubovich, Pers. Comm.). This change resulted in slightly lower wastewater generation projections for Alternatives 1, 2, and 3.

In addition to the correction to PSIC employee population assumptions, a clarification was added to the assumptions about the types of manufacturing and industrial customers expected to build within PSIC. While the specific industries are unknown, the contaminant loads generated by these customers may differ from historic loading trends.

Additionally, the average monthly flow capacity of the WRF has been corrected from 0.4 MGD to 0.5 MGD. This correction increased the expected timeline for expansion for Alternatives 1, 2, and 3.

The following sections of DEIS Chapter 3.8 have been revised:

- Affected Environment (DEIS page 3-103)
- Impacts (DEIS page 3-112)
- Mitigation Measures (DEIS page 3-119)

Affected Environment (DEIS page 3-103)

3.8.1 Affected Environment

Wastewater

The Mason County Public Works department provides sanitary sewer service to a portion of the Belfair UGA. See Exhibit 3-40.

Wastewater in the study area is collected and treated at the Belfair wastewater and water reclamation facility, which began operation in 2012 (see State Reclaimed Water Permit No. ST-6224 described below). The facility is a Class A reclamation facility with two membrane bioreactor treatment trains and a 13-acre storage pond. During drier periods of the year, the treated water is used to irrigate a forestry operation east of the facility. During wet periods of the year, the treated water is held in the storage pond and used for irrigation in the drier periods. The WRF has the treatment capacity for 0.5 million gallons per day (MGD) maximum month flow or 0.4 MGD average monthly flow of wastewater and reclaimed water is discharged to storage ponds and an irrigation spray field. The WRF is permitted for a water reuse rate of 0.125 MGD, which is the capacity of the spray field, but is less than the current treatment capacity of the WRF. An inventory of the facility and collection system is in Exhibit 3-41.

The Draft 2021 General Sewer Plan (GSP) (BHC 2021) projected average daily flow of the Belfair wastewater and water reclamation facility (WRF) is 0.322 million gallons per day (MGD) in 2040. This value exceeds the capacity of the spray field but represents about ~~80~~ 64% of the WRF treatment capacity. Based on estimates in the GSP, the County expects to expand the irrigation system or identify alternative reclaimed water uses starting in 2021 and increase spray capacity to 0.2366 MGD by 2026. The current GSP does not include a capital project to expand the capacity of the WRF because the 2040 demand projections are not expected to exceed 85% of the existing ~~0.4~~ 0.5 MGD capacity. Therefore, the GSP recommends considering the expansion of the WRF when the capital facilities plan is next updated.

Mason County has been awarded a grant to extend the sewer system to the Puget Sound Industrial Center (PSIC) and is considering whether to move forward with that project. The GSP, which considers a 20-year planning horizon, includes the expected employment population increase for PSIC in its wastewater projections for 2040.

A summary of the growth and service population is provided in Exhibit 3.8-5. The GSP 2040 residential population projection for the Belfair UGA is 2,604, while the projected 2040 employment population for the Belfair UGA and

the portion of PSIC expected to be serviced by the WRF is anticipated to be 2,623. The portion of this employment population from PSIC is 1,950.

Impacts (DEIS page 3-112)

3.8.2 Impacts

Wastewater

As shown in Exhibit 3.8-9, the increases in residential and employment population for Alternative 1 are less than the 2040 values presented in the GSP. The increases in residential and employment population for Alternatives 2 and 3 are significantly greater than the 2040 values presented in the GSP. Alternatives ~~1,~~ 2 and 3 are expected to reach 85% of the WRF treatment capacity in ~~2039, 2031~~ 2032~~,~~ and ~~2030~~ 2031 respectively, which would require the utility to begin planning for a new wastewater treatment facility, while Alternative 1 and the current projections in the GSP do not reach 85% of the WRF capacity by 2040. Alternatives 2 and 3 represent significant increases in wastewater generation beyond Alternative 1 and the GSP projections – these increases should be carefully considered in the utility's system planning.

Exhibit 3-46. Growth of Average Daily Wastewater Generation Among Alternatives

Metric	GSP (2040)	Alternatives (2036)		
		1	2	3
Residential population	2604	*1199*	*4441*	*5669*
PSIC employment population increase	*1,950*	~~*1,560*~~ *1,463* [4]	~~*1,560*~~ *1,463* [4]	~~*1,560*~~ *1,463* [4]
Employment population within the Belfair UGA	673	*130*	*2,841*	3,326
Current average annual flow (MGD) [1]		0.067	0.067	0.067
Increase in average annual flow (MGD) [2]	--	~~*0.184*~~ *0.179*	~~*0.661*~~ *0.656*	~~*0.798*~~ *0.793*
Total average annual flow (MGD)	0.322	~~0.251~~ 0.246	~~0.727~~ 0.723	~~0.864~~ 0.860
Spray Field Capacity (MGD) [3]	0.237	0.237	0.237	0.237
% of spray field capacity	136%	~~106~~ 104%	~~307~~ 305%	~~365~~ 363%
Water Reclamation Facility Plant Capacity (MGD)	~~0.400~~ 0.500	~~0.400~~ 0.500	~~0.400~~ 0.500	~~0.400~~ 0.500
% of Water Reclamation Facility Capacity	~~80~~ 64%	~~63~~ 49%	~~182~~ 145%	~~216~~ 172%

Assumptions: Values in italics represent increases in population and demand. 80 gallons per day per resident and employee within the Belfair UGA and 50 gallons per day per employee within PSIC; Commercial employees for alternatives calculated using these assumptions: 2 employees per1000 sf industrial area, 2.88 employees per 1000 sf office area, 2.35 employee per 1000 sf retail area.
Source: Mason County, 2021. Herrera 2021.

[1] Existing sewer demand = 0.0668 MGD (Mason County 2021)

[2] The GSP anticipates increasing spray field capacity from 0.125 to 0.237 MGD by 2026 (Mason County 2021)

[3] The PSIC employment population estimate for 2036 was calculated using liner interpolation between values of 0 in 2020 and 1,950 in 2040 presented in the GSP (Mason County 2021)

Alternative 1 – No Action

Alternative 1 would result in the smallest increase in wastewater generation. Assuming the expansion of the spray field proceeds as planned in the GSP (i.e., spray capacity increases to 0.2366 MGD by 2026), Alternative 1 is expected to slightly exceed planned spray field capacity by 2036 but is not expected to exceed the WRF capacity.

Alternative 2 – Moderate Growth

Alternative 2 would result in the second largest increase in wastewater generation and is expected to exceed the planned spray field capacity and existing WRF treatment capacity. Alternative 2 would result in average annual wastewater generation that is approximately ~~230~~ 220% of the 2040 estimate in the GSP and would require construction of an additional wastewater treatment plant. Planning for the plant would need to begin when wastewater generation reaches the ~~0.34~~ 0.425 MGD, which is project to be in ~~2031~~ 2032.

Alternative 3 – Higher Growth

Alternative 3 would have the largest increase in in wastewater generation and is expected to exceed spray field capacity and WRF treatment capacity. Alternative 3 would result in average annual wastewater generation that is approximately 270% of the 2040 estimate in the GSP and would require construction of an additional wastewater treatment plant. Planning for the plant would need to begin when wastewater generation reaches the ~~0.34~~ 0.425 MGD, which is project to be in ~~2030~~ 2031.

Mitigation Measures (DEIS page 3-119)

3.8.3 Mitigation Measures

Other Potential Mitigation Measures

Wastewater

Under Alternatives 2 and 3, wastewater generation would exceed the spray field capacity of 0.237 MGD and WRF capacity of ~~0.4~~ 0.5 MGD capacity earlier than the projections listed in the GSP and require expansion of spray field capacity and construction of a new wastewater treatment facility before 2036. Due to the increased development expected in Alternatives 2 and 3, the sewer utility is also expected to collect more capital facilities charges to help fund capacity expansion for the collection system, spray field, and WRF. The Planned Action Ordinance could phase development levels based on the provision of conveyance infrastructure, spray field

capacity of 0.237 MGD, and adequate wastewater treatment capacity above ~~0.4~~ 0.5 MGD.

In the analysis presented above, loading rates to the WRF are assumed to be consistent with historic loading rates because the specific types of industries expected to move into the UGA are unknown. As development progresses within the UGA, the County should compare the expected contaminant loading rates from specific industries against historic loading rates to determine if additional treatment may be required for industry-specific loading rates.

Chapter 3.9 – Transportation

Section 3.9.3 Mitigation Measures, Policy and Program Considerations outlines that the EIS analysis meets the SEPA requirements for development projects. The development SEPA-related transportation impacts are disclosed for the regional UGA transportation system in the EIS. The Draft EIS stated that Mason County will require individual traffic impact studies for proposed development to confirm consistency with the EIS and UGA Plan; in response to comments from WSDOT expressing concern regarding site access and localized transportation impacts, the DEIS text is amended to reflect a require a requirement for site-specific traffic impact studies to identify local transportation mitigation measures, such as site access improvements and/or improvements at nearby intersections and roadways to support the proposed development. The revised text is presented below.

Policy and Program Considerations (Draft EIS p. 3-149 and 3-150)

The analysis completed provides an understanding of the SEPA-related transportation impacts associated with development of the Belfair UGA. As development occurs, it is likely that no additional regional transportation SEPA requirements would need to be addressed if the anticipated trip generation is within the bounds of issues/transportation impacts, implementing TDM strategies or other measures consistent with those identified previously. If the County desires to use the Planned Action EIS as disclosure of regional/UGA transportation impacts for individual developments, consideration may need to be given to ~~the following.~~ a traffic impact fee or transportation benefit district as described in the Planned Action Ordinance. Mason County will continue to require site-specific traffic impact studies to disclose site access and local transportation impacts and identify appropriate mitigation measures to the transportation system in the immediate vicinity of the proposed development. The site-specific traffic impact studies will also be used to confirm consistency with the UGA EIS.

5 Acronyms

ADA	Americans with Disabilities Act
CAO	Critical Areas Ordinance
cfs	Cubic Feet per Second
CIP	Capital Improvement Program
CTR	Commute Trip Reduction
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
GMA	Growth Management Act
gpm	Gallons per Minute
HCM	Highway Capacity Manual
KMC	Kirkland Municipal Code
LF	Linear Feet
LOS	Level of Service
MDD	Maximum Daily Demand
MEV	Million Entering Vehicles
MGD	million gallons per day
MPH	Miles per Hour
MVMT	Million Vehicle Miles Traveled
NFIP	National Flood Insurance Program
NWI	National Wetlands Inventory
PSCAA	Puget Sound Clean Air Agency
PSRC	Puget Sound Regional Council
RCW	Revised Code of Washington
SMP	Shoreline Master Program
SOV	Single Occupancy Vehicle
SR	State Route
TMDL	Total Maximum Daily Load
VMT	Vehicle Miles Traveled
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WRF	Water Reclamation Facility

6 References

References specific to the supplemental analysis presented in this Supplemental Draft EIS are presented below. For a complete list of works cited, please refer to Chapter 5 of the Draft EIS.

Ecology. 2012. Fact Sheet for the State Reclaimed Water Permit ST 66224 Belfair Wastewater and Water Reclamation Facility. August 28, 2012.

Ecology. 2021. Water Quality Permitting and Reporting Information System (PARIS). Accessed September 2021.

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7 Appendices

A Draft EIS Public Notices and Public Comments Received

B Hydrogeologic Analysis (2021) – Pacific Groundwater Group

C Transportation Mitigation Cost Summary

D Revised Draft EIS Chapter 3.6 – Historic and Cultural Resources

A Draft EIS Public Notices and Public Comments Received

MASON COUNTY
STATE ENVIRONMENTAL POLICY ACT
NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT STATEMENT AND PUBLIC HEARING
BELFAIR URBAN GROWTH AREA PLANNED ACTION

Date of Publication: April 29, 2021

Notice is hereby given under WAC 197-11-455 and 510 and MCC 8.24.020 that Mason County is issuing a Draft Environmental Impact Statement (DEIS) addressing the Belfair Urban Growth Area Planned Action. The DEIS describes the existing conditions and identifies probable significant environmental impacts, mitigation measures to mitigate these impacts, and any significant unavoidable adverse impacts from the proposal, in accordance with RCW 43.21C.031. The DEIS also fulfills the SEPA requirements for Planned Action environmental review consistent with RCW 43.21C.440 and WAC 197-11-164 to 172.

Lead Agency / Proponent

Mason County

Agency Contact

Kell Rowen, Planning Manager
Mason County Community Services
360.427.9670 ext. 286
krowen@co.mason.wa.us

Description of Proposal

The Belfair Urban Growth Area (UGA) is a long-standing urban unincorporated community in Mason County serving as a commercial hub for a broader community at the northern end of Hood Canal. SR 3 bisects the community and was recently widened, the County received a loan to further develop a sewer system, and a new state bypass route is pending. With these infrastructure investments facilitating travel between Kitsap and Mason Counties, a small-town quality of life, and natural environment assets, Belfair may soon experience a rapid increase in growth. To guide growth that reflects the community's vision, Mason County proposes to establish a Planned Action Environmental Impact Statement (EIS) and ordinance for the Belfair UGA. In association with the Planned Action, the County proposes to update the Belfair UGA Plan, adopted in December 2004, and refresh the vision. Amendments to the Mason County Comprehensive Plan and Belfair zoning and environmental regulations would be needed to implement alternatives.

The DEIS reviews a range of alternatives for the future of Belfair's UGA. The "No Action" alternative reflects current growth targets, Alternative 2 is similar to the existing development capacity in the UGA, and Alternative 3 reflects a higher growth scenario that would add residential, mixed use, and industrial park development to the UGA. The DEIS evaluates the alternatives with the following environmental topics: natural environment (earth, water resources, plants and animals), land use, cultural resources, aesthetics, public services (police, fire, parks, schools), and utilities (water, wastewater, stormwater, power). The DEIS outlines mitigation measures that would apply to future planned action development.

Location

The proposal addresses the Belfair UGA bounded at the northeastern boundary of the Mason County border with Kitsap County. It is nearly 4 square miles in area.

Comment Period

The DEIS document is available for download on the County's project website: https://www.co.mason.wa.us/community-services/belfair-eis. A printed copy may be reviewed at Mason County Community Services offices by appointment (see Contact below). A printed copy may be requested at cost (see Contact below). A printed copy is also available for review at the North Mason Timberland Library; see https://www.trl.org/locations/north-mason for hours and requirements to meet COVID-19 pandemic conditions.

Agencies, affected tribes, and members of the public are invited to comment on the DEIS. The method and deadline for giving us your comments is:

Comment Period

Provide your written comments by **5 pm, June 1, 2021.**

Send to Contact:

Kell Rowen, Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton WA 98584
(360) 427-9670 ext. 286
planning@co.mason.wa.us

Public Hearing

The Planning Advisory Commission will host an online public hearing on the Draft Planned Action Ordinance, Draft Subarea Plan Update, and associated amendments to the Mason County Comprehensive Plan and Belfair zoning regulations would be needed to implement alternatives. The online public hearing will be held on **May 17, 2021 at 6:00 pm.** See the project website for instructions to virtually attend the meeting.
https://www.co.mason.wa.us/community-services/belfair-eis/.

SEPA Responsible Official

David Windom, Community Services Director
Mason County, 615 W Alder Street, Shelton, WA 98584

Signature Kell Rowen Date 4/29/2021

NOTICE OF DRAFT EIS COMMENT PERIOD EXTENSION

Mason County
Draft Environmental Impact Statement
Belfair Urban Growth Area Planned Action

On April 29, 2021, Mason County issued a Draft Environmental Impact Statement (Draft EIS), requesting comments by June 1, 2021. Mason County is extending the comment period to **5 pm, June 7, 2021.**

Date of Notice: May 24, 2021

Lead Agency / Proponent: Mason County

Description of Proposal: Recent investments will contribute to rapid growth in Belfair. In addition to the County's grant to extend the sewer system, a new freight corridor is planned. Mason County is refreshing the 2004 Belfair Urban Growth Area (UGA) Plan and creating a Planned Action Ordinance to guide growth that reflects the community's vision. Corresponding Comprehensive Plan and County Code Amendments would also be considered.

Mason County has prepared a Draft EIS in accordance with RCW 43.21C.031. The EIS also fulfills the SEPA requirements for Planned Action environmental review consistent with RCW 43.21C.440. The Draft EIS evaluates alternatives for the future of Belfair's UGA, and also outlines mitigation measures. The "No Action" alternative reflects current growth targets, Alternative 2 is similar to the existing development capacity in the UGA, and Alternative 3 reflects a higher growth scenario that would add residential, mixed use, and industrial park development to the UGA.

Location: The proposal addresses the Belfair UGA bounded at the northeastern boundary of the Mason County border with Kitsap County. It is nearly 4 square miles in area.

Extended Comment Period: On November 12, 2020, Mason County issued a scoping notice for the EIS, and published it in the newspaper. On April 29, 2021, Mason County issued a Draft EIS, with a comment period ending on June 1, 2021. Mason County has found some agencies may not have received the scoping notice as intended. As a courtesy, Mason County is extending the Draft EIS comment period. You may comment on the scope and contents of the Draft EIS.

Please provide your written comments on the Draft EIS by **5 pm, June 7, 2021.**

Send to Contact:

Kell Rowen, Community Development Administrator, Mason County Community Services
615 W Alder Street
Shelton WA 98584
(360) 427-9670 x 286, planning@co.mason.wa.us

SEPA Responsible Official: Kell Rowen, Community Development Administrator

Signature Kell Rowen Date 5/24/2021

From: Larson, Andy <LarsonA@wsdot.wa.gov>
Sent: Tuesday, June 29, 2021 6:59 AM
To: Loretta Swanson; Kell Rowen
Cc: Schueler, JoAnn; Engel, Dennis; Sawyer, Jeff; Ott, Sarah; Sanoy, Gaius; Perez, Joseph; Turpin, Theresa; Kokenge, Kyler; Moody, Lone
Subject: Belfair Planned Action EIS Review Comments

Hello Loretta,

WSDOT has reviewed the Belfair Planned Action EIS and we have the following comments:

- Lack of nonmotorized facilities
    - Support the plan to extend sidewalk from its current terminus on SR 3 near MP 25.39 south to SR 106 at MP 24.91. Recommend the plan also include extending bicycle lanes in that section.
    - Support the plan's proposal for trail along SR 300, but the path should remain on SR 300 to create a connected network. The plan leaves a gap along SR 300 to the downtown business district, which would be a valuable destination for nonmotorized users.
- Planned transportation improvements
    - Recommend including intersection improvements at the SR 3/NE Clifton Ln and SR 3/SR 300 intersections. These intersections are constrained under the existing traffic volumes, and additional growth will further deteriorate the system.
    - Support the recommendation for a roundabout at the SR 300/NE Old Belfair Hwy intersection
    - Support intersection improvement at the SR 3/Romance Hill Rd intersection – a roundabout should be assumed as the improvement as a conservative measure for funding-planning purposes
    - Additional development will create additional traffic impacts which will further constrain the system. Exhibits 3-57 and 3-60 show the impacts of additional development.
        - Will need to evaluate the intersection operation of many stop-controlled and signalized intersections in the UGA – near or exceeding LOS threshold with existing conditions, will be exacerbated with future growth
        - The existing two-way-left-turn-lane (TWLTL) may not be the best solution with additional development – may need to consider access management strategies
- Proposed mitigation measures
    - Need to consider managing access on SR 3 – not currently considered
    - Need to consider replacing the signal at SR 3/Clifton Rd with a roundabout instead of advocating for the permissive left turn as currently stated
    - Need further discussion at the SR 3/Ridgepoint Blvd intersection – EIS dismisses roundabout prematurely
- Section 1.6.9
    - It is important to keep in mind as mentioned in the document, the SR 3 Freight Corridor will be a limited access highway. The freight corridor is anticipated to be T-3; carrying 300,000 to 4 million tons of freight annually. Therefore, any new developments along the freight corridor should be required to provide frontage roads and because it is a freight corridor, those developments should include active transportation, such as separated bike paths as part of the development. With the growing popularity of Ebikes,

hills are less of an issue for the commuting cyclists. Having separated bike paths and frontage roads will go a long way to enhancing multimodal connections and is in compliance with the Belfair Mobility Plan.

- Exhibit 3-29 Park, Trails, and Open Space Plan (2004)
    - I realize this is an older plan and the alignment of the SR 3 Freight corridor has been evolving, it would be good to consider revising this drawing as it appears there are potential conflicts with the SR 3 Freight Corridor Limited Access Highway.

- Page 3-147 Non-motorized improvements
    - Because SR 3 Freight corridor will be classified as T-3 freight corridor and limited access, WSDOT concurs with the statement that as developments occur, "*required frontage improvements"* from new developments are appropriate. A separated facility parallel to the SR 3 Freight corridor is consistent with the limited access/T-3 Freight Classification and with the Belfair Mobility Plan.

Andrew Larson, PE
Development Services Engineer
(360) 900-9541

Mariah Frazier

From: Planning
Sent: Monday, June 14, 2021 10:12 AM
To: Ken VanBuskirk
Cc: Mariah Frazier
Subject: FW: KELL - Comment on Belfair DEIS

FYI

From: BRIAN PETERSEN <drbrian@hctc.com>
Sent: Friday, May 28, 2021 12:18 PM
To: Planning <planning@co.mason.wa.us>
Subject: KELL - Comment on Belfair DEIS

Hi Kell,

Hope this note finds you well.

I only have three main comments on the DEIS materials I went through.

1. At the southern “environmental node” as we referred to it in the original plan… we do have a new park identified and designed … The "Sweetwater Creek / Waterwheel Park”. This park is right across from Theler and it is actually in our 'Parks & Trails Comp Plan’ for Mason County and therefore also in our most recently updated "Mason County Comp Plan”. I think it would be helpful if this was identified on the EIS and called out by name since it is so far along in it’s development and already in the Comp Plan.

2. The Romance Hill Connector has been discussed for years. This connector / ROW was originally purchased and improved by Public Works Director, Jerry Hauth for the specific purpose of a future connection at this location. The community supported this connection through multiple community meetings in our UGA Master Planning sessions throughout a three year process. The final zoning plans the community settled on shows a small pocket of commercial zoning at the future intersection of Romance Hill and the Belfair Bypass. This connection has been discussed and planned for over 20 years. This is good planning. Let’s make sure a couple people don’t politicize this. Remember, IF there was no mid point connector, people would need to make a decision on possible commercial stops in town… two miles north of town… if they wanted to change their mind and drop in for some shopping, they couldn’t get back off the bypass until 3 miles south of town by the high school and then would have to backtrack into town… which few would do.

Also, keep in mind the traffic patterns identified over the years. The amount of people using the bypass has been overstated at times. Many ‘passers by’ are folks who will continue traveling down 106 to Union or up Dalby / McReavy Rd. to Shelton or down to 101 to Shelton and beyond. Those people will still come through the heart of the commerce center. However, if they are truly only ‘passers by’ trips and they wanted to avoid the heart of the commerce center at the Starbucks light, they could stay on the bypass…. come down the Romance Hill road and take a left on 3 and still head south.

Romance Hill is critical for our commerce center and yet still helpful for the pass through traffic.

3. Future investment in sewer line extensions should be stubbed lines to access our own 'industrial' zoned lands… including a stub of the main under highway 3.

That's it….
Thanks for your time and for this process. Sorry I missed the last one online but I appreciate you allowing continued comment on this.

Cheers,

Dr. Brian Petersen
ADIO Properties, LLC
(360) 710 0855

Mariah Frazier

From: Courtney Flora <cflora@mhseattle.com>
Sent: Friday, June 4, 2021 3:30 PM
To: Kell Rowen
Subject: Belfair PAO and Subarea Plan

Hi Kell— Thanks for forwarding the updated draft. Here are our initial comments on the proposed code language. It would be great if we could connect on Monday to run through these.

- In Attachment B under MCC 17.20.020, "Mixed-Use/Master Plan" should be added as one of the Districts Established.
- The new 17.23.200 says the purpose of the MP-MU district is to "allow a mix of commercial and residential uses with a focus on business/industrial park development and multi-family housing." But the allowed uses in 17.23.210 are only those uses allowed in General Commercial and Mixed Use—not in Residential or Business Industrial. We may need to add some of the residential and BI uses to meet the intent of the zone; we will review in more detail.
- What's the rationale for including 17.23.220, Special Uses? If we have to go through a Master Plan process anyway, probably no need to have this section.
- Apex is reviewing the new landscaping standards, and we may have additional comments on that.
- In the new 17.23.280 ("Master Plan"), it would be helpful to have a process statement, such as "Allowed uses under the 10-acre threshold will be reviewed and approved through an administrative site plan application, consistent with adopted regulations. Proposals exceeding the 10-acre threshold may be reviewed under a Type III Master Plan process, as outlined in MCC 17.70."
- In 17.70.016(c), add a final sentence, "In the Belfair UGA, the applicant will submit a SEPA checklist for purposes of determining consistency with the Planned Action Ordinance. If the proposal is consistent, no further SEPA review will be required."
- In 17.70.016 (e), add a final sentence: "For proposals in the Belfair UGA subject to a Type III process, no Development Agreement is required." (An open record hearing before the Hearing Examiner and Council would violate state law).
- In 17.70.017(a), change "may approve" to "shall approve" in the opening sentence ("may" suggests that if all the approval criteria are met, decision-maker could still deny project, which doesn't make sense)
- 17.70.017(a)(2) requires compliance with the review criteria in 17.70.015(b), which doesn't exist. This reference should be deleted or corrected.
- In 17.70.017(a)(8) add "significantly" before "adversely impacted" (this could be interpreted to mean any adverse impact, no matter how minor, precludes approval
- An extended vesting provision should be added. The memo references 15-vesting with the option of requesting 5 year extensions; I don't see that anywhere in the current or draft regulations.

Hope this all makes sense—again, happy to talk through it. Thanks, and have a great weekend!

Courtney Flora
Partner
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701 Fifth Avenue, Suite 6600
Seattle, Washington 98104
Tel: 206.812.3376
Fax: 206.812.3389
cflora@mhseattle.com

www.mhseattle.com

Mariah Frazier

From: Planning
Sent: Monday, June 7, 2021 3:20 PM
To: Mariah Frazier
Subject: FW: Belfair UGA EIS comments

From: Judy G Scott <ssconstruct@hotmail.com>
Sent: Monday, June 7, 2021 1:42 PM
To: Planning <planning@co.mason.wa.us>
Subject: Belfair UGA EIS comments

Greetings
I believe it is important and critical for a SR 3 Freight Corridor/Romance Hill Road Roundabout
A Single lane roundabout to be incorporated into the plan even though it shows (Unfunded Improvement Incorporated into the Plan) The economic and safety of access to the down town and medical facilities is important. Even though there are some issues with this road. If there should be a shut down of the North and/or South end of the Freight corridor access points this road would be an added safety measure. Also for the economic viability for the "downtown" area of Belfair an extra measure of accessibility is vital for businesses to thrive.

I also support the change from Festival Retail to Mixed Use.

I have concerns and questions in regard to the "options" of short term agricultural zoning? This property is my property and I do not support any changes at this time.
Thank you
Judy Scott

Sent from Mail for Windows 10

June 4, 2021

To: Kell Rowen, Community Development Administrator

Mason County Planning Advisory Commission

Mason County
Mason County Community Services
615 W Alder Street
Shelton WA 98584

Comments to: SEPA scoping materials, Draft Belfair EIS, Draft update to 2004 UGA plan, Proposed Development Code amendments, and Draft planned action ordinance.

SEPA scoping materials:

Post card notices of SEPA scoping materials were originally distributed to several local businesses and were not widely known in the community as they were not mailed out. The original scoping materials contained UGA boundary revisions that removed a substantial portion of the NW corner, (Riverhill, Newkirk road) area, from the UGA. There was no public notice mailed to the residents of the UGA of this consideration. The boundary revision was removed from consideration with little public involvement. I was told it was because a County Commissioner did not like the idea! I submitted several scoping comments about modifying the UGA boundary that seem to have been ignored.

The reason given for the comment period being extended a week was due to the SEPA register not having the Scoping Document which was sent out in November 2020. The draft EIS distribution list does not list the City of Bremerton, Mason County Hospital District 2, and Mason County Cemetery District 1.

There was a lot of discussion in the original scoping meeting about facilitating growth that supports a community-based vision for Belfair. This community based vision is not widely known or supported as evidenced by the lack of public involvement to date. The biggest hot topic issue in our community right now is what is going on with all the land clearing and how will it affect traffic.

Draft Belfair EIS:

The April 29th letter preceding the EIS 3 speaks to the subarea plan, infrastructure improvements and mitigation fees being key issues facing our decision makers. I agree.

Fact sheet iv. Preceding the EIS describes the Alternative #3. I support this alternative focusing development on the plateau out the valley and CARA, however only with the following adjustments to Alternative #2.

Do not include the Public Facility, Festival Retail or R5 rezones described in Alternative 2 instead modify, revise UGA boundary to remove public WDFW property west of Timberland Regional Library and remove all properties in the Irene Creek and Viola Creek drainages.

Summary 1-8: I doubt that Belfair water district will be able to serve the entire study area without modifying the UGA boundaries. How many permit exempt groundwater wells with buffers exist in the study area?

Summary 1-11: Discard 2nd bullet point regarding expanding the mixed use zoning in connection with building a freight corridor Romance hill connector. This connection concept is not widely supported in the community. Discard 3rd bullet point regarding rezoning 94 acres from R-4 to R-5. This is also not widely supported in the community and would only add to transportation concurrency dilemma. Amend 4th bullet point to include undevelopable state owned property on western edge of UGA.

Summary 1-20: In my opinion impact fees should be established for schools, parks and transportation infrastructure.

Summary 1-24: Mason County **should** rather than "could" implement a funding mechanism for stormwater system for UGA.

Proposals and Alternatives 2-5: Refresh UGA plan-first bullet point typo, "area" should be replaced with word "are".

Proposals and Alternatives, 2-6, 7: Exhibits 2-3 and 2-4 depict UGA boundary in wrong location. 2 separate properties rezoned out of UGA.

Proposals and Alternatives, 2-9: Exhibit 2-5 Public facility zoning on Old Belfair highway is not compatible with nearby long term agriculture and ARL, agricultural resource lands. Two documented eagles nest, 1100 and 1900' to SW.

Proposals and Alternative 2-13: Planned Action Boundary should only cover east portion of UGA.

Chapter 3. Earth 3-3. Geographically Hazardous Areas. With more than 30% of the UGA lands being classified as a landslide hazard area all development including parks and trails and roads should be excluded from those areas. Again all future development should be focused on the eastern UGA away from these landslide hazard areas. With this in mind the planned Romance hill connector to freight corridor should be abandoned. In addition the most recent DNR tsunami modeling should be included as appendices to plan. https://www.king5.com/article/weather/earthquakes/new-maps-show-how-a-tsunami-could-impact-seattle-and-puget-sound/281-199e4224-07fa-4d31-9464-71976b1e8a01

Water Resources 3.2.1 Affected Environment page 3-10 "A large portion of UGA is within area where ground water resources are important and must be protected." How will County accomplish this protection?

Page 3-11 Exhibit 3-3 depicts the CARA stopping at UGA boundary. I think it is important that the map shows that the CARA extends outside the UGA boundary. I think the percentage of UGA land in a CARA should be calculated and addressed in the EIS similar to what was done for the Geographically Hazardous areas. I think the 2013 Mason County CARA team recommendations regarding the CARA

ordinance should be considered and referenced in the mitigation measures and referenced in EIS. (Attached).

Page 3-12, discusses Hood Canal and a 182 largest wetland but doesn't say where it is at. Need to be identified by location, landmark if nothing else.

Page 3-13, Exhibit 3-4. How can a plan be approved and adopted with inaccurate data? Same faulty data including fish presence used by same consultant in 2018 Belfair UGA Basin Plan.

Page 3-14, 15 wetlands. Mason County needs to characterize and rate all the wetlands in UGA immediately before any more are filled in. Reference pages 33 and 184 of 2018 Belfair UGA Basin Plan.

Page 3-17, Wells and groundwater states that there are no zoning changes proposed between alternatives over the CARA. That is false. Zoning changes include the current fire station being constructed on Old Belfair highway, the whole festival retail zone to mixed use and yet to be constructed 100 apartments on Roy Boad road as depicted on scoping post card and incorrectly rezoned form R-5 to R-10 in 2018 before moratorium was removed in 2019. Development code for the FR to mixed use rezone, **if approved,** will need to be amended to remove dry cleaners from allowed uses. They are prohibited in a CARA.

Chapter 3.3 Plants and Animals, 3.3.1 Affected Environment. Page 3-24 bottom. Due to conflicting information only streams depicted on DNR database are considered official fish habitat. How can you approve this plan when the DNR database is known to be faulty?

Page 3.28-2nd paragraph, Mindy creek tributary crossed under SR-3. (DNR 2020) wrong location. Stream was rerouted a short distance when SR3 was widened but still merges with Mindy creek and enters Union River not Hood Canal.

Page 3.29 Plant and animal impacts common to all alternatives. Recent SEPA done for NMRFA building and rezone to Public facility failed to identify that their project and entire UGA lie in US Fish and Wildlife "Pacific"migratory bird flyway. Also there are two active Bald eagle nests adjacent to western boundary of UGA. The closest being 600 feet from UGA. Both sites are in the Union River valley in the area I suggested to be removed from UGA.

Page 3-33. Federal regulations should include the Federal Bald and Golden Eagle protection Act administered by the U. S. Fish and Wildlife Service.

Page 3-36, Exhibit 3-11 existing land use map is wrong for two parcels off of old Belfair highway, undeveloped conservancy land and residential across street.

Page 3-40 Major pipeline developments. PCI LLC sets on a CARA. Major community concern with traffic mitigation for pipeline developments. Some feel they fail to timely meet GMA goal 11 and 12 on page 3-43.

Page 3-41. Streams not depicted as referenced in key.

Page 3-46 Existing Development Capacity. Comments received in scoping process support the proposal to modify UGA boundary to remove NW part of study area from UGA. The land capacity analysis considered the effects of modifying the boundary and found it had little effect to the capacity. **The PAC should make a recommendation to modify UGA boundary in Union river valley as part of alternative #3 focusing development on plateau in eastern portion of UGA.**

Page 3-65 Exhibit 3-22 Archaeology sites. Applicant misrepresented 45MS197 as an archaeology site. It wasn't listed **until 2012** as a historic hydroelectric site. The waterwheel site was built in the **1950's** after a trout pond and spillway was built by a Mr. Barber and a large excavator. The waterwheel was decorative only and served no other purposes.

Page 3-106. Last sentence. "The County currently does not have a stormwater utility fee or a dedicated funding mechanism for stormwater capital improvement projects." **PAC should recommend that the County establish a stormwater utility fee.**

Page 3-108 Exhibit 3-44 Existing stormwater facilities. What is the regional storm water WSDOT facility located outside UGA on PNWSC property? Is it in use? By WSDOT?

Page 3-112 Belfair water district anticipates that Alternative 2 and 3 growth projections exceed water district plans. **What is the PAC going to recommend regarding? Will recommendation consider concurrency requirements?**

3.9 Transportation

Page 3-120 Transportation section is the most I have been hearing about in community and is perhaps the largest issue if not the most expensive infrastructure.

Page 3-131 Belfair connector projects.

Only one connector to the freight cooridor built at Log yard road utilizing existing round about is the most common sense solution. The Romance Hill connector to the freight corridor is not a community supported option. Romance Hill road bisects a Land slide hazard area. If it is connected to freight corridor the connection costs should be paid by developers.

Page 3-133 Planned transportation improvements.

NE Clifton Lane Access Management at SR 3: The only left-turn to and from NE Clifton Lane between SR 3 and Roy Boad Road are currently restricted and to provide a compact roundabout at Roy Boad Road to allow u-turning is not necessary and a poor idea as it is only 200' from next intersection and there is a Mason Transit Authority bus stop with lots of pedestrians.

NE Old Belfair Highway/SR 300-NE /Clifton Lane Roundabout: This project was identified as part of the original 2004 subarea plan **seventeen years ago as a signalized intersection**. So much for concurrency!

2004 T-7: Signalize the Clifton Lane/Old Belfair Highway intersection. Install a traffic signal at this intersection when warranted. Include pedestrian sidewalks and signals on all four legs of the intersection. This intersection is very dangerous. Locals refer to it as Belfair's IQ test. A roundabout in this location is not good. There are too many pedestrians! Signalize intersection like recommended in 2004.

Page 3-134. Pedestrian and bicycle network. Bicycles and dogs are not allowed on Theler trail system. The proposed trail linking Romance hill, SR-3 and Salmon Center is in a large landslide hazard area. Trail maintenance is very expensive.

Page 3-135 Exhibit 3-53 Proposed trail is in a landslide hazard area. Risk is unacceptable. Trail maintenance in steep ground is expensive and causes erosion.

Page 3-146 I fail to see how County can meet the 6 year concurrency requirement. It appears County has already approved new developments with less than adequate current levels of service.

Page 3-148 Capacity improvements. 2 way left turn lane on Old Belfair highway to Newkirk road is a bad idea. Would not be necessary if a modified Alternative 3 was selected with UGA boundary revisions I earlier described.

Draft 2021 Belfair UGA Plan

I was a member of the 2004 plan committee. It was a large committee made up of 27 people and we had over 14 public meetings which were all well attended. On the cover page of the plan there is a large building depicted, the Salmon Center. It was a 36,000 square foot facility depicted on 25 acres and was one of the three development nodes in the 2004 plan. On page 6 of the 2021 draft version it talks about the Salmon Center being constructed in 2009 and that it has cemented the "theme", and is a tourism draw with 300,000 visitors a year anticipated. It should be noted that it was moved to Agricultural Resource land outside the UGA. 300,000 visitors a year is way outside the scope of their special use permit, current transportation and sewer infrastructure cannot support and cannot be extended outside of the UGA.

Page 11.

March 15, 2021 PAC meeting. Important to note that PAC discussed minor modification to redirect trails and **parks** from identified landslide hazard areas.

April 19,2021, Community meeting under RCW 43.21.c440(3)(b) meeting was not noticed well and there were no public members or public agencies in attendance.

Page 14. Why is Salmon Center depicted on map? It is not in UGA and map gives impression that it is an important area. Outside the scope of their special use permit!

Page 15. Romance Hill connection is planned. This is not a community supported vision. If built it should be paid for by developers(s). Natural environment- the CARA acreage should be depicted as a percentage of total UGA acreage like the Land Slide Hazard Area.

Page 16. Bikes and dogs are not allowed on Theler trails and WDFW lands.

Page 21. Depicts loop trail in Landslide hazard area.

Page 23. Park and multifamily residential sited on a class 1 wetland that was identified as a potential stormwater facility in 2018 basin plan.

Page 31. LU-1 Where is the recommendation that was in original scoping document regarding removing a portion of the Riverhill community? I think the residents of Riverhill and the Old Belfair Highway should be surveyed. Also another publically owned WDFW parcel on western edge of UGA should be removed. There was no public discussion about either.

Page 32. LU-2 Mixed Use designation -Assumes Romance Hill connector to freight corridor will be built. Very expensive, developers should pay total cost for infrastructure. Community does not support. Where Mixed Use is on top of the CARA specific recommendations should note prohibited uses and uses requiring environmental permits per Mason County Resource ordinance. 8.52.120

Page 34,35. LU-3 Support the concept. That area has the greatest potential for smart growth and the plateau is where there are minimal environmental impacts. The hydrology layer needs to be corrected to remove nonexistent streams. Alternative 3 with a reduction in Uga and development in the Union River valley makes most sense.

Page 40. LU-6 Map incorrect does not include existing R10 on Roy Boad road. 2 of the R-10s are overlying CARA and another is in landslide hazard area.

Page 47. Transportation.
How can plan be approved if transportation section is pending.
Several of the original transportation recommendations in the 2004 were not achieved in their entirety or at all.
T-1 just phase 1, phase 2 still pending
T-2 no median
T-3 no median
T-4 no median
T-6 not at all, name changed to Freight Corridor
T-7 no
T-9?

https://static1.squarespace.com/static/59af58ce37c5817a20c87a02/t/59b4260be9bfdf95033f32eb/1504978454855/belfair_uga_plan.pdf

Page 48.
P-2 and P-3. Market does no longer meet Washington State Farmers Market Association requirements to be a “farmers” market.

P-4. Good idea for larger Regional Park to be sited on plateau. Port of Allyn and Salmon Center’s idea of Sweetwater Park is not supported by community. Site still listed on Department of Ecology’s cleanup list. Does not protect critical areas. R-10 zoning should be removed from area as Salmon center has moved and is no longer focal point of the southern development node.

P-7. Trails require lots of maintenance. Who will pay? No trail of park should be put in a landslide hazard area.

Page 50. Figure 28.
What is "add improved access at bridge in long term"? Area depicted is the US Navy RR trestle. Abandon or reroute trails, (P1) to avoid all landslide hazard areas.

Page 51.
Water quality recommendations need funding. County needs to enforce current ordinance and adopt recommendations of 2012 CARA team.(attached) **PAC should recommend.**

Page 52. Implementation Strategy
The implementation strategy is word for word the same as 2004. Successful implementation of plan depends on local interests to organize and cooperate. That organization and cooperation is not happening. **Perhaps the PAC should recommend to the BOCC that Belfair incorporate**. As I understand it the Belfair UGA is one of a few UGAs in the state that aren't associated with an incorporated city. See second paragraph.
https://investors.harborcustomhomes.com/profiles/investor/ResLibraryView.asp?ResLibraryID=94134&BzID=2449&G=1380

Proposed Development Code Amendments.

Page 1.
Last bullet point.
Apply Public Facility Zoning that matches the standards contained in the Shelton UGA Public Institutional zone (MCC 17.07.710) (Alternatives 2 and 3).

I don't think it meets the intent of the ordinance in "facilitating"" managed" growth to approve rezoning existing facilities after the fact, or to apply the "Public facility" zoning that matches the standards contained in the Shelton UGA Public Institutional zone. The two UGAs are entirely different and Shelton is incorporated with their own Commission.

Page 7.
Code 17.23.130 Allowed uses: 20. Remove dry cleaner as an allowed use. Strictly prohibited in CARA.

Page 9.
Code 17.23.145 Prohibited uses. Add dry cleaners as prohibited in CARA
Code 17.23.155 (b) What is Old Beard place??? Please be more specific. The only Beard place I know of is 2 miles from UGA.

Draft Planned Action Ordinance
Page 4. "The County provided several opportunities for meaningful public involvement and review in the Belfair UGA Plan and Planned Action EIS processes, including a community meeting consistent with RCW 43.21C.440; has considered all comments received; and, as appropriate, has modified the proposal or mitigation measures in response to comments.
Please note the PAC meeting April 19 was not consistent with 43.21.C 440,3b. Agenda noted as "Public workshop", **Meeting minutes document there was no public or agencies in attendance.**

Section 2 Purpose, E. Uncertain how the objectives in this section are going to be adopted and achieved.

Page 9- (b) Concurrency. All Planned Action Projects shall meet the transportation concurrency requirements and the Level of Service (LOS) thresholds established in the Mason County Comprehensive Plan and Mason County Code. What are current established thresholds in Comprehensive plan and code.

Page 11-e (2) The County shall base its decision to qualify a project as a Planned Action Project on review of the SEPA Checklist form in WAC 197-11 and review of the Planned Action Project submittal and supporting documentation, provided on County required forms. [the County may develop its own SEPA checklist for the planned action area; however, the standard form is assumed here]

I feel the SEPA checklist review needs to be strengthened and **the PAC should recommend that the County develop its own SEPA checklist.**

Page 17. Exhibit A-option 2 makes most sense to focus development on plateau. Streams not visible on exhibit map.

Page 23. Utilities

7.
To account for increased stormwater conveyance needs due to increased impervious areas, the County shall require planned action applicants to pay their fair share of regional facilities that have been implemented in accordance with the Belfair UGA 2018 Basin Plan.
What are the regional facilities that have been implemented in accordance with that 2018 basin plan?

8.
Mason County may condition planned action applicants to pay adopted capital facilities charges for stormwater.
Change Mason County "may" to "shall".

Page 23 Transportation

9.
Connect the Romance Hill Loop Trail to land uses north of Romance Hill Road to facilitate north-south non-motorized activity in the Belfair UGA.
"Romance Hill loop trail" has not been adopted and is not referenced in UGA plan parks and trails recommendations.

Page 24. Transportation

10.
Concurrency: Transportation improvements or strategies shall be constructed to ensure that an adequate transportation system is in place to serve increased travel demands. Concurrency is defined as having a financial commitment in place to resolve the deficiency within six years. The County will not approve new developments unless the LOS standards are met. Transportation improvements identified in the Comprehensive Plan, County Transportation Improvement Program, and the Belfair Planned Action EIS are needed to meet LOS standards. Planned action applicants shall pay their proportionate share of improvements based on new PM Peak hour trips. A calculation of SEPA mitigation Fess is included in Section B-3.
The County will not approve new developments unless the LOS standards are met.

Page 25.

16.
The County Stormwater Management code (MCC 14.48.050) requires new development to meet the minimum requirements of the 2005 Edition of Ecology's Stormwater Management Manual for Western Washington. The County requires all large developments that propose stormwater infiltration upslope of landslide hazard areas to complete a hydrogeology analysis to confirm that the proposed design would not increase the risk of landslide hazards. Stormwater facilities must be designed in accordance with the 2012 Stormwater Management Manual for Western Washington, as amended in 2014, consistent with the Mason County Shoreline Master Program (MCC 8.52).
It is confusing which manual 2005 or 2012 governs which process?

Page 25 water resources

. During final design and permitting of projects under all alternatives, project proponents will first be required to avoid and minimize impacts to wetlands and streams through design measures and best management practices. Where impacts are unavoidable, project proponents will mitigate them in accordance with applicable federal regulations, local critical areas ordinances, and permit requirements. See Table 2.

No mention of CARA needs to be.

Page 28.

#29.
MCC Chapter 14.46 includes the purpose, description, and regulations associated with the County's storm and surface water utility. The utility is responsible for flooding management, water quality improvement, and protecting aquatic habitat. Currently, **there are no annual stormwater fees associated with the utility**. Assessments for fees may become necessary to support the utility and its functions, and a priority list of projects will be developed before any fee or assessment is required (MCC 14.46.040).
County storm water utility, annual storm water fees need to be adopted. **PAC should recommend.**

Page 29.

1a. Based on the share of trips in Section (3)(a) and mitigation in the EIS the cost and fee per trip has been calculated. Unless amended, **or replaced with a transportation impact fee**, mitigation fees consistent with the proportionate share of costs shall be applied to planned action applications. The proportionate share of costs of the Planned Actions shall be determined based on their proportionate share of trips identified in Section 3.D(3) of this ordinance and this section.

PAC should recommend a transportation impact fee.

Sincerely,

Ken VanBuskirk

NE 61 Davis Farm Road

Belfair, Wa 98528

To Randy Neatherlin, Chair, Mason County Board of County Commissioners

From Bob Hager, Lead, Informal CARA Team

Date March 26, 2013

Subject Status and Recommendations on Mason County Critical Aquifer Recharge Areas (CARAs) Ordinance

In response to your request, I am pleased to report that the informal group you asked me to convene has finished its recommendations on Mason County Critical Aquifer Recharge Area(s) and ordinance.

The members of the informal team were Pat Vandehey, Terri Thompson, Constance Ibsen, Ken VanBuskirk and myself. The results are the product of the team members' review of existing materials, investigations and, in particular, the substantial information compiled by Terri Thompson and Pat Vandehey.

MASON County Critical Aquifer Recharge Area Ordinance
Status and Recommendations

OVERVIEW AND STATUS

Mason County Resource Ordinance, Section 17.01.080 (MCRO) provides the standards for Critical Aquifer Recharge Areas (CARAs) in accordance with the Growth Management Act (Attachment 1). The GMA defines CARAs as "areas with a critical recharging effect on aquifers used for potable water." CARA ordinances are to protect the aquifer by ensuring a clean supply of freshwater as it enters the ground and the aquifer. It is generally accepted that protecting public drinking groundwater supplies from contamination is essential for human health. Clean-up costs can be prohibitive or not possible.

Mason County CARA locations are designated as Class I (Extremely Susceptible) Class II (Highly Susceptible), Class III (Moderately Susceptible) or Class IV (Low Susceptibility). CARAs are shown on 25 USGS base maps with boundary lines drawn by retired volunteer geologist consultant Gordon Adams (now deceased). In a March 29, 1999 letter to Robert Fink, Mason County Growth Management Planner, Mr. Adams describes the methodology and references he used (Attachment 2).

Mason County Planning uses these maps when reviewing permit applications. Mason County planners often have difficulty determining if a particular property is located on a CARA due to the width of the hand drawn lines and the scale of the maps. In addition, there are some areas where the lines do not meet (Attachment 3). Although developed at the same time by Mr. Adams, the City of Shelton and the Mason County CARA maps are exactly opposite for Class I and II aquifer classifications. Interestingly, the online Mason County and City of Shelton Comprehensive Plans CARA maps show no Class III aquifers. The Gordon Adams' maps show many Class III CARAs. Also, the Gordon Adams' CARA map shows a Class II CARA in downtown Shelton (Attachment 4), which is missing from the City of Shelton CARA and Mason County CARA maps on their respective websites (Attachment 5).

Ecology was unable to provide a list of facilities on Mason County CARAs that it permits or monitors because of the limited information on Mason County CARA locations. Ecology did provide a list of 495 facilities in Mason County that it has permitted or tracked under various Ecology programs. Using existing Mason County CARA maps, a limited review by the CARA team determined that a large number of these facilities are on CARAs. For example, of the 102 known sites around the Belfair area in the Ecology database, 37 of the listed facilities are on the Union River Class II CARA. There are 55 leaking underground storage tanks in Mason County for clean up under the oversight and review of Ecology (Attachment 6). Ecology is currently unable to determine if any of these sites are located on a CARA due to the lack of sufficient definition in Mason County CARA mapping.

Mason County does not have a database of facilities requiring permits located on CARAs. The MCRO, Section J1, requires that a "*database identifying all pre-existing prohibited uses or uses requiring a permit is maintained."* For these pre-existing facilities the MCRO, Section C, requires the County to *"contact the owner and develop a compliance plan and time line to bring the pre-existing use into compliance to the highest degree practicable and which provides an acceptable low risk to the aquifer."* There is also no database of abandoned facilities on CARAs.

On-Site Septic Systems (OSS) require mandatory operation and maintenance if located on a CARA (MCRO, Section G). This is also reflected in the 2007 Mason County *On-Site Management Plan*. (Attachment 7). There is no OSS countywide database for property parcels on CARAs. OSS operations and maintenance compliance in Mason County is generally not enforced.

There are indications that environmental contamination in Mason County is impeding development:

According to the 2002 CDM *Brownfields Assessment* (Attachment 8) in the early 1990's Hokushin, a manufacturer located in Japan, planned to build a $70 million fiberboard manufacturing plant employing 120 on 70 acres in John's Prairie. During the *Phase 2 ESA* they encountered contamination in the ground water exceeding drinking standards. The source of the contamination was unknown and is still unknown. The manufacturer decided against a plant here and constructed an identical plant in Australia. In 1998, Express Pipe and Precast leased a parcel in John's Prairie to start a concrete precast manufacturing operation. They encountered large quantities of buried wood waste for which that the Port of Shelton was not aware. The company terminated the lease because the large quantity of wood waste made the development uneconomical and no agreement on how to dispose of the wood waste was reached.

CARA TEAM CONCLUSION:

The CARA team concludes that sufficient and adequate ordinances are in place to protect CARAs; needed is ordinance implementation and enforcement.

RECOMMENDATIONS

Immediate

Develop GIS CARA parcel layer: Direct and give authority to Mason County GIS staff to develop a parcel level layer for Mason County CARA locations based on the 1999 CARA maps prepared by Gordon Adams. John Stormon, hydrogeologist with Washington Department of Ecology, has offered to assist Mason County GIS staff.

This is the most urgent of all the recommendations, as it is needed to identify properties that are on various CARAs and to implement the other requirements in the Ordinance. Ecology also needs this GIS layer to identify facilities it permits and tracks within the CARAs.

> The discrepancies between County CARA maps and Shelton CARA maps need to be reconciled. The maps encompass the same CARA areas; yet identify Class 1 and Class II exactly opposite.
>
> Review and identify Class III CARAs on the original Adams' maps and add to the GIS layer.
>
> In addition, the County must develop an ongoing process to refine the GIS layer with DNR, USGS geological information, wellhead data and various hydrogeologic studies prepared for individual projects.

Concurrently

Provide for a Critical Areas **Compliance staff position**. This position needs to be independent of Mason County department of Community Development, Health and Public Works. The job description would include the tracking, monitoring and enforcement of regulations concerning Critical Aquifer Recharge Areas. Possibly, Ecology's Hazardous Waste Program monies could be tapped to provide some support for this staff position and build in-house capacity

Ongoing

Data Base(s) Using the CARA GIS parcel layer:

Develop a comprehensive database of active existing facilities and operations on CARAs that have been permitted **Post the 1999** CARA Ordinance adoption that are either a 'Prohibited Use' or require an 'Environmental Permit."

Identify and document sites required to have a hazardous waste number (WAC 173-303).

Inspect for compliance; initial inspection and subsequent inspections "not less than one every two years." (MCRO, Section J 1 and 2)

Assure that employees at the facilities are aware of and are following the required procedures for being located on a CARA.

Determine and implement compliance procedures/regulations, including enforcement, timelines and penalties.

Develop a database of active facilities and operations on CARAs that existed prior to 1999 **CARA adoption** (**Pre-existing uses)** that are either a 'Prohibited Use' or require an 'Environmental Permit' (Attachment 1, MCRO*,* Section J1*).*

In accordance with MCRO, Section C, for each facility or operation mentioned above: *"…contacting the responsible party, develop and implement a compliance plan and timeline, bringing the operation into compliance to the highest degree possible, and provides an acceptable, low risk to the aquifer*."

Develop a database of abandoned facilities or operations in Mason County, located on CARAs listed as prohibited under the Ordinance. Ecology previous permits and local residents' knowledge are sources to locate the sites. For each site develop a plan for monitoring and/or removal.

Develop a database for active and inactive surface mining (MCRO, RE-516, A –F (Attachment 9).

Develop a database of OSS on CARAs, flagging the property records for requiring mandatory Operation and Maintenance *(Attachment 1, MCRO, Section G and the On-Site Management Plan* (Attachment 7).

Notify the homeowners that are located on CARAs that operation and maintenance of OSS is mandatory to protect aquifer and drinking water sources.

Develop a process of coordination between the County, City and Ecology for the permitting and monitoring of facilities on CARAs.

Request that this report be made available to all Mason County Department Heads.

Attachments:
Four Examples of Sites Impacting CARAS, Attachments (9), Addendum (prepared by T. Thompson)

The following are some examples of past or current operations, which may be or have been, adversely impacting soil and water quality.

Belfair Sewer Project, Belfair UGA

Contaminated soil was encountered during construction of the Belfair sewer and resulted in cost overruns. This area is in the Union River Class II CARA in the Belfair UGA. A GIS parcel layer of pre-existing and/or abandoned permitted or prohibited uses on the Belfair CARAs could have assisted design engineers to locate sewer transmission lines into areas with less likelihood of encountering contaminated soils. Unfortunately, contaminated soil was encountered where there are known pre-existing or abandoned facilities including, at least six gas stations/auto repair facilities, two dry cleaners, and two boat repair facilities --all within 1/3-mile radius.

Goose Lake/Sanderson Airfield

Department of Ecology Agreed Order No. DE99TC-S260, 2001, states:

The Goose Lake Site is located approximately 0.3 miles west of Shelton. The Goose Lake Site and nearby upland property were used as a disposal area for Rayonier's waste from a calcium sulfite pulp mill. Thousands of tons of waste sulfite liquor were deposited from May 1931 to 1934 into the Lake and from 1934 into a series of upland disposal lagoons. Goose Lake sediment samples demonstrated extremely high concentrations of sulfide. Analysis for total metals indicates that the sediments are contaminated with mercury. Polychlorinated biphenyl (PCB) was also present in the sediment. Analysis of groundwater in the vicinity of the landfill indicated the presence of chromium above the Method A Cleanup Level. Contamination with arsenic above the Method A Cleanup Level was found in all three monitoring wells. Soil samples in the vicinity of the former disposal ponds indicated that arsenic concentrations were above the Method B Cleanup Level. Chromium has also been detected is soils and groundwater at Sanderson Air Field which is located in the Port of Shelton just north of Goose Lake.

Leaking Underground Storage Tank s (LUSTs) – Example, Belfair UGA

According to Ecology, there are 58 known leaking underground storage tanks (LUSTs) in Mason County. Example, **Facility Site 81456814 MC GWIMONT**at NE 22604 HWY3, Belfair. It is identified in the Ecology Toxics Program as Nbr. 6547. It is located on the west side of Highway 3 at the intersection with Highway 106. The start date for the Ecology effort is 8/1/1973. There is no further information or end date provided. Although this is not in the Union River Class II CARA, it is within the Belfair Water District Wells 1 and 2 well head protection buffer zones.

Shelton Landfill (C Street Dump)

This landfill is located on a CARA west of Highway 101 near the end of C Street. It is unlined and unmonitored. It has been listed under Ecology's Toxics program as a State Cleanup Site since 1988. A large amount of municipal and hazardous waste is buried there. It is also a site that Simpson Timber Company deposited dioxin ash mixed with sewer sludge. Currently, Miles Sand and Gravel, also located on the CARA, has removed a great deal of hillside near this old landfill. The 1987 final dioxin study report by CH2M Hill stated: "…*the lowest portion of the depression is not on City property and there is a potential for movement of contaminated material to lower elevations within the depression although two berms would have to be breached before surface movement would occur." There is a potential for leaching from hazardous material into groundwater and into Goldsborough Creek.*

Mariah Frazier

From: Planning
Sent: Monday, June 7, 2021 3:20 PM
To: Mariah Frazier
Subject: FW: Belfair EIS Comment

From: Chris Wilder <cwilder@masontransit.org>
Sent: Thursday, June 3, 2021 12:49 PM
To: Planning <planning@co.mason.wa.us>
Cc: Trina Gwerder <tgwerder@masontransit.org>
Subject: Belfair EIS Comment

Belfair EIS Comment

MTA has concerns about the roundabout's proximity on Hwy 300 / NE Clifton Ln / NE Old Belfair Hwy and Roy Boad / Clifton Ln that may create safety concerns at our bus stop along Bill Hunter Park. Our Buses are large and cumbersome, taking extra time and space to safely merge into traffic. With the roundabout's proximity and steady flow of traffic, this may cause close calls or collisions with our Buses as they try to merge. This intersection is very busy, and other drivers can be very impatient.

Our other concern is the crosswalks in these roundabouts. There is a lot of pedestrians in this area that will be needing to safety cross the street to get to our bus stop. We would like to ask that traffic lights and warning lights for the crosswalks are put in at this intersection instead of a roundabout.

Thank you.

Chris Wilder (MTA)

Skokomish Indian Tribe

Natural Resources Department (360) 877-5213

N. 541 Tribal Center Road **Fax (360) 877-5148** **Skokomish Nation, WA 98584**

June 7, 2021

Kell Rowen, Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton WA 98584
(360) 427-9670 x 286
planning@co.mason.wa.us

Subject: Skokomish Tribe Comments: Mason County Belfair Urban Growth Area: Draft Environmental Impact Statement (DEIS); April 2021

Dear Ms. Rowen,

Thank you for the opportunity to comment on this Draft EIS.

The Skokomish Tribe (Tribe) and reservation are located primarily within the Skokomish River Basin. The basin is part of the Tribe's much larger usual and accustomed (U&A) gathering, fishing and hunting area within the Hood Canal Watershed. These waters are tributary to the waters of Puget Sound in Washington. The Tribe is heavily dependent on shell-fish gathering and fin-fishing for salmon within our U&A, not only for cultural and subsistence use, but also for commercial purposes. The Tribe has senior water rights within our U&A. This includes the Belfair UGA planning area in the (Southern) Hood Canal Sub-Basin within WRIA 14. The planning area is also on western edge of WRIA 15, and involves the water resources of four tribes, including the Skokomish, Squaxin, Suquamish, and Port Gamble S'Klallam (PGST) Tribes.

Both water quantity and quality are primary components of critical habitat. It is vitally important that water quantity is protected for the restoration of biodiversity and the recovery of ESA listed species within the Union River Watershed. It is the Tribe's position that far too much pressure is already placed on this watershed by land development within Kitsap and Mason Counties, including the following:

- Belfair is pumping groundwater in the Skokomish U&A (Union River) and possibly Coulter Creek (Squaxin U&A).
- Bremerton withdraws surface water from the Skokomish U&A (Union River).
- Bremerton production wells withdraw groundwater from an aquifer that likely connects to the Union River, Gorst and Parish Creeks (PGST and Suquamish U&A).
- Bremerton pumping may also affect the Coulter Creek (Squaxin U&A).

The Draft EIS states in the Fact Sheet (Page 5) under the *"Proposed Action and Alternatives"*; that:

"Belfair may soon experience a rapid increase in growth. The County proposes to update the Belfair UGA Plan, adopted in December 2004, and refresh the vision. The County also seeks to Planned Action ordinance for the Belfair UGA to facilitate growth that supports a community-based vision for Belfair. Amendments to the Mason County Comprehensive Plan and Belfair zoning and environmental regulations would be needed to implement alternatives."

If there is more growth in Belfair, then the increased pumping of Belfair area wells is likely to specifically affect the Union River, while rural dispersed growth would affect multiple creeks as well as the Union River. Has the County done any hydro-geologic analysis to ascertain impacts with different well pumping scenarios?

The DEIS narrative states that *"environmental regulations would be needed to implement alternatives."* Based on our review of Section 3, *"Environment, Impacts, and Mitigation", with* specific reference to 3-10, *"Water Resources", t*he Tribe's position is that this section, while it may be able to show that sufficient "legal" water rights exist to facilitate growth, fails to mention Tribal senior water rights issues, thereby minimizing or even failing to recognize "Tribal" senior water rights. Additionally, the narrative fails to connect "legal" water rights" to the physical availability of water in fact. The County has not produced any definitive surface and/or ground water studies to provide hydro or hydro-geologic information that evidences or shows that there is physically enough water resource availability to facilitate either Alternative 2 or Alternative 3. Instead the County has provided estimates based on assumptions about "legal" water rights. This does not replace hydrologic or geo-hydrologic evidence, and is simply insufficient In order to develop effective environmental regulations and mitigation. The Tribe is obligated to protect our senior water rights. It is our position that studies need to be conducted to demonstrate this evidence.

Additionally, on Page 9, the DEIS states that:

"Mason County has also coordinated with tribes and agencies with jurisdiction and environmental expertise and service providers in the preparation of the current DEIS".

To our knowledge, and with exception of this notification, the Skokomish Tribe has not been consulted regarding the development of this draft EIS, either by any of the consultants listed under *"Authors and Principal Contributors to the EIS"* on Page 8, or by Mason County.

Thank you for the opportunity to comment. If you have any questions or concerns regarding these comments please contact Dana Sarff, Environmental Planner, at 360-877-5213 Ext 2201 or at dsarff@skokomish.org

Respectfully,

Joseph Pavel
Director of Natural Resources
Skokomish Tribe

SQUAXIN ISLAND TRIBE

June 7, 2021

Kell Rowen
Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton, WA 98584

Dear Ms. Rowen,

These are comments on the Mason County Belfair Urban Growth Area Draft Environmental Impact Statement | April 2021.

Our primary concerns lie with Mason County's plans for the Belfair Water Reclamation Facility (WRF). The mere existence of this facility is very positive, and there are a number of positive ways to use the WRF's reclaimed water. Still, Mason County's plans to expand the WRF are so substantial that any expansion alternative will cause a change to groundwater, surface water, and water quality of the Coulter Creek and its tributaries, which are Treaty Resources of the Squaxin Island Tribe.

According to Washington State Department of Ecology's PARIS Database, the Belfair WRF's outflow to pond and sprayfields ranged from about 0.04-0.15 million gallons per day (MGD) in 2020. The WRF has accumulated violations of its permit, including for Nitrogen (PARIS Database). According to the draft EIS, the WRF is permitted to 0.32 MGD. Alternatives 1, 2, and 3 in the draft EIS could result in flow to the plant approaching 0.251, 0.727, and 0.864 MGD respectively (page 3-113). Furthermore, from Mason County's draft General Sewer Plan, the County anticipates increasing sprayfield capacity from 0.125 MGD to 0.237 MGD by 2026. We understand from this draft EIS that Mason County plans to receive wastewater from the City of Bremerton's Puget Sound Industrial Center.

It is clear that reclaimed water application into the Coulter Creek watershed will increase significantly.

Please quantify in the EIS:

1. The current nitrogen load released through the pond and sprayfield into the watershed.
2. How much water will be sent from the Puget Sound Industrial Center?

3. The future nitrogen load released through the pond and sprayfield into the watershed under Alternatives 1, 2, and 3.

Please address in this EIS:

4. What are the County's plans to decrease the number of violations at the Belfair WRF and improve treatment?
5. What are alternatives to only expanding the sprayfield? Forestry irrigation is a way to use wastewater, but forestry in Western Washington does not require irrigation. While improving wastewater treatment, could the WRF fully infiltrate reclaimed water in new locations or reuse it inside the Belfair UGA?

The draft EIS makes an unfounded assumption that because there will be additional development in the Belfair UGA, additional permit-exempt wells will not be drilled, and owners of existing permit-exempt wells will connect to the Belfair Water District Service. We know from experience that although a public water system may available, homeowners may not connect to it due to additional cost.

Please quantify in this EIS:

6. The number of rural residential parcels that will not have permit-exempt wells versus the number of newly built households that will connect to the Belfair Water District 1 system.
7. The number of existing households with permit-exempt wells that are expected to connect to the Belfair Water District 1 system, and how it can be assured that they will do so.
8. Different impacts to groundwater (and therefore Union River and Coulter Creek) that result from additional pumping in Alternatives 1, 2, and 3 of the draft EIS.

The Belfair WRF reclaimed water source exists in the middle of multiple watersheds, jurisdictions, and Tribal Usual and Accustomed Areas (U&A's):

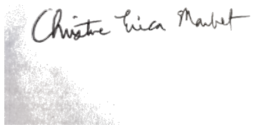
- Belfair Water District is pumping groundwater in the Skokomish U&A (aquifers connected to the Union River) and possibly affects aquifers connected to Coulter Creek (Squaxin U&A).
- Bremerton withdraws surface water from the Skokomish U&A (Union River).
- Bremerton production wells withdraw groundwater from an aquifer that connects to the Union River and Gorst and Parish Creeks (Port Gamble S'Klallam and Suquamish U&A). Bremerton pumping may also affect the Coulter Creek (Squaxin U&A).
- Bremerton and Mason County are developing an agreement to remove water, in the form of wastewater, from the Puget Sound Industrial Center (Port Gamble S'Klallam and Suquamish U&A) to Coulter watershed (Squaxin U&A).
- The City of Port Orchard is looking for addition water rights, which may impact Coulter Creek.

- WRIA 15 just went through a planning process for rural wells and offset of their impact. Reclaimed water is a possible offset. The WRIA 15 group never heard from Mason County about the Belfair Water Reclamation Facility.

Please address in this EIS

9. How Mason County will inform and include all stakeholders in its plans and agreements around reclaimed water?
10. How Mason County will identify and chose alternatives for reclaimed water that improve water quality and streamflow for streams and rivers most impacted by groundwater pumping from expanded development in the Belfair Urban Growth Area.

Sincerely,



Erica Marbet

Water Resources Biologist

Squaxin Island Tribe

Hood Canal Coordinating Council
Jefferson, Kitsap & Mason Counties; Port Gamble S'Klallam & Skokomish Tribes
17791 Fjord Drive NE, Suite 118, Poulsbo, WA 98370

June 1, 2021

Kell Rowen, Community Development Administrator
Mason County Community Services
615 W Alder Street
Shelton, WA 98584

RE: Hood Canal Coordinating Council Staff Review Comments on the Belfair UGA DEIS April 2021

Dear Kell,

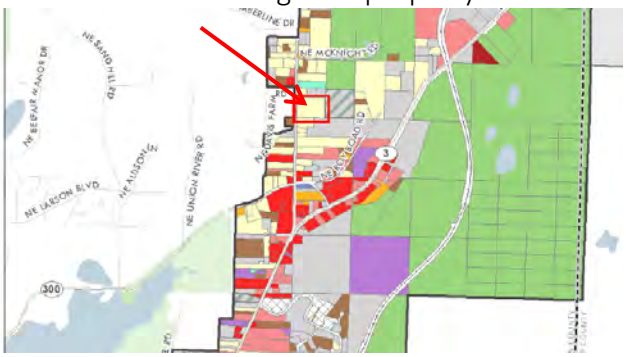
The Hood Canal Coordinating Council staff has reviewed the Mason County Belfair Urban Growth Area DEIS, April 2021 and would like to provide the following comments.

Comment 1: See Wetlands pages 3-14, 3-15 and Exhibit 3-4 Wetlands and Streams
There is a large wetland occurring on Irene Creek east of the Old Belfair Highway which is partly contained within the 17 acre wetland mitigation site of the Hood Canal Coordinating Council's In Lieu Fee Program. We have estimated this wetland to be at least at 24 acres based on area topography, aerial imagery review and field survey of some parcels in the area. This is a Category 1 wetland and occurs from south of the Irene Creek culvert crossing at Old Belfair Highway north and east to McKnight Road. North of McKnight Road a wetland with an open water pond also occurs. These two wetlands are hydrologically connected by Irene Creek and hyporheic flow. This wetland is not accurately depicted on Exhibit 3-4 Wetlands and Streams.

Comment 2: Is the UGA boundary correct at the circled location of Exhibit 3-4, looks different from previous Exhibits? Also verify boundary on Exhibit 3-7.

Comment 3: Exhibit 3-10. Existing Land Use Acreages
Undeveloped Public/Conservancy lands should be separated out from undeveloped only lands. Public and conserved lands have restrictive land uses placed on title and are not typically available for development so should not be included with unrestricted undeveloped land.

Comment 4: Exhibit 3-11 Existing Land Use Map
Incorrect land use for parcel 12329-11-00040 (see red arrow on figure excerpt below) – conserved wetland mitigation property.



Sincerely,

Patty Michak

Patty Michak
Mitigation Program Manager
Hood Canal Coordinating Council

Mariah Frazier

From: Stephanie Neil <davisfarmflowergirl@gmail.com>
Sent: Tuesday, June 1, 2021 6:49 PM
To: Planning
Subject: Fwd: Belfair UGA Draft EIS comments

I wanted to clarify what I wrote in my earlier email regarding cultural resources. I'm really happy to see the County considering additional measures to identify and protect cultural resources. I think it is a good idea to conduct more surveys in high probability areas before development. I don't think the desktop reviews will be that useful because they are just gathering background information, there is no fieldwork. The statewide predictive model is a useful tool but it has limitations. My main question is who would be determining if a survey was necessary - DAHP staff, County staff, or other?

Thank You,
Stephanie Neil

---------- Forwarded message ---------
From: **Stephanie Neil** <davisfarmflowergirl@gmail.com>
Date: Tue, Jun 1, 2021 at 6:22 PM
Subject: Belfair UGA Draft EIS comments
To: <planning@co.mason.wa.us>

Thank you for taking comments on the Belfair UGA Draft EIS.

I have been a Belfair resident for about 32 years and it's a very special place to me. I grew up in Belfair, left in 1996 for university and to start my career, and returned when I had my first child in 2007 because I wanted to raise my kids here.

I looked at the Draft EIS and also some of the meeting notes and have the following comments.

I see Belfair as a crossroads, vacation destination, and bedroom community to Bremerton and beyond. I personally commute from Belfair to Seattle three days a week via the ferry service from Bremerton and Southworth and I'm one of many. Belfair is on a major route north-south and also a jumping off point to summer cabins and recreation on Hood Canal, Tahuya Peninsula, Mason Lake, and the Olympic Peninsula.

I know there will be increased growth and we need to plan for it. I'd also like to see improvements in transportation to handle increased numbers of people, and the protection of important natural resources.

I prefer Alternative 2 or a new Alternative with pieces from Alternative 3, but not the entire thing. I think the growth should be focused near SR3 or the new SR3 Freight Corridor. I think it will be easier to improve the existing infrastructure on SR3 and design SR3 Freight Corridor infrastructure to handle the increased growth.

I do not think it would be wise to rezone the portion of the UGA in the Newkirk area. The Union River Valley Critical Aquifer Recharge Area needs to be protected and as noted in the Draft EIS the Union River is a shoreline of statewide significance and already has issues with bacteria, dissolved oxygen, and temperature levels. Also noted were poor spawning conditions due to runoff. Efforts should be made to protect the Union River and its major tributaries.

I own the property at 301 NE Old Belfair Hwy. I noted the UGA includes that parcel (it sticks out there) but the zoning has been changed to Rural Residential. Irene Creek flows through this property. The UGA boundary should be redrawn

straight along Old Belfair Hwy at this location. The property at 381 NE Davis Farm Rd. was also changed to Rural Residential and borders Irene Creek but the UGA boundary also goes around this property. It should be redrawn here as well.

I think there is additional acreage in public/conservancy than is shown. The property at 360 NE Old Belfair Hwy is under a conservation easement. The 10 acre to the east of this parcel is marked but not the 7 acre along OBH.

I do think adding more growth to the northern area of the UGA near the SR3 and SR3 Freight Corridor by changing to a MP-MU designation is a good idea. This area is better suited for development and would be closer to the main travel routes.

The Draft EIS noted the intersection at Old Belfair Hwy/ SR 300/ Clifton Ln is very busy and already poorly functioning. It would not be wise to add increased traffic coming from the Newkirk direction, even if the intersection is improved.

I don't think the maps have all the streams and wetlands accurately mapped. I think there are likely additional wetland areas to the east of SR3 near the center of Belfair and some streams do not appear to be in the correct locations. I think better data is needed to properly plan and there may need to be additional areas that are set aside for wetland preservation and/or mitigation.

I would like to see a connection from the SR3 Freight Corridor to SR3 close to the intersection of SR3 and SR106. I think this would make a more logical connection than the one planned at Romance Hill. Maybe this would be harder to engineer at the top of the hill, I don't know enough about the details of the land, but it seems like it would make a much better connection and keep the people travelling down SR106 from going through downtown.

I like the idea of a roundabout at the SR300/ OBH/ Clifton Lance intersection. I don't understand the need for another roundabout at Roy Boad Road.

I really like the idea for increased bicycle and foot trails, especially the one along SR300. I regularly ride my bicycle and run on roads and many in Belfair are very dangerous. The section from QFC to Sand Hill Rd is one of the worst. It would be great to have more of the parks tied together. This connection along SR 300 towards Belfair State Park and towards the Sand Hill park is much needed.

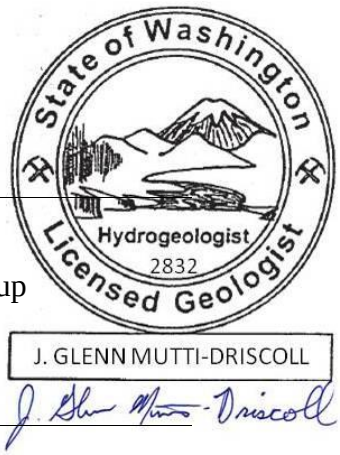
I am a professional archaeologist and familiar with the secure side of WISAARD. I have some questions regarding additional cultural resources requirements. Who would be reviewing and determining if a cultural resources desktop review or survey is necessary? Would that be done by County staff? It seems like that would require a lot of additional work. I don't see the usefulness in having desktop reviews for the moderately low and moderate areas. I like the idea of adding standard inadvertent discovery language, but I think the other proposed changes might be requiring more work than is really necessary to protect cultural resources.

Thank you for your time,
Stephanie Neil

B Hydrogeologic Analysis (2021) – Pacific Groundwater Group

PACIFIC groundwater GROUP

Technical Memorandum



To: Matt Fontaine, Herrera; Lisa Grueter, Berk Consulting

From: Glenn Mutti-Driscoll and Peter Schwartzman, Pacific Groundwater Group

Re: Belfair EIS Hydrogeologic Analysis

Date: October 25, 2021 (Revised, Original September 10, 2021)

This memorandum presents findings from a basic hydrogeologic analysis for the Belfair, Washington area to support an Environmental Impact Statement (EIS) being developed by Mason County. This analysis focused primarily on estimating likely hydrogeologic impacts to stream baseflows ("streamflow capture") due to increased pumping from Belfair Water District No. 1 (District) wells. The projected pumping increases fall within the District's legally allocated water right quantities, but through the EIS process concerns have been raised regarding potential streamflow impacts tied to increased pumping. Pacific Groundwater Group (PGG) used existing hydrogeologic reports for the Belfair area, District well logs, and a regional groundwater model developed by the U.S. Geological Survey (USGS) to estimate streamflow capture. Impacts presented in this memorandum should be considered initial estimates, and could be further improved through refinement of the existing model (including model domain revision and recalibration), which was outside of this scope of work.

We also reviewed work previously performed for the WRIA 15 Watershed Restoration and Enhancement Committee (WREC) that regionally mapped areas potentially favorable for infiltration on the Kitsap Peninsula. The County is interested in understanding the potential for reclaimed water infiltration in and near the Belfair Urban Growth Area (UGA), which was the focus of our assessment.

The work was authorized by Berk Consulting on August 23, 2021. The work was performed, and this memorandum prepared, using generally accepted hydrogeologic practices in this area at this time, for exclusive application to the Belfair vicinity, and for exclusive use by Berk Consulting and Mason County. This is in lieu of other warranties, express or implied.

PUMPING IMPACT ESTIMATES

PGG reviewed available well logs for District wells, regional geologic information for the Kitsap Peninsula (Welch and others, 2014), and the Kitsap groundwater flow model developed by the USGS (Frans and Olsen, 2016) to assess the likely impacts of District well pumping on local surface-water features. A review of the Kitsap model domain and District well locations found that three district wells (Wells 1, 2, and 4) are within the groundwater model domain, while two wells (Wells 3 and 5) are slightly outside of it. Because Wells 3 and 5 are outside of the model domain and no other groundwater models are known to exist in this area, likely pumping impacts from

these wells were qualitatively assessed, while pumping impacts from Wells 1, 2, and 4 were quantitatively assessed using the Kitsap groundwater model. In addition to not all of the District wells being within the Kitsap model domain, a known issue with the Kitsap model is that it can inaccurately simulate dry cells in shallow model layers, which could bias the estimated pumping impacts on streams. While these model limitations are recognized, the regional Kitsap model is the best available tool for predicting pumping impacts, and for this preliminary analysis was used as-is without significant updates. The following sections present results of a geologic review of the District wells and the pumping impact assessments, and potential biases that may be present in the analyses due to simulation inaccuracies will be interwoven into the discussion of pumping impacts.

GEOLOGIC REVIEW

The general geology of the Belfair area consists of a thick sequence of stratified glacial and interglacial sediments[1] that overlie bedrock. Primary surficial geologic units include the Vashon glacial till (Qvt), which is locally overlain or incised by Vashon recessional Outwash (Qvr) and alluvium, and is underlain by Vashon advance outwash (Qva). Of these surficial units, Qvr and Qva are generally permeable, while the Qvt is generally restrictive to flow and behaves as an aquitard.

District Wells 1 and 2 are flowing artesian wells screened between approximately 319 and 386[2] feet below ground surface (bgs), or roughly 300 to 365 feet below sea level. They are located west of Highway 3 and in close proximity to Hood Canal (**Figure 1**). A driller's log is available for Well 2, but unavailable for Well 1. Based on the Well 2 log, an approximately 300 ft thick confining unit composed primarily of silt and clay is present at the site, and corresponds to geologic units QC1 and QC2 based on the USGS characterization (Welch and others, 2014; Frans and Olsen, 2016). A roughly 10 ft thickness of surficial Qvr materials is present on site, while intervening regional aquifers between Qvr and QA2 (including Qva, QC1pi, and QA1) appear to be absent. Well 1 has a certificated annual water right quantity (Qa) of 225 acft/yr (or an average annual pumping rate of 139 gpm), and an instantaneous water right quantity (Qi) of 150 gpm. The water right for Well 2 is supplemental to Well 1 (meaning that the combined annual pumping from Wells 1 and 2 cannot exceed 225 acft/yr) and Well 2 has a Qi of 300 gpm. Historically Well 2 has yielded 150 gpm, and is only used as an emergency well because it produces sand during its startup (Stantec, 2021).

Well 4 is 640 feet deep, and is located in the uplands above the Union River (**Figure 1**). Based on its driller's log and regional aquifer unit elevations estimated by the USGS (Welch and others, 2014; Frans and Olsen, 2016), it is screened in the QA2 aquifer (between 585 and 630 feet bgs, or 245 to 290 feet below sea level). The QA2 aquifer is not artesian near Well 4, and shallower aquifer and aquitard units appear present at the well. Well 4 has a certificated Qa of 645 acft/yr (or an

[1] The sedimentary sequence defined by Welch and others (2014) for the Kitsap peninsula includes the following aquifer and aquitard units: Vashon Recessional Outwash (Qvr aquifer); Vashon Glacial Till (Qvt aquitard), Vashon Advance Outwash (Qva aquifer), Upper Confining Unit (QC1 aquitard); Upper Confining Unit Permeable Interbeds (QC1pi aquifer); Sea-level Aquifer (QA1 aquifer); Middle Confining Unit (QC2 aquitard); Glaciomarine Aquifer (QA2 aquifer), Lower Confining Unit (QC3 aquitard), Deep Aquifer (QA3 aquifer); and the Basal Confining Unit (QC4 aquitard).

[2] The exact screen interval of Well 1 is unknown, but it is completed to 386 feet. Well 2 appears to be screened from 319 to 329 feet bgs and 365 to 372 feet bgs (its well log is marginally legible).

average annual pumping rate of 400 gpm) and a Qi of 600 gpm. Currently Well 4 is only pumped at approximately 100 gpm (Stantec, 2021).

Wells 3 and 5 are artesian wells located on Hummingbird Lane and in close proximity to Hood Canal (**Figure 1**). Both wells 3 and 5 are installed to a depth of 147 feet bgs. Well logs are not known to exist for either well, but a well log from a neighboring well on Hummingbird Lane (ALG472) that is screened to 154 feet bgs was downloaded from the Department of Ecology well report viewer and reviewed. A regional aquifer approximately 150 feet bgs (or ~135 ft below sea level) was not identified by the USGS in vicinity of Hummingbird Lane or in the nearby Well 2 driller's log, which suggests that these shallow wells tap a localized aquifer or one that extends further south. It is possible that the permeable material encountered at Wells 3 and 5 could be part of the Upper Confining Unit Permeable Interbeds (QC1pi) aquifer based on its elevation, however USGS mapping did not identify the QC1pi aquifer in the Belfair area. Due to the absence of the QC1pi, shallower Qva, and deeper QA1 aquifers in the vicinity of Wells 1 and 2, PGG did not consider it reasonable to shift Wells 3 and 5 into the model domain to provide approximate expected capture estimates for the wells. Well 3 has a supplemental water right to Well 1 (meaning that the combined annual pumping from Wells 1, 2, and 3 cannot exceed 225 acft/yr) and a Qi of 275 gpm. When Well 3 is pumped at its full Qi it produces a fine blue clay, however, at pumping rates closer to 100 gpm its water quality greatly improves (Stantec, 2021). Well 5 does not currently have a pump and is not permitted for municipal supply.

WELL 4 AND WELLS 1/2 PUMPING IMPACT ASSESSMENTS

Capture occurs when a pumping well removes groundwater that would otherwise discharge to a waterbody, resulting in reduced streamflow and/or discharge to it. In cases where a well is in close proximity to a waterbody or the waterbody is losing, water can also be directly removed from it. The Kitsap groundwater flow model was used to estimate capture rates from nearby streams and waterbodies from District pumping wells 1, 2, and 4. The steady-state version of the Kitsap model was used for the capture analyses, and all existing pumping wells and return-flow septic recharge wells were turned off within it. Existing wells within the model were turned off to prevent nonlinear behavior of the model associated with pumping drawdowns and automatic adjustments in well pumping rates[3]. This modification was employed to ensure that any changes in waterbody discharge were due only to District pumping wells and not pumping rate changes at other wells. Because of this modification, we expect that pumping impacts on streams will be slightly overestimated (because higher shallow aquifer heads for base case conditions will cause surface-water/groundwater interactions to be slightly overestimated compared to current conditions, and therefore streams will be more responsive to drawdown). Solver criteria were also adjusted to yield a smaller mass balance error in the Kitsap model, which decreased background numerical noise and improved simulated model fluxes.

Figure 1 shows stream segments simulated in the southern portion of the Kitsap model. Stream impacts due to pumping were calculated on a segment-by-segment basis for this analysis. As

[3] The Kitsap groundwater flow uses the Newton Raphson (NWT) solver package of MODFLOW 2005, which has a PHIRAMP parameter that causes well pumping rates to decrease if the saturated thickness for model cell where a well is located drops below a fraction of the cell thickness defined by PHIRAMP. This automatic reduction in pumping rates can create computation issues when conducting a linearity analysis.

indicated by the coloration, new stream segments were defined at every confluence in a given stream network. District Well 4 and Wells 1 and 2 were added to the model at their X-Y locations and within their observed production aquifer (which is QA2 for all three wells). Wells 1 and 2 are in close proximity to one another (they are approximately 50 feet apart) and fall within the same model cell[4]; therefore they were represented as one well in the model.

Percent stream capture was calculated using the Kitsap model by running a base case (non-pumping) and pumping scenario, calculating the change in simulated discharge for each stream segment, and then dividing the change in discharge by the well pumping rate. Capture from Well 4 and Wells 1/2 was calculated at two different pumping rates to assess if the model has a linear response to changes in pumping rate. If the model does respond linearly to pumping stresses, impacts to streams and other waterbodies can be easily estimated by multiplying any pumping rate between the upper and lower pumping rates tested (defined below) by the percent capture for the water body. The following pumping rates were assumed for the linearity analysis:

- Well 4: a low pumping rate of 100 gpm was assumed (its current pumping rate) and 400 gpm was assumed for a high pumping rate (its Qa expressed as an average annual pumping rate).
- Wells 1/2: a low pumping rate of 139 gpm (the annualized pumping equivalent of the Qa for Wells 1, 2, and 3) and 300 gpm (the maximum functional pumping rates for Wells 1 and 2).

Linearity analyses were performed using the following steps:

1. Steady-state model simulations were run for each pumping location, with zero pumping rates (no pumping), the low pumping rate listed above, and the high pumping rate from above.

2. The change in discharge at different boundaries (streams, drains, and general head boundaries) was calculated for the different pumping rates (with the change being relative to the discharge simulated for zero pumping).

3. The amount of change in discharge at each boundary was compared for the different pumping rates as a ratio. This ratio is referred to as the "change ratio," and is calculated by dividing the change in discharge simulated for the higher pumping rate by the change in discharge simulated for the lower pumping rate.

4. The change ratio was compared to the "pumping ratio," which is the higher well pumping rate divided by the lower well pumping rate. If the change ratio value is within 10% of the pumping ratio value, then the model response was deemed linear. As an example from Well 4, since its pumping ratio is equal to 4, the change ratio for a given boundary condition had to be between 3.6 and 4.4 for the response to be considered linear.

Pumping impacts for Wells 4 and 1/2 were found to be generally linear[5], and capture estimates for different waterbodies are presented in **Table 1** and **Figures 2** and **3**. As an example of how to use the percent capture values, if Well 4 pumps at an average annual rate of 200 gpm (which falls

[4] The Kitsap groundwater flow model has a uniform grid cell size of 500 feet x 500 feet.
[5] All stream impacts of greater than 0.0003 cfs were found to have a linear relation to District well pumping rates. Streams with lower impacts were not necessarily linear, but were deemed inconsequential and tied to model noise.

between the 100 and 400 gpm of pumping rates tested), approximately 90 gpm of the pumping would be captured from the Union River (45.3% x 200 gpm).

Table 1 presents capture rates for marine General Head Boundaries (which simulate the discharge of freshwater to Puget Sound), drains (which represent groundwater seeps and springs located along bluffs), and streams. Stream capture values reported in **Table 1** are cumulative values for each watershed, where impacts for each simulated stream segment within the watershed are summed together. **Table 1** indicates that relatively low marine impacts are expected due to Wells 1/2 or Well 4 pumping (20 and 8.2%, respectively). Most of these impacts are expected on Hood Canal (though some impact on Case Inlet is also likely), and these percentages suggest that most pumping impacts from District wells will occur on freshwater bodies.

For Well 4, the greatest freshwater impact is simulated on the Union River (45.3%), followed by Coulter Creek (19.2%), and Mission Creek (7.0%), which as shown in **Figure 2** are the three largest creeks in close proximity to Well 4. **Figures 2** and **3** present percent stream capture by segment rather than by watershed (as in **Table 1**); **Figure 1** can be referred to for identifying exact stream segment definitions. The general "bullseye" pattern shown in **Figure 2**, where greater impacts occur closer to the pumping well, reflects the general distribution of drawdown from the pumping well. Percent capture response for stream segments depends on a variety factors, including proximity of the stream to the pumping well, the modeled stream conductance value, and the modeled transmissivities of underlying aquifers and aquitards. PGG did not attempt to differentiate the factors leading to variable stream capture on a segment-by-segment basis. In addition, some small stream segments in close proximity to Well 4 (such as on Coulter Creek, Mission Creek, and the Union River) show 0.0% impact. These tributaries were reviewed and had no change in simulated flow because they were dry for all model scenarios tested. These tributaries are mapped as perennial (based on review of USGS topographic maps), and therefore the regional Kitsap model does not appear to simulate them correctly. Modeled impacts for these dry tributaries would therefore be underestimated since no change can be simulated on them. However, watershed-scale flow estimates (**Table 1**) are expected to be more accurate than tributary-scale estimates (**Figures 2** and **3**) because the USGS model was calibrated to streamflow near the mouths of both the Union River and Coulter Creek and the regional scale of the model does a better job at matching watershed-scale baseflow than local-scale baseflow.

For Wells 1/2, the greatest freshwater impact is simulated on the Union River (25.1%), followed by Coulter Creek (21.3%), and Mission Creek (11.3%), as summarized on **Table 1** and shown (by stream segment) in **Figure 3**. The general "bullseye" pattern described for Well 4 also applies to Wells 1/2, where greater impacts occur closer to the pumping well. Similar to the Well 4 scenarios, some stream segments in close proximity to Wells 1/2 have 0.0% capture simulated because they were dry for all model scenarios, and therefore pumping impacts on these tributaries may be underpredicted. It should be noted that simulated pumping impacts for Wells 1/2 are likely biased due to the proximity of the wells to the southern boundary of the Kitsap model. The boundary condition representing the isthmus southwest of District Wells 1/2 (connecting the Kitsap Peninsula to the Olympic Peninsula) is a no flow boundary, which prevents well drawdown from propagating onto the isthmus and increases the simulated drawdown in active parts of the model. The higher simulated drawdown causes more capture to be simulated on the Kitsap peninsula than would be expected if the isthmus and regions of WRIA 14 (for the Kennedy-Goldsborough watershed) were simulated in the model. If a groundwater flow model developed specifically for the

Belfair area existed and included portions of WRIA 14, stream capture to the southwest in WRIA 14 would be expected along with lower simulated capture on Kitsap Peninsula streams. Simulated marine impacts could potentially increase, but are unlikely to substantially increase (i.e. marine capture would not likely exceed 25 or 30%).

WELLS 3/5 PUMPING IMPACT ASSESSMENTS

Wells 3 and 5 are outside of the Kitsap model area, and therefore could not be quantitatively evaluated with the existing groundwater model. Based on the reviewed Hummingbird Lane well log and the geologic characterization of nearby Wells 1 and 2 by the USGS (Welch and others, 2014), the completion aquifer for Wells 3 and 5 does not extend north to the Well 1/2 area. This suggests that the aquifer could either be a localized aquifer or a regional aquifer that extends to the south. It is likely that pumping impacts from Wells 3 and 5 would be greater on saltwater bodies than other District wells because they are in close proximity to Hood Canal and are significantly shallower than the other District wells. Wells 3 and 5 would also potentially have greater impacts on streams to the south based on their geographic location and because their aquifer has a limited northern extent.

FAVORABLE INFILTRATION AREA ASSESSMENT

Infiltration analyses performed for the WRIA 15 WREC were reviewed for the Belfair area, and potentially favorable infiltration areas are mapped on **Figure 4**. All analyses were conducted on a basin scale using regional data to screen potentially favorable infiltration sites, and therefore a local site assessment would be required to more accurately evaluate the infiltration feasibility for any potentially favorable area identified. Additionally, depth to groundwater was not incorporated in the regional infiltration analysis and can be a limiting factor for infiltration sites, and could be evaluated through a local site assessment.

Figure 4 maps the extent of Qvr and Qva materials in the Belfair area, which are generally permeable sediments that may allow infiltration to occur. Areas mapped as glacial till (Qvt) are generally unfavorable for infiltration. Areas mapped as Qvr by the USGS also include river alluvium, and a review of underlying geologic unit thicknesses in the Belfair area suggests that the mapped Qvr is almost entirely composed of alluvium (i.e. it is not underlain by Qvt and Qva, suggesting that all Vashon glacial sediments were reworked or eroded by local streams and represent alluvium instead). Though Qvt appears to be absent in areas mapped as Qvr, Qvr areas are generally in close proximity to streams, and therefore could have a shallow depth to groundwater (which can limit infiltration potential since less unsaturated material is present to accommodate the groundwater mound that would develop beneath an infiltration facility).

Another potentially favorable geologic unit to target for infiltration is Qva, because it occurs farther from creeks (and thus is expected to have deeper depths to water) and it is beneath glacial till in the regional sediment sequence. However, its exposure within the Belfair UGA generally occurs on steep slopes, where construction of an infiltration facility could be challenging based on building constraints and/or hillslope stability (which could be impacted if a groundwater mound develops and intersects the foot of the hillslope).

An additional infiltration analysis performed for the WRIA 15 WREC included examining the thickness of both glacial till and the underlying Qva aquifer. In areas where glacial till is mapped at the surface, 100 ft x 100 ft grids of unit thickness for both the Qvt and Qva developed by the USGS (Welch and others, 2014) were reviewed. Areas where the Qvt is less than 10 feet thick and the Qva is greater than 50 feet thick were identified as potentially favorable infiltration areas, assuming that either the Qvt would be removed or avoided through the use of shallow injection wells screened in Qva. Relatively small, isolated areas where this occurs are shown in red on **Figure 4,** and could warrant further consideration.

REFERENCES

Frans, L.M and T.D. Olsen, 2016. Numerical Simulation of the Groundwater-Flow System of the Kitsap Peninsula, West-Central Washington. US Geological Survey Scientific Investigations Report 2016-5052.

Stantec, 2021. Belfair Water District 1 2020 Comprehensive Water System Plan Final Report. Consultant's report prepared for Belfair Water District 1. April 9, 2021.

Welch, W.B., Frans, L.M., and T.D. Olsen, 2014. Hydrogeologic Framework, Groundwater Movement, and Water Budget of the Kitsap Peninsula, West-Central Washington. US Geological Survey Scientific Investigations Report 2014-5106.

Table 1. Estimated Annual Pumping Impacts, Belfair Wells 1/2 and Well 4

Location	Capture As a Percent of Pumped Volume	
	Wells 1/2[1]	Well 4[2]
Marine General Head Boundaries	20.0%	8.2%
Drains	2.0%	1.4%
Union River	25.1%	45.3%
Coulter Creek	21.3%	19.2%
Mission Creek	11.3%	7.0%
Tahuya River	4.3%	3.9%
Rocky Creek	3.8%	2.2%
Huge Creek	2.1%	2.3%
Gorst Creek	1.0%	2.9%
Unnamed Creek by Wells 1/2	2.6%	0.4%
Blackjack Creek	0.9%	2.1%
Little Mission Creek	1.5%	0.5%
Burley Creek	0.6%	1.1%
Total[3]	96.5%	96.6%

Notes:

Capture rates are rounded to the nearest 0.1%, or approximately 0.0009 cfs.

Stream impacts on this table are total impacts simulated for each watershed. Figures 2 and 3 present stream impacts for individual stream segments within each watershed.

1. A linear capture response was defined for Wells 1/2 pumping at rates between 139 and 300 gpm.

2. A linear capture response was defined for Well 4 pumping at rates between 100 and 400 gpm.

3. Tabulated values in this table include all features with 1.0% capture or more simulated. The remaining ~3.5% of pumping impacts are spread across numerous distal creeks, as indicated by Figures 2 and 3.

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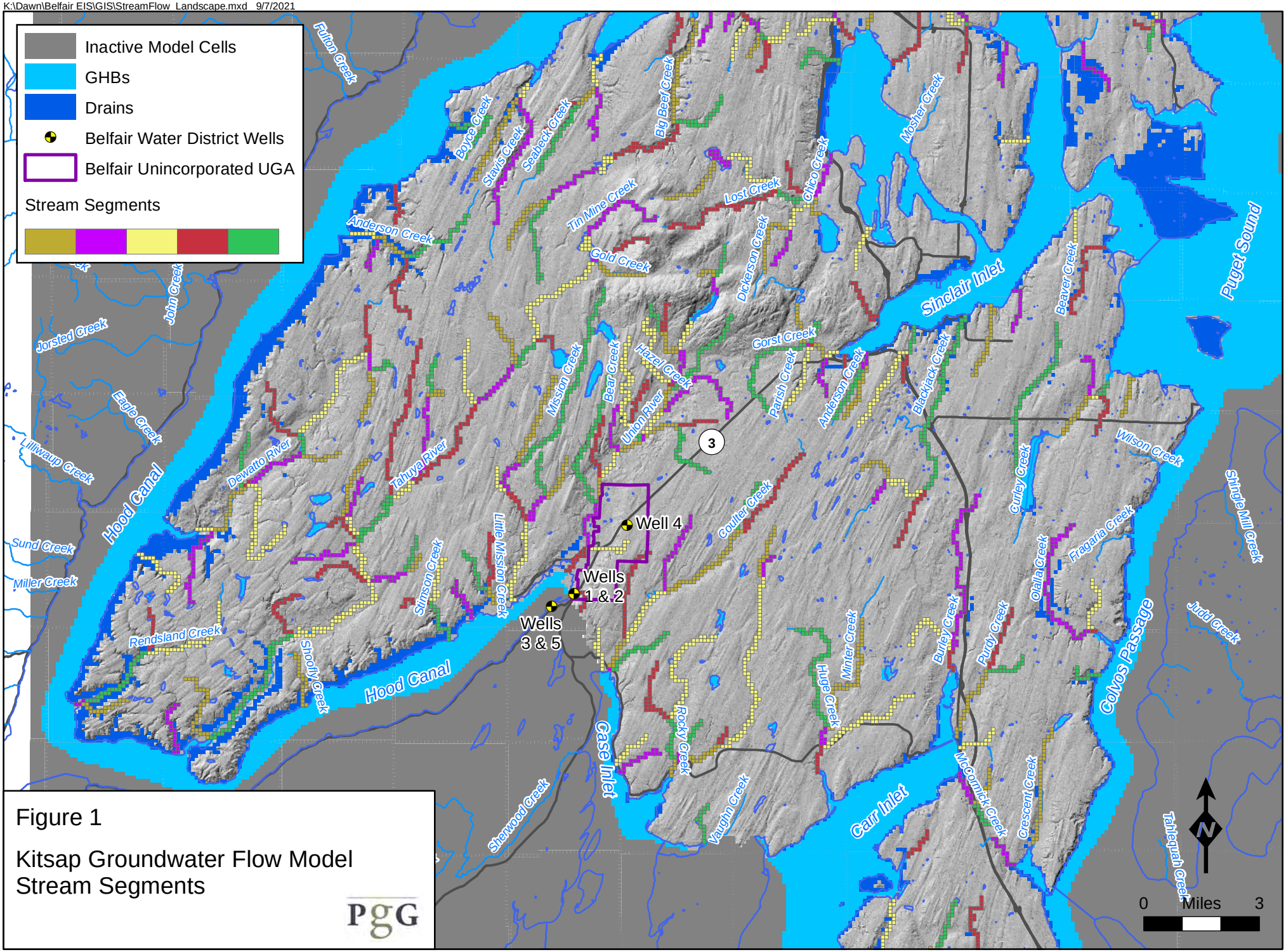

Figure 1

Kitsap Groundwater Flow Model
Stream Segments

PgG

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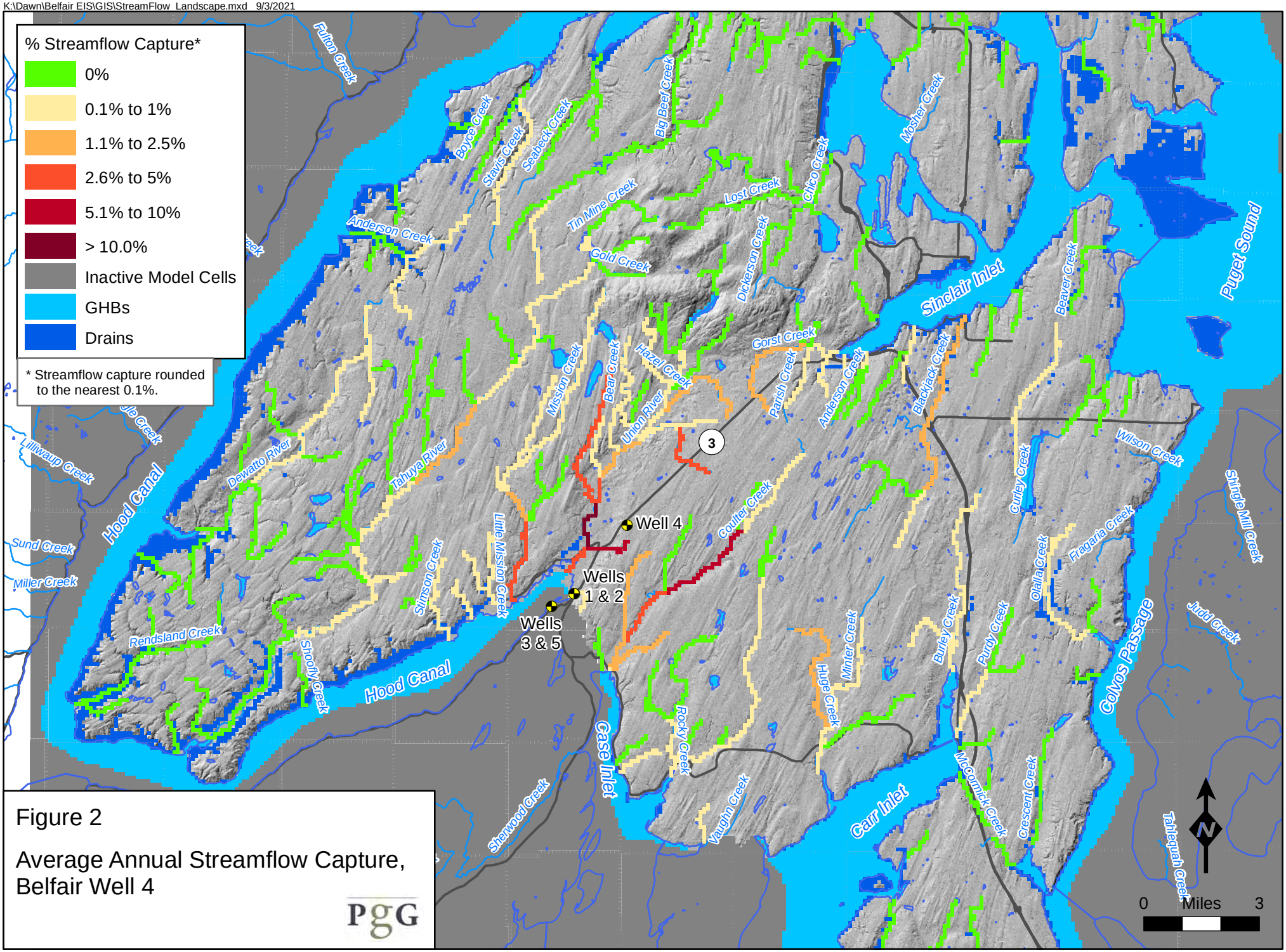

Figure 2

Average Annual Streamflow Capture, Belfair Well 4

PgG

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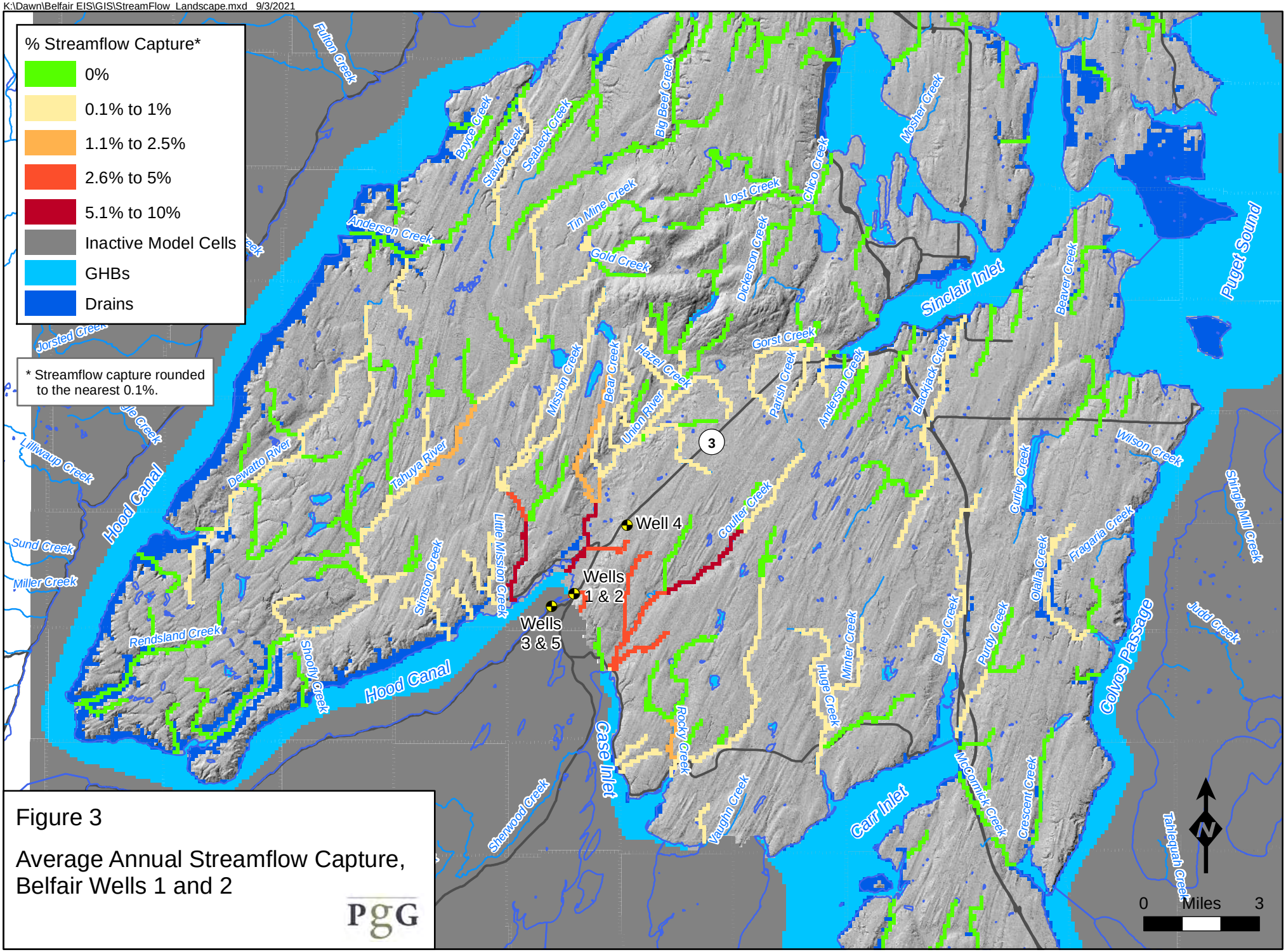
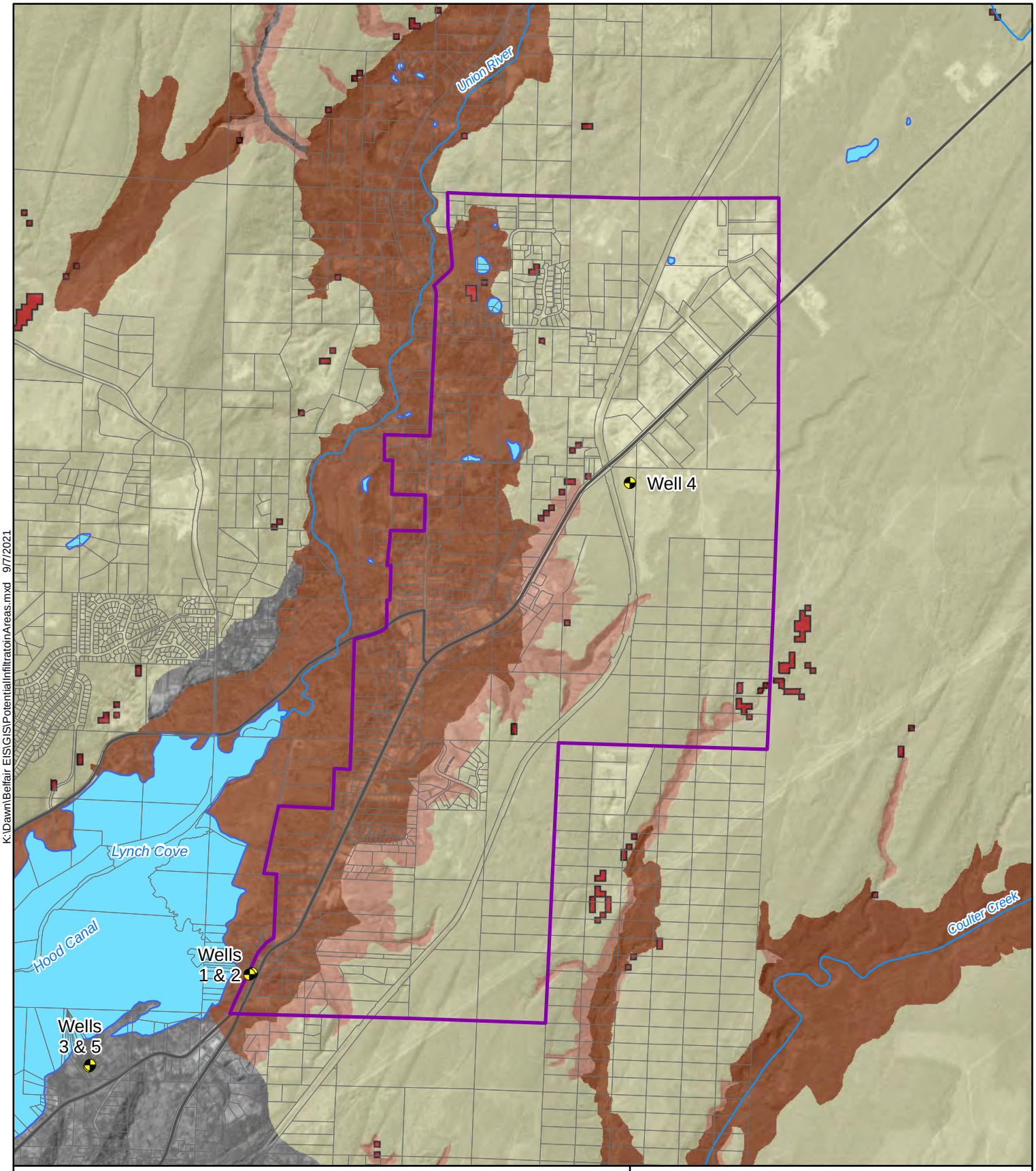


Figure 3

Average Annual Streamflow Capture, Belfair Wells 1 and 2

PgG



Belfair Water District Wells

Belfair Unincorporated UGA

Qvt Less Than 10ft and Qva Greater Than 50ft Thick

Surficial Geologic Unit (Welch and others, 2014)

Qvr

Qvt

Qva

N

0 Miles 1

Figure 4

Potential Infiltration Areas within 1/2-Mile of the Belfair UGA

PgG

C Transportation Mitigation Cost Summary

Potential Mitigation and Fee Summary

Study Intersecction	Baseline Traffic Control	No Action/Baseline Mitigation Measures	Additional Mitigation Needed with Action Alternatives	LOS Stand-ard	Recom-mended V/C Ratio	Unmitigated								
						Alternative 1 No Action			Alternative 2			Alternative 3		
						LOS	Delay	WM or V/C	LOS	Delay	WM or V/C	LOS	Delay	WM or V/C
NE Old Belfair Highway/ NE Newkirk Road	Two-Way Stop		Two-way left-turn lane along NE Old Belfair Highway	C/D	NA	C	22	WB	E	41	WB	E	42	WB
NE Old Belfair Highway/SR 300/NE Clifton Road	Roundabout	Roundabout with southbound and eastbound right-turn lanes. (Unfunded Improvement Incorporated into the Plan)	Add a westbound right-turn slip lane and northbound right-turn lane.	C/D	0.9	B	11	0.68	C	31	1.00	C	28	0.98
NE Clifton Road/NE Roy Boad Road	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)		C/D	0.9	A	5	0.53	A	5	0.67	A	5	0.63
~~SR 3/SR 3 Freight Corridor/SW Lake Flora Rd~~	~~Roundabout~~	~~Multilane roundabout with a single lane on the northbound and westbound approaches, southbound right-turn slip lane, eastbound left-turn lane.~~	~~Add a westbound right-turn lane.~~	~~D~~	~~0.9~~	~~B~~	~~10~~	~~0.73~~	~~D~~	~~40~~	~~1.29~~	~~C~~	~~34~~	~~1.22~~
SR 3/Log Yard Road	Roundabout	Roundabout with two (2) southbound through lanes (tapered to one lane after the intersection) and westbound and northbound right-turn slip lanes.		C/D	0.9	A	7	0.46	B	12	0.86	A	10	0.73
SR 3/Ridgepoint Boulevard	Two-Way Stop Control	No improvement needed	A single lane compact roundabout	C/D	NA	C	25	WB	F	56	WB	E	46	WB
SR 3/NE Clifton Road	Traffic Signal	Either install a roundabout or provide signal modifications and a second eastbound left-turn (from NE Clifton Road to northbound on SR 3). The additional eastbound left-turn would require widening SR 3 to a 4-lane cross section between NE Clifton Road and Ridgepoint Boulevard		C/D	NA	F	97	-	F	115	-	F	97	-
SR 3/SR 300	Two-Way Stop Control	Single lane roundabout		C/D	NA	F	>180	EBR	F	>180	EBL	F	>180	EBR
SR 3/Romance Hill Road	Two-Way Stop Control	Roundabout with separate southbound through and left-turn lanes		C/D	NA	F	>180	WBL	F	>180	WBL	F	>180	WB
SR 3/SR 302	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)	Add separate southbound through and left-turn lanes	C/D	0.9	B	11	0.84	C	22	1.02	B	20	1.00
SR 3 Freight Corridor/Log Yard Road	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)		C/D	0.9	A	6	0.54	B	15	0.90	A	9	0.74
SR 3 Freight Corridor/Romance Hill Road	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)		C/D	0.9	A	6	0.61	A	10	0.91	B	11	0.89
SR 3 Freight Corridor/SR 302/School Driveway/Bellwood Lane	Roundabout	Single lane (5-leg) roundabout (Unfunded Improvement Incorporated into the Plan)		C	0.9	A	7	0.47	A	7	0.57	A	7	0.56
Pedestrian Improvements - Walking Trail	N/A	Per Subarea Plan	Per Subarea Plan											
Pedestrian Improvements - Regional Trail	N/A	Per Subarea Plan	Per Subarea Plan											
Theler Wetland Trail Network Expansion	N/A	Per Subarea Plan	Per Subarea Plan											
Pedestrian-Friendly Streetscapes	N/A	Per Subarea Plan	Per Subarea Plan											

Notes:

Shading Mitigation Required

Unfunded Baseline Improvement

WM = Worst Movement

N/A = Not applicable

Potential Mitigation and Fee Summary

Study Intersecction	Baseline Traffic Control	No Action/Baseline Mitigation Measures	Additional Mitigation Needed with Action Alternatives	Mitigated Alternative 2 LOS	Mitigated Alternative 2 Delay	Mitigated Alternative 2 WM or V/C	Proportional Share No Action %	Proportional Share Alt 2 %	Proportional Share Alt 3 %	Alt 4 %	Planning Level Costs Baseline/ No Action $	Planning Level Costs Additional for Action Alt $	Proportional Share Cost with LOS C or D Standard No Action $	Alt 2 $	Alt 3 $	Alt 3 Hybrid $
NE Old Belfair Highway/ NE Newkirk Road	Two-Way Stop		Two-way left-turn lane along NE Old Belfair Highway	C	21	WB	0%	39%	39%	35%	$ -	$ 1,210,000	$ -	$ 477,320	$ 474,043	$ 425,634
NE Old Belfair Highway/SR 300/NE Clifton Road	Roundabout	Roundabout with southbound and eastbound right-turn lanes. (Unfunded Improvement Incorporated into the Plan)	Add a westbound right-turn slip lane and northbound right-turn lane.	B	18	0.87	26%	41%	40%	36%	$ -	$ 4,290,000	$ -	$ 1,758,008	$ 1,730,542	$ 1,556,329
NE Clifton Road/NE Roy Boad Road	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)		See primary analysis			36%	49%	47%	42%	$ 2,570,000	$ -	$ 922,334	$ 1,249,844	$ 1,198,538	$ 1,089,474
~~SR 3/SR 3 Freight Corridor/SW Lake Flora Rd~~	~~Roundabout~~	~~Multilane roundabout with a single lane on the northbound and westbound approaches, southbound right-turn slip lane, eastbound left-turn lane.~~	~~Add a westbound right-turn lane.~~	~~C~~	~~22~~	~~0.99~~	~~0%~~	~~53%~~	~~52%~~	48%			~~$ -~~	~~$ -~~	~~$ -~~	~~$ -~~
SR 3/Log Yard Road	Roundabout	Roundabout with two (2) southbound through lanes (tapered to one lane after the intersection) and westbound and northbound right-turn slip lanes.		See primary analysis			33%	54%	50%	46%	$ 2,320,000	$ -	$ 762,667	$ 1,251,820	$ 1,160,397	$ 1,061,286
SR 3/Ridgepoint Boulevard	Two-Way Stop Control	No improvement needed	A single lane compact roundabout	D	53	1.18	0%	40%	35%	31%	$ -	$ 1,490,000	$ -	$ 598,468	$ 524,939	$ 468,144
SR 3/NE Clifton Road	Traffic Signal	Either install a roundabout or provide signal modifications and a second eastbound left-turn (from NE Clifton Road to northbound on SR 3). The additional eastbound left-turn would require widening SR 3 to a 4-lane cross section between NE Clifton Road and Ridgepoint Boulevard		C	34	-	16%	36%	32%	28%	$ 2,310,000	$ -	$ 364,189	$ 828,113	$ 733,467	$ 650,492
SR 3/SR 300	Two-Way Stop Control	Single lane roundabout		B	13	0.83	-2%	21%	20%	17%	$ 1,900,000	$ -	$ -	$ 391,501	$ 380,159	$ 330,328
SR 3/Romance Hill Road	Two-Way Stop Control	Roundabout with separate southbound through and left-turn lanes		B	10	0.87	19%	30%	33%	29%	$ 3,180,000	$ -	$ 589,669	$ 967,670	$ 1,044,179	$ 927,754
SR 3/SR 302	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)	Add separate southbound through and left-turn lanes	A	9	0.67	30%	40%	39%	35%	$ 1,900,000	$ 420,000	$ 576,786	$ 927,388	$ 910,654	$ 817,723
SR 3 Freight Corridor/Log Yard Road	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)		See primary analysis			100%	100%	100%	100%	$ 1,900,000	$ -	$ 1,900,000	$ 1,900,000	$ 1,900,000	$ 1,900,000
SR 3 Freight Corridor/Romance Hill Road	Roundabout	Single lane roundabout (Unfunded Improvement Incorporated into the Plan)		See primary analysis			100%	100%	100%	100%	$ 1,900,000	$ -	$ 1,900,000	$ 1,900,000	$ 1,900,000	$ 1,900,000
SR 3 Freight Corridor/SR 302/School Driveway/Bellwood Lane	Roundabout	Single lane (5-leg) roundabout (Unfunded Improvement Incorporated into the Plan)		See primary analysis			100%	100%	100%	100%		$ -	$ -	$ -	$ -	$ -
Pedestrian Improvements - Walking Trail	N/A	Per Subarea Plan	Per Subarea Plan				20%	20%	20%	20%	$ 14,547,000	$ -	$ 2,909,400	$ 2,909,400	$ 2,909,400	$ 2,909,400
Pedestrian Improvements - Regional Trail	N/A	Per Subarea Plan	Per Subarea Plan				20%	20%	20%	20%	$ 7,605,000	$ -	$ 1,521,000	$ 1,521,000	$ 1,521,000	$ 1,521,000
Theler Wetland Trail Network Expansion	N/A	Per Subarea Plan	Per Subarea Plan				20%	20%	20%	20%	$ 3,833,000	$ -	$ 766,600	$ 766,600	$ 766,600	$ 766,600
Pedestrian-Friendly Streetscapes	N/A	Per Subarea Plan	Per Subarea Plan				20%	20%	20%	20%	$ 3,254,000	$ -	$ 650,800	$ 650,800	$ 650,800	$ 650,800
									Total Cost		**$ 17,980,000**	**$ 7,410,000**	**$ 12,863,445**	**$ 18,097,930**	**$ 17,804,719**	**$ 16,974,964**
												Total Trips	**419**	**4,101**	**3,771**	**3,454**
												Fee per Trip	**$ 30,700**	**$ 4,413**	**$ 4,721**	**$ 4,915**

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3.6 Historic and Cultural Resources

3.6.1 Affected Environment

Historic Context

The Belfair UGA and vicinity have long been inhabited by indigenous peoples and contain sensitive cultural resources (e.g., archaeological sites, traditional cultural properties, graves and cemeteries, historic buildings). The Belfair UGA is located in the traditional territory of the present-day Skokomish Tribe, also known as the Twana people, who live in the Hood Canal drainage basin (Mason County Community Development and Utilities 2007). There were nine Twana communities, and the largest were known as Skokomish, or "big river people" (Skokomish Tribe 2014). The Skokomish signed the Treaty of Point No Point in 1855.

Also inhabiting the vicinity were the Squaxin people, a group that predominantly lived on the shores and in the watersheds of the seven southernmost inlets of Puget Sound (Squaxin Island Tribe 2017; Mason County Community Development and Utilities 2007). The Squaxin Island Tribe is comprised of seven family groups that occupied the seven southernmost inlets: Carr, Henderson, Hammersley, Budd, Case, Skookum, and Totten. Closest to Belfair was the Squawksin family group who lived on Case Inlet (Squaxin Island Tribe 2017). The Squaxin signed the Medicine Creek Treaty in 1854. After signing the treaty, the Squawksin were move to Squaxin Island (Squaxin Island Tribe 2017).

George Vancouver was the British Royal Navy commander of the expedition to the northwest coast of North America. Vancouver is credited as the first Euro-American to map portions of Hood Canal during a 1792 survey and was the earliest explorer who came as far as the Skokomish River delta in 1792 (Wilma 2006 in Carroll and Christensen 2021) (Britannica, The Editors of Encyclopaedia., 2021).

The U.S. military's Wilkes Expedition followed nearly 50 years later. It started in 1838 and was led by Lieutenant Augustus Case, and was notable as the first American survey of the Columbia River as well as charting areas along the Northwest coast (Smithsonian, 2021) By 1841, the expedition resulted in the mapping of the eastern portion of Hood Canal (Davis 1993 in Carroll and Christensen 2021). The Hudson's Bay Company sent traders into this region in the I830s, and they may have established a trading post near Union City during this time. (Carroll and Christensen 2021)

Euro-American settlement followed around Hood Canal in the 1850s, and timber harvesting and sawmills were established (Mason County Community Development and Utilities 2007). Belfair was renamed from Clifton in 1925 because the postmaster-general requested renaming due to many communities named Clifton. Postmistress Mrs. Murray submitted Belfair after reading it in a book titled *St. Almo* (Liu 1999).

In 1926, the Northern Pacific Railroad extended to Shelton, Mason County's economic center. The logging industry grew in the county and was a mainstay of the economy until the Great Depression from 1929 to 1939. In the 1920s and again after the Great Depression, tourism developed in the Hood Canal area. After World War II numerous "auto camps," vacation homes, and resorts dotted the region (Crespin 2006 in Carroll and Christensen 2021).

More comprehensive historic context statements encompassing the Belfair UGA can be found in the various cultural resource survey reports for the area. For example, one of the most recent survey reports in the area (Carroll and Christensen 2021) includes background information on Precontact Archaeology, Traditional Lifeways, and Historical Background, including Project Area Land Use, for the Olympic Ridge Development Project permitted within the Belfair UGA.

Inventory of Historic and Cultural Resources

In order to establish a baseline inventory of known historic and cultural resources located in the Belfair UGA and immediate vicinity, Eppard Vision accessed the secure side of WISAARD (Washington Information System for Architectural and Archaeological Records Data), the Washington State Department of Archaeology and Historic Preservation (DAHP) online GIS map tool and searchable database of cultural resources. The Belfair UGA and a one-mile buffer were reviewed for cultural resource information per standard practice. Applying a buffer to the study area boundaries (here, the UGA boundaries) and reviewing the resulting records provides a more comprehensive understanding of known cultural resources in the area than a simple inventory; the resulting information can then be used to determine where and what kind of cultural resources might be identified in the future, which represents an important proactive planning tool. The inventory that follows distinguishes between resources located in the UGA and those located in the one-mile buffer.

All WISAARD GIS layers were reviewed for cultural resource and environmental information, including four that returned pertinent results:

- Archaeology Sites;
- Cemetery Sites;
- Cultural Resource Surveys; and
- Inventories (i.e., a dataset in the Property layer of built environment properties that includes historic register designations of Determined Eligible, Determined Not Eligible, and No Determination).

Results from these four layers are summarized below.

Additional layers with pertinent information included:

- Traditional Cultural Property (no recorded properties);

- Register (no recorded properties);
- Maritime (Hood Canal is included in the new Maritime Washington National Heritage Area);
- Tribal (displays Tribal Areas of Interest to guide consultation);
- General Land Office (GLO) Features (the Oakland Trail crosses the Belfair UGA, and the Seabeck Trail is located on the west side of Hood Canal); and
- Predictive Model (statewide model for archaeological resources, also described below).

Resulting records were then reviewed for information beyond mere locational data in order to summarize the types of resources and where they have been found. Results are summarized below.

Archaeology Sites

One archaeological site is located within the Belfair UGA boundaries, and an additional seven archaeological sites are located within the one-mile buffer. Exhibit 3-22 provides a brief description of each archaeological site.

Exhibit 3-22. Archaeology Sites

Site Number	Site Type	Site Name	Site Description
45MS197	Historic Hydroelectric	Belfair Waterwheel Site	Waterwheel, flume, check dam, ca. 1910-1920s*
45MS160	Historic Homestead	McReavy Homestead	Cement pad, refuse scatter, metal, glass, ca. 1868-1970
45MS161	Historic Logging Property	Union River Logging Camp	Springboard-notched stumps, stove, ca. 1850-1900
45MS106	Pre-Contact Camp	Union River Cedar Site	FCR, clam shell, burnt bone, charcoal, hearth, stone maul
45MS112	Pre contact shell midden	Lynch Cove Site	FCR, faunal remains, at least 4 hearths, beads, lithics
45MS159	Historic Agriculture-dike	None listed	Earthen dike ca. 1910-20

Site Number	Site Type	Site Name	Site Description
45MS257	Historic Agriculture	Ole Mickelson Orchard Remnants	Remains of an historic orchard, 5 trees
45MS258	Historic Isolate	Isolate-Metal Milk Jug	Metal milk jug on historic homestead

** Local information provide through the public comment process indicates construction of the waterwheel feature on this site may be more recent (1950's) than documented in the DAHP WISAARD database. If true, the site would still qualify as an archaeological site under State law, but a site form update for the property is recommended.*
Source: DAHP 2021, Eppard Vision 2021

Note: The absence of *recorded* archaeological sites in an area should not be interpreted as an absence of the *potential* for sites; rather, it can only be assumed that no sites have been recorded in the area to date.

In terms of the *potential* for sites, environmental indicators for archaeological resources include bodies of water (both salt and fresh, extinct and extant), landforms, and soils. Further interpretation of recognized environmental indicators would contribute to a more refined understanding of the potential for archaeological sites in the Belfair UGA and surrounding area; however, such interpretation is beyond the scope of this inventory.

Cemetery Sites

No cemetery sites are located within the Belfair UGA boundaries; two cemetery sites are located within the one-mile buffer. The following Exhibit 3-23 provides a brief description of each cemetery site.

Exhibit 3-23 Cemetery Sites

Site Number	Location	Name on Sign	Other Names
45MS00189	Buffer	Griffith Cemetery	Old Belfair Cemetery; Old Clifton Cemetery
45MS00166	Buffer	Twin Firs Cemetery	Belfair Cemetery

Source: DAHP 2021, Eppard Vision 2021

Cultural Resource Surveys

Twelve cultural resource surveys have been conducted within the Belfair UGA boundary, and an additional nine have been conducted within the one-mile buffer. Exhibit 3-24 provides a brief description of each survey report.

Exhibit 3-24 Cultural Resource Surveys

NADB No.	Citation	Resources Identified
1350738	*Memo to Jeff Sawyer RE: A Cultural Resources Survey for a State Highways Safety Project, XL 2645* (Bundy 2007)	None
1351725	*Archaeological Investigations of Belfair Water District's Proposed Pressure Zones Interconnection Project* (Neil 2008)	None
1353263	*Memo to Mason County RE: Cultural Resources for the Belfair Wastewater and Water Reclamation Facilities* (Bard 2009)	None
1692743	*Cultural Resource Survey of the Cady Tree Farm Property, Belfair, Mason Co., WA* (Neil 2018)	None
1682186	*Archaeological Investigation for the Belfair Community Center Project* (Baldwin 2012)	None
1684752	*Cultural Resources Survey for the WSDOT's SR3, Belfair Widening and Safety Improvements Project* (Emerson 2011)	*45MS197* and Hood Canal Lodge No. 288 (historic name)/Hood Canal Masonic Center (common name)
1685036	*Cultural Resources Survey Addendum, Pond C, SR 3 Belfair Area Widening and Safety Improvements Project* (Kiers 2014)	None
1339606	*A Cultural Resources Survey of the WSDOT's SR3: Belfair to Lake Flora Road Safety Improvements, Mason Co., WA* (Robinson 1996)	None
1339607	*Cultural Resources Study for Cascade Natural Gas Corp.'s Proposed Phase 2 Kitsap Lateral Upgrade Project, Mason and Kitsap Counties, WA* (Naoi Goetz 1996)	Springboard-cut stumps (ubiquitous, not considered significant)
1340400	*Belfair Vicinity Improvements SR 3, Mileposts 23.52 to 28.79 Cultural Resources Discipline Report* (Goetz 2001)	None
1351343	*Cultural Resources Investigations for the Pacific NW Salmon Center's Union River Estuary Land Acquisition Project* (Luttrell 2007)	*45MS106* and historic logging railroad grade (not considered eligible)
1341003	*Mason County Belfair Bypass No Adverse Effect Report-Belfair Vicinity Improvements, SR 3, Mileposts 23.52 to 28.79* (Naoi Goetz 2002)	None

NADB No.	Citation	Resources Identified
[NADB pending]	*Cultural Resources Survey for the Olympic Ridge Development Project, Mason County, Washington (Carroll and Christiansen 2021)*	None
1686857	*NRCS Cultural Resources Survey for the Floyd Sawyer Project, EQIP 2014 Project, Contract No. 740546120FP and 740546121QM* (Munsell 2015)	None
1689933	*Cultural Resource Survey of the Postier Short Plat Project, Belfair* (Neil 2017)	45MS257 and 45MS258
1686341	*Cultural Resource Monitoring for the Beard's Cove Estuary Restoration Project, Belfair* (Beard 2015)	None
1354637	*Cultural Resources Survey, SR 3 Judy Lane Vicinity-Drainage, Mason Co., WA* (Kiers 2010)	None
1334630	*Cultural Resources Assessment, Sand Hill Mobile Home Park, Mason Co., WA* (Solimano 1995)	45MS112
1339611	*A Cultural Resources Survey of the WSDOT's SR300: Sand Hill Road Intersection Project, Mason Co.* (Hartmann 1998)	None
1351674	*Archaeological Investigations of the Cascade Land Conservancy Restoration Project on the Irene Davis River Preserve* (Neil 2008)	45MS160 and 45MS161
1352617	*Cultural Resources Inventory of the NRCS GPC-Belfair Wetland Reserve Project, Belfair* (Baker 2007)	45MS158 and 45MS159
1352618	*Cultural Resources Investigations for the Klingel Wetlands Dike Removal Project, Lynch Cove* (Crisson 2008)	Klingel Dike

Inventories

The Inventories layer includes built environment Properties and their historic register designations of Determined Eligible, Determined Not Eligible, and No Determination. Within the boundaries of the Belfair UGA, forty properties have been inventoried, and an additional five have been inventoried in the one-mile buffer. Only one of the forty-five total properties inventoried has been Determined Eligible (the Hood Canal Lodge No. 288 described below). Thirty-eight properties have been Determined Not Eligible, and six properties are listed as No Determination.

Thirty-five properties were inventoried during the cultural resource survey for the Washington State Department of Transportation's SR 3 Belfair Widening and Safety Improvements Project (Emerson 2011). Only one property was Determined Eligible for listing in an historic register: Exhibit 3-25 the Hood Canal Lodge No. 288, (historic name), also known as the Hood Canal Masonic Center (common name), was Determined Eligible for listing in the National Register of Historic Places under Criterion A (association with events that have made a significant contribution to the broad patterns of our history). The concrete block building was built in 1948 and has been in continuous use as a social meeting hall. The significance of the property is related to its association with the Masonic fraternal organization:

> *This modest concrete block building lacks the stately appearance of many Masonic lodges, and most of the windows and doors have been altered, diminishing the historic integrity of the structure. It does, however, represent one of the most popular and well-known fraternal organizations in the United States, one of a few that are still thriving. This particular lodge is still active within the community of Belfair. Due to its association with the Masonic fraternal organization this building is eligible for placement on the National Register of Historic Places under Criterion A, contribution to broad historical events (Emerson 2011).*

Exhibit 3-25. Hood Canal Lodge No. 288

Source: Emerson 2011

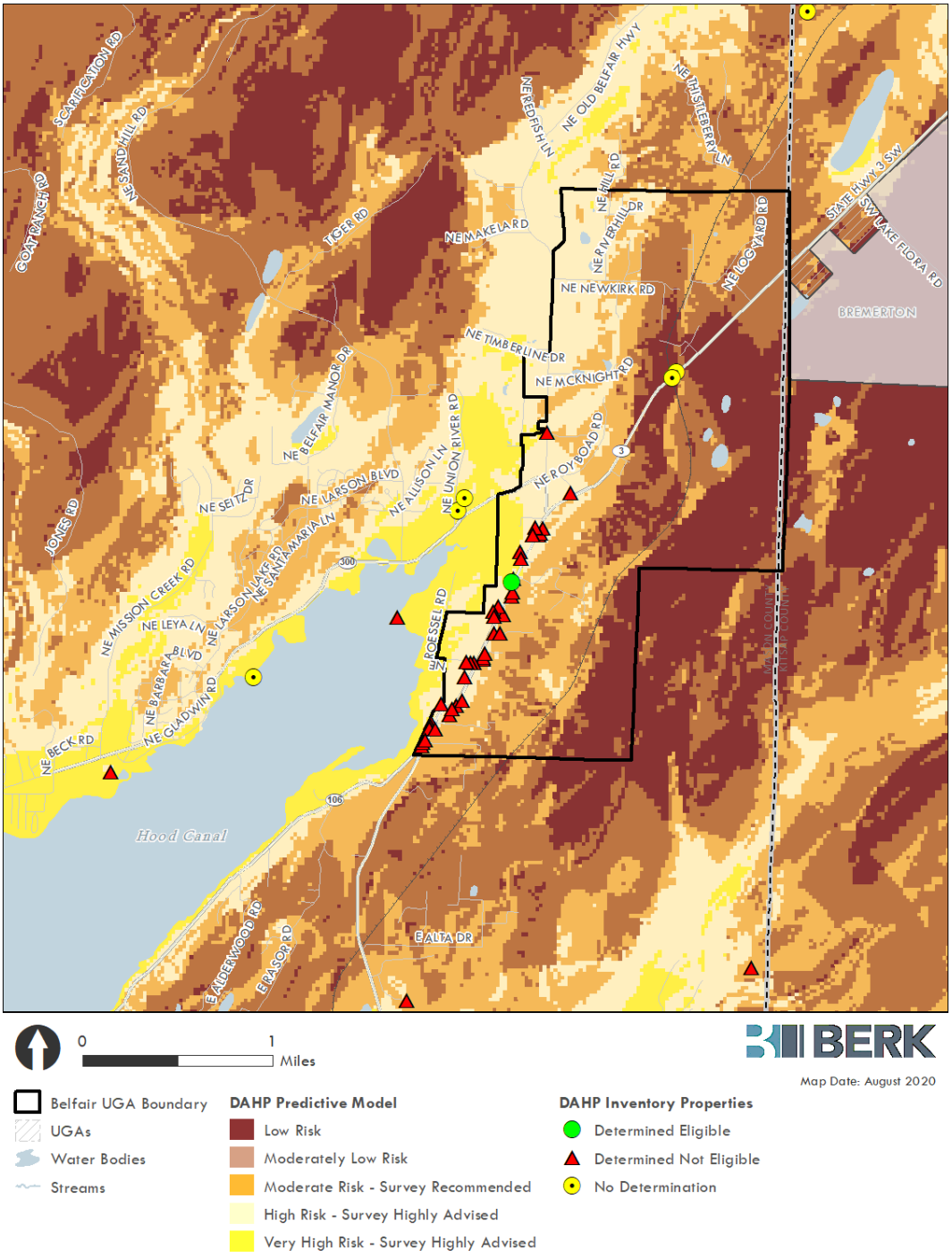
Predictive Model

The Statewide Predictive Model indicates areas of risk for archaeological resources according to the following five categories: Low Risk-Survey Contingent Upon Project Parameters; Moderately Low Risk-Survey Contingent Upon Project Parameters; Moderate Risk-Survey Recommended; High Risk-Survey Highly Advised; and Very High Risk-Survey Highly Advised. Predictive model results for the Belfair vicinity are shown in Exhibit 3-26.

Throughout the entire area reviewed (i.e., the Belfair UGA and the area within one mile of it), all five categories are indicated. In general, the area west of SR 3 corresponds to High and Very High risk, while the eastern portion of the UGA corresponds to Low and Moderate risk.

Risk categories correspond to the underlying landforms and environmental features. For example, Low and Moderately Low Risk areas correspond to areas of steep slopes (e.g., the eastern portion of the UGA; Moderate Risk areas correspond to more moderate slopes near water bodies, such as creeks and streams; and High and Very High Risk areas correspond to areas of gentle slope near water bodies (e.g., the area west of SR 3 near the Union River, Lynch Cover, and Hood Canal).

Exhibit 3-26. Predictive Model of Cultural Resources in Belfair UGA and Vicinity



Source: DAHP 2020.

Note: While the predictive model serves as a tool for determining the archaeological sensitivity of an area, the model output is based on environmental factors at a statewide scale and should be considered within the context of what is known about specific project areas. While the Belfair UGA includes areas located in all five risk

areas, the potential for cultural resources should be analyzed within the context of future proposed project activities and all available data on known cultural resources.

Regulatory Context

The following regulations, among others, may apply to future proposed projects in the UGA, and additional cultural resource work may be required and/or recommended per applicable Tribal, federal, state, and/or local regulations:

- Section 106 of the National Historic Preservation Act – effects on "historic properties" (i.e., prehistoric or historic districts, sites, buildings, structures, or objects included in or eligible for inclusion in the National Register of Historic Places) must be considered *prior to* federal involvement (e.g., funding, permitting)
- National Environmental Policy Act (NEPA) – cultural resources must be considered when analyzing the effects of federal actions on environmental quality.
- State Environmental Policy Act (SEPA) – cultural resources are addressed at item 13 of the Environmental Checklist.
- Mason County Code – historic and cultural resources are addressed via County policies and regulations [e.g., Shoreline Master Program (17.50.10); Historic Preservation (17.40); Forest Practices (11.05.060].

Additionally, Washington State law protects archaeological resources (RCW 27.53) and Indian burial grounds and historic graves (RCW 27.44) located on both the public and private lands of the State. An archaeological excavation permit issued by DAHP is required in order to disturb an archaeological site. Knowing disturbance of burials/graves and failure to report the location of human remains are prohibited at *all* times.

Standard Inadvertent Discovery Language (SIDL)

Even when available information suggests a low probability of encountering cultural resources, it is never possible to guarantee they will not be encountered during project activities; therefore, the following standard inadvertent discovery language (SIDL) should be followed at *all* times on the public and private lands of the State per RCW 27.44 and 27.53:

- Should **human remains** be discovered during project activities, work in the area of the discovery should be stopped immediately, the area secured, and the coroner/medical examiner (Mason County Coroner 360.426.4441) and local law enforcement (Mason County Sheriff 360.275.4467, ext. 313) notified as per State law.

- Should **cultural resources** (e.g., artifacts made of stone, bone, antler, or shell; archaeological deposits such as shell midden; archaeological features such as hearths or post holes) be discovered during project activities, work in the area of the discovery should be stopped immediately, the area secured, and the Department of Archaeology and Historic Preservation (360.586.3065) notified as per State law.

3.6.2 Impacts

Impacts Common to All Alternatives

Under all alternatives, development is allowed, and could result in ground disturbance impacting below-ground resources.

Alternative 1 – No Action

Impacts to Historic and Cultural Resources from each of the three alternatives, including Alternative 1 – No Action, can be analyzed by considering two categories of historic and cultural resources: below-ground (e.g., archaeological sites) and above-ground (e.g., historic buildings).

Generally speaking, ground disturbance represents one of the greatest impacts to below-ground resources. Interpretation of archaeological sites, for example, depends on context: artifacts and features found in situ, or in their original place of deposition, can be more completely interpreted than those found out of context. Similarly, respect for human remains and burials depends on avoiding their unanticipated disturbance.

Impacts to above-ground resources, in comparison, are generally considered to be anything affecting the characteristics that make them eligible for historic registers. The National Register of Historic Places (NRHP), for example, requires a property, such as a historic building, to exhibit "integrity" of the features necessary to convey its significance, including location, design, setting, materials, workmanship, feeling, and association. Examples of such impacts include physical damage, change in the character of the property's use or setting, incompatible visual or audible elements, and even neglect.

Alternative 1 – No Action assumes no subarea plan update, zoning changes, or planned action would be adopted, and current plans and development regulations would remain in place. While growth under Alternative 1 is studied at growth target levels (approximately 479 dwellings and about 1,200 people), that level of growth can already be met by pipeline development in review now. Based on a land capacity estimate associated with existing zoning, there is room for about 1,809 dwellings and 4,381 persons, as well as 1.17 million square feet of commercial and industrial space under Alternative 1. Impacts to historic and cultural resources,

therefore, would be similar in nature (e.g., ground disturbance) but greater in degree (e.g., increased land use with no improvement in planning efforts for considering impacts to historic and cultural resources).

Alternative 2 – Moderate Growth

Alternative 2 (Moderate Growth) involves a similar land use pattern as the No Action Alternative with targeted zoning changes to accommodate additional growth and minor changes to the UGA boundary. Alternative 2 would allow up to 1,837 new housing units (4,441 new residents) and up to 1,185,834 square feet of additional commercial space. Impacts to historic and cultural resources, therefore, would again be similar to Alternative 1 in nature (e.g., ground disturbance) but greater in degree (e.g., increased land use with targeted zoning changes and minor changes to the UGA boundary). The degree of impact would be reduced if the zoning changes included improved planning efforts for considering impacts to historic and cultural resources, such as those described in Section 3.7.3 Mitigation Measures below.

Alternative 3 – Higher Growth

Alternative 3 (Higher Growth) involves a more intensive land use pattern than the No Action Alternative or Alternative 2. Zoning changes would be focused in the commercial/industrial center in the northeastern corner of the UGA and in the eastern residential and mixed-use portions of the UGA on the plateau. Alternative 3 represents a higher level of potential growth than Alternatives 1 or 2 and would allow up to 2,340 new housing units (5,669 new residents) and up to 1,438,852 square feet of additional commercial space. Impacts to historic and cultural resources, therefore, would be similar to Alternative 2 in nature (e.g., ground disturbance) but greater in degree (e.g., more intensive land use pattern with zoning changes focused in the northeastern and eastern areas described above). The degree of impact would be reduced if the zoning changes included improved planning efforts for considering impacts to historic and cultural resources, such as those described in Section 3.7.3 Mitigation Measures below.

3.6.3 Mitigation Measures

Incorporated Plan Features

Countywide Planning Policies in the Mason County Comprehensive Plan would apply to all alternatives and include:

- 13.1. Support the efforts of the Mason County Historic Preservation Commission created to identify and actively encourage the conservation of Mason County's historic resources (MCC 17.40).

- 13.2. Identify and encourage the preservation of lands, sites, and structures that have historical or archeological significance through enforcement of regulations that implement the State's goals and objectives for historic preservation at the local level.

Regulations and Commitments and Other Potential Mitigation Measures

Considering the possible impacts to historic and cultural resources prior to project implementation, particularly ground disturbance, is one of the most effective ways to mitigate impacts. Pre-project consideration of impacts can be accomplished through both planning-level processes and project-level review, as appropriate. Suggested planning- and project-level measures are described below. Other mitigation measures that encourage preservation of historic and cultural resources include tax incentives, protective easements, and acquisition.

Per State law, the following apply to *all* actions at *all* times:

- Washington State law (RCW 27.53 and 27.44) protects archaeological resources (RCW 27.53) and Indian burial grounds and historic graves (RCW 27.44) located on both the public and private lands of the State.
- An archaeological excavation permit issued by the Washington State Department of Archaeology and Historic Preservation (DAHP) is required in order to disturb an archaeological site.
- Knowing disturbance of burials/graves and failure to report the location of human remains are prohibited at all times (RCW 27.44 and 68.60).

Planning-Level Processes

Consideration of potential impacts to historic and cultural resources (both below-ground and above-ground) can be facilitated through the following planning efforts; these will provide efficiencies over an exclusively project-level approach, although the planning-level scenario would include the project-level review process that follows. Option One would apply to the County Comprehensive Plan as a whole and could be addressed with future periodic reviews, while Option Two would apply to more discrete actions, such as the Planned Action Ordinance under consideration here.

- **Option One:** Incorporate a Cultural Resource Management Plan (**CRMP**[2,3]) into the Comprehensive Plan. The CRMP would include a pre-project cultural resource review process to be conducted by a qualified professional and **standard inadvertent discovery language (SIDL)**[4] to ensure compliance with all applicable cultural resource regulations.
- **Option Two:** Establish a **local ordinance** or **development regulations**[5] addressing pre-project review; standard inadvertent discovery language (SIDL) to be included on all permits; and a **data-sharing agreement**[6] or **user agreement**[7] for qualified individuals from DAHP.

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[2] **CRMP defined** – A plan integrating cultural resource identification and management into land use planning and permitting processes. Included in the plan is a "pre-project cultural resource review process" which must be conducted by professionally qualified staff with the required knowledge and expertise. Examples of qualified staff include DAHP, affected federally-recognized Tribes, and professional archaeologists as defined at RCW 27.53.030.

[3] **CRMP examples** – The Washington State Historic Preservation Plan 2021-2026 can be accessed at https://dahp.wa.gov/preservationplan
Examples of local preservation plans from Tacoma, Olympia, Puyallup, Clark County, and King County can be accessed at the bottom of the same webpage under "Local Preservation Plans."
The Whatcom County Shoreline Management Program-Archaeological, Historic and Cultural Resources section (Whatcom County Code 23.90.070) can be accessed at http://www.codepublishing.com/wa/whatcomcounty/

[4] **Standard Inadvertent Discovery Language (SIDL) example** – The following standard inadvertent discovery language (SIDL) should be followed at *all* times on the public and private lands of the State per RCW 27.44 and 27.53:

- Should **human remains** be discovered during project activities, work in the area of the discovery should be stopped immediately, the area secured, and the coroner/medical examiner (Mason County Coroner 360.426.4441) and local law enforcement (Mason County Sheriff 360.275.4467, ext. 313) notified as per State law.
- Should **cultural resources** (e.g. artifacts made of stone, bone, antler, or shell; archaeological deposits such as shell midden; archaeological features such as hearths or post holes) be discovered during project activities, work in the area of the discovery should be stopped immediately, the area secured, and the Department of Archaeology and Historic Preservation (360.586.3065) notified as per State law.

[5] **Local ordinance/development regulations examples** – Whatcom County Code 20.72.652 (zoning) addressing pre-project review and SIDL for archaeological resources can be accessed at https://www.codepublishing.com/WA/WhatcomCounty/
As of March 2021, 87 local jurisdictions were participating in the Certified Local Government (CLG) program administered by DAHP; this number includes jurisdictions participating via interlocal agreements. CLGs must have an historic preservation ordinance.

[6] **Data-sharing agreement** – As of February 2021, 45 local jurisdictions held a data-sharing agreement with DAHP. Additionally, 27 federal, 10 state, and 30 Tribal jurisdictions, as well as 5 academic institutions and 7 large private land managers, held data sharing agreements for a total 124 partners. According to DAHP's GIS Manager, the introduction of real-time cultural resource data through the online WISAARD application prompted many partners to migrate to user agreements (see next note) resulting in a decrease in the total number of data-sharing partners in recent years.

[7] **User agreement** – Qualified individuals can obtain a user agreement from DAHP in order to access the secure side of WISAARD. The secure side includes archaeological sites, cultural resource survey reports, and data entry for historic property inventories. Qualified individuals include those meeting or working under supervision towards meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology, History, Architectural History, Architecture, and Historic Architecture; Tribal cultural resource staff; Federal and State Agency staff responsible for Section 106 review; certain Anthropology students; and academic researchers.

- **For *all* projects, either Option:**
  - Include standard inadvertent discovery language (SIDL) on all related permits (compliance with RCW 27.53, 27.44).

Project-Level Review

Conducting a pre-project cultural resource review is one of the most effective ways to mitigate impacts to historic and cultural resources. Exemptions could be considered (e.g., exempt for above-ground resources if less than 45 years old *and* not eligible for or listed in any historic register or survey). If the project is not exempt, a cultural resource review would be conducted.

A "decision tree" for both above-ground and below-ground resources can be used to determine the appropriate level of investigation and, if necessary, mitigation. In all cases, permits should be conditioned at a minimum with standard inadvertent discovery language (SIDL) in order to ensure compliance with all applicable cultural resource regulations.

The proposed Decision Tree assumes the County will lead any necessary pre-project cultural resource review and will consult with DAHP and affected Tribes at specific points in the process. Collaboration among responsible parties will be necessary, including on the determination of whether on-the-ground surveys are necessary, which would be conducted by the project applicant. The Decision Tree would be applied to each proposed action in the UGA as a more comprehensive supplement to other review tools, including the more generalized Statewide Predictive Model.

A proposed decision tree for pre-project cultural resource review in the Belfair UGA is as follows:

For Above-Ground Cultural Resources (e.g., historic buildings):

1. Consult public version of **WISAARD**[8]
2. Determine appropriate action as follows:

   a. Project exempt if *both* are met:
      1. Resource is less than 45 years old *and*
      2. Resource ineligible for/not listed in any historic register or database

      Note: If property information on WISAARD does not indicate eligibility, contact DAHP for confirmation.

   b. If project is **not exempt** (i.e., does not meet *both* criteria in 2.a above) and resource is identified in database, then
      1. DAHP determines significance;

[8] **WISAARD –** Washington Information System for Architectural and Archaeological Records Data; DAHP's online GIS map tool and searchable database for cultural resources accessed at https://wisaard.dahp.wa.gov

2. If **significant,** Avoid resource or determine Mitigation strategy; and
3. Condition permit with decision.

For Below-Ground Cultural Resources (e.g., archaeological sites):

1. Consult secure version of **WISAARD** including the **Statewide Predictive Model** (access obtained from DAHP via data-sharing agreement or user agreement for qualified individuals)

2. Determine appropriate action as follows:

a. Project **exempt** if *any* are met:
   1. Prior negative archaeological survey on file, *or*
   2. No ground disturbance will occur, *or*
   3. Project in 100% culturally-sterile fill.

b. If **no known** cultural resources are present, apply the DAHP Predictive Model and follow the survey recommendations according to the associated risk identified below and in Exhibit 3-27:
   1. Low Risk-Survey Contingent Upon Project Parameters
   2. Moderately Low Risk-Survey Contingent Upon Project Parameters
   3. Moderate Risk-Survey Recommended
   4. High Risk-Survey Highly Advised
   5. Very High Risk-Survey Highly Advised

   Note: In *all* cases, *regardless* of risk, condition permit with standard inadvertent discovery language (SIDL)

Exhibit 3-27. Above Ground Cultural Resources DAHP Predictive Model and Summary Survey Recommendations

Risk Category	Minimum Evaluation
Low	SIDL
Moderately Low and Moderate	Desktop Review and SIDL
High and Very High	Survey and SIDL

c. If cultural resources **are** present and ground-disturbance is proposed, then:
   1. Notify and consult with DAHP and Tribes (e.g., via Notice of Application);
   2. Avoid resource or determine Mitigation strategy; and
   3. Condition permit with decision.

3. For **all** ground-disturbing projects

a. Include SIDL language consistent with RCW 27.53 and 27.44 protecting sites, graves, and Indian burials on public and private lands.

b. Provide Tribal notification (e.g., via Notice of Application) and adjust per Tribe's instruction

When a Cultural Resource Survey Is Indicated

When pre-project cultural resource review indicates a cultural resource survey is necessary or when funding or permitting agencies require an archaeological survey, then according to professional best practices, the survey should include an appropriate level of background research in order to inform the research design. Background research by professional archaeologists should include a variety of sources of information, such as a more detailed review and comparison of the types of records identified in this inventory, aerial photographs, maps, and individuals with specific knowledge of the project area. It is recommended that the results of any geotechnical work be made available to the archaeologists to assist with interpretation of the project area.

Based upon the results of the background research and of any on-the-ground survey deemed necessary, the professional archaeologist typically provides the regulating agency and affected parties with management recommendations to be implemented during project activities. Management recommendations approved by the regulating agency are then reflected in permit conditions or a memorandum of agreement.

3.6.4 Significant Unavoidable Adverse Impacts

The primary significant adverse impacts to historic and cultural resources could result from failing to establish a required cultural resource review process for the project-level phase. This impact can be avoided by establishing such a review process as identified in mitigation measures.

Cultural resources located in areas with a high rate of development and redevelopment activities, such as those located in the Belfair UGA and subject to the proposed Alternatives, are at risk of destruction and even permanent loss if impacts are not considered prior to project implementation. Inadvertent discoveries during project implementation often result in the destruction of cultural resources and then in costly response efforts. The information the resources could have conveyed cannot be recovered, and the communities that value them cannot replace them. Cultural resources are finite and irreplaceable making pre-project planning particularly important.

In the absence of pre-project planning, project proponents are at risk of violating applicable cultural resource regulations, which can result in civil and criminal penalties.

Proactive consideration of impacts to cultural resources results in more effective identification, planning, and protection than reactive responses to inadvertent discoveries during project implementation. A well-designed and implemented pre-project cultural resource review process is the most effective way to avoid, minimize, or mitigate adverse impacts.