

FINAL

Joint

Land Use Study

September 2015

Naval Base Kitsap and Naval Magazine Indian Island

Prepared for Kitsap County, Jefferson County, and City of Bremerton

This study was prepared under contract with Kitsap County, Washington, with financial support from the Office of Economic Adjustment, Department of Defense. The Naval Base Kitsap Joint Land Use Study content reflects the views of Kitsap County and does not necessarily reflect the views of the Office of Economic Adjustment.



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Executive Summary

Together, Naval Base Kitsap (NBK) and Naval Magazine Indian Island (NAVMAGII) are perhaps the most complex bases in the U.S. inventory, serving a variety of strategically important missions and commands with a combination of infrastructure, ranges, and services not found anywhere else. Naval Base Kitsap is situated approximately 20 miles west of Seattle, and is comprised of multiple facilities and locations, including NBK-Bangor, NBK-Bremerton, NBK-Keyport, the Dabob Bay Range Complex, Jackson Park, Manchester Fuel Depot, and the Navy Railroad. Naval Base Kitsap is located predominantly within Kitsap County with Military Operating Areas in Puget Sound, as well as in Kitsap, Jefferson, and Mason Counties. Naval Magazine Indian Island, located on a 2,700-acre island within Jefferson County, is a strategic loading point for ships in the Pacific Fleet preparing for or returning from deployment.

The bases are also tremendously important to the regional economy. Naval Base Kitsap has an annual payroll of approximately \$2.3 billion. Protection of the integrity of these bases is critical to national security and the region's economy.

What is a Joint Land Use Study?

A Joint Land Use Study (JLUS) is a collaborative land use planning effort between military installations and their surrounding communities. The study is intended to identify actions that both the communities and installations can take to encourage compatible land uses around the installations. This process does not require the implementation of any particular recommendation, but rather suggests tools available to the communities to tailor and implement if they so choose.

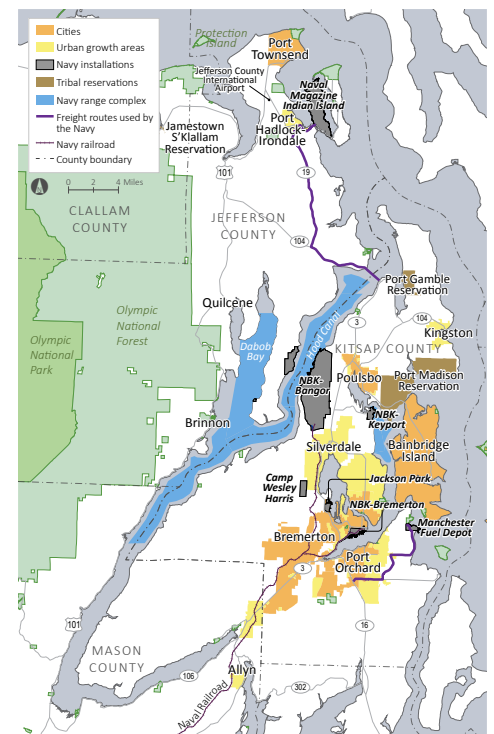
This Naval Base Kitsap and Naval Magazine Indian Island JLUS is one of more than 100 such studies that have been developed by communities across the country located close to military installations. This effort was funded by the Department of Defense (DoD) Office of Economic Adjustment (OEA), Kitsap County, Jefferson County, and the City of Bremerton.

Chapter 1: Introduction

The introduction provides an overview of joint land use studies and states the purpose of this NBK and NAVMAGII JLUS. This Chapter also provides an overview of the JLUS and the community engagement process undertaken to develop this study.



Public workshop participants in Bremerton/ Kitsap County discuss and rank extent of issues.



JLUS study area (see full-sized map on page 9)

Issues by jurisdiction

Tribal areas of interest include environmental protection and raising awareness and improving development notification processes for archaeological and cultural sites protection.

Kitsap County areas of interests include land use compatibility around base perimeters and along freight routes used by the Navy, shoreline and upland uses along Hood Canal, transportation, and communication and coordination.

Jefferson County areas of interest include the Hood Canal and Portage Bay Bridges, land use compatibility along freight routes used by the Navy, shoreline and upland uses along Hood Canal, and communication and coordination.

Mason County areas of interest include compatible development around freight routes used by the Navy, shoreline and upland uses along Hood Canal, and communication and coordination.

Bremerton areas of interest include NBK-Bremerton's traffic impacts, parking and base access, land use compatibility adjacent to the base, and communication and coordination.

Chapter 2: Study Area Profile and Trends

Chapter 2 provides an overview of:

- **Military Installations.** NBK includes NBK-Bremerton, NBK-Bangor, NBK-Keyport, the Hood Canal Military Operating Area (MOA) and Dabob Bay Range Complex, the Manchester Fuel Depot, Jackson Park, Camp Wesley Harris, and the Navy Railroad. These support aircraft carrier, submarine, and surface ship berthing and repair, torpedo handling, maintenance, and storage, and the Navy's research, development, testing, and evaluation site. NAVMAGII provides ordnance loading, unloading, and storage capabilities for the Pacific Fleet ships.
- **Military Economic Impacts.** The economic impact of NBK and NAVMAGII includes an average wage of \$33,400 to 12,825 enlisted personnel and \$74,000 to civilian personnel and \$44 million in direct contracts.
- **Regional Context.** Jurisdictions included in this study are Kitsap County, Bremerton, Jefferson County, Mason County, Port Orchard, Poulsbo, Port Townsend, Shelton and five Tribes—Jamestown S'Klallam, Lower Elwha Klallam, Port Gamble S'Klallam, Skokomish, and Suquamish. Three regional coordinating councils operate in the region: Hood Canal Coordinating Council, Kitsap Regional Coordinating Council, and Puget Sound Regional Council.
- **Transportation Context.** Routes important to this study include State Route (SR) 3, SR 104, and the Hood Canal Bridge, which connect Kitsap Peninsula and eastern Jefferson County; SR 104, SR 19, the Portage Canal Bridge, and SR 116, which facilitate freight travel to Indian Island and connect to Marrowstone Island; SR 3 and SR 304, which serve downtown Bremerton and NBK-Bremerton; waterways, which support recreational and ferry traffic; and the SR 16/SR 3 interchange, which facilitates freight travel.
- **Growth Trends.** Kitsap County is expected to grow by 80,000 people by 2035, Mason County by 20,000, and Jefferson County by 7,800, with most growth anticipated in the designated urban growth areas (UGAs) of Port Orchard, Poulsbo, Bremerton, Central Kitsap UGA, Silverdale, Port Townsend, and Port Hadlock-Irondale UGA. This growth will create additional transportation and public service demands and creates the potential for land use conflicts with Navy operations.

Chapter 3: Existing Plans and Programs

Chapter 3 provides an overview of:

- State and federal planning and regulatory framework, including State and National Environmental Policy Acts (SEPA and NEPA); Washington's Growth Management Act (GMA), Shoreline Management Act (SMA), Endangered Species Act (ESA), and National Pollutant Discharge Elimination System (NPDES) permits.
- Local Jurisdiction Planning Tools, including the following:
 - A. **Comprehensive Plans.** The Comprehensive Plans set out the jurisdictions' goals for growth and rural area protection. Kitsap County is the only jurisdiction in study area with policies that address the military. All have rural and resource protection goals that are especially important in protecting the Navy from encroachment.
 - B. **Zoning.** Zoning implements the jurisdictions' comprehensive plans by allowing greater intensity of land use in urban and designated growth areas and lesser intensity elsewhere.
 - C. **Shoreline Master Programs.** Jurisdictions classify stretches of shoreline with varying "environment designations" to ensure appropriate land uses that balance geographic, economic, and environmental needs.
 - D. **Critical Areas.** State and federal law requires jurisdictions and the Navy to classify, designate, and protect critical areas—wetlands, aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas. With much shoreline and unique habitat in the study area, development is focused to protect critical areas.

Chapter 4: Compatibility Analysis

Chapter 4 summarizes and provides analysis of compatibility issues and suggests tools and strategies for refinement later in the process. The issues are organized under five sections:

4.1 Communication and Coordination

This section captures a range of communication and coordination issues that relate to many of the issues described in Section 4.2 through 4.5.

4.2 Adjacent Land Uses and Infrastructure Coordination

Section 4.2 addresses the interface between the Navy perimeter and adjacent land uses, including:

- Land uses around bases, including NBK-Bremerton, NBK-Bangor, and NBK-Keyport;
- Explosive Safety Quantity Distance (ESQD) Arcs;
- Land uses adjacent to freight routes, such as the Navy Railroad, freight route serving Manchester, and freight route at Chimacum and Port Hadlock-Irondale serving NAVMAGII;
- Building heights around NBK-Bremerton;
- Infrastructure coordination, including shared utilities at NBK-Bremerton and NAVMAGII along SR 116; and
- Private structures in NBK-Bangor, NBK-Keyport, and Navy railway property.

4.3 On-Water and Shoreline Activities

Increasing boat and seaplane traffic in the waterways around naval bases and training ranges could compromise essential underwater testing operations, conflict with Navy vessel movements, and complicate security and public relations. Water traffic issues include:

- Intensifying land uses (e.g., new or expanded marinas, boat ramps, aviation gas distribution facilities, commercial piers, forestlands conversion, and resorts) that increase traffic on Hood Canal and Dabob Bay,
- Boater education to enhance understanding of Coast Guard requirements while designated Ranges are in operation to ensure public safety, and
- Growth in recreational boating and crabbing activities around Indian Island.

Adjacent Land Uses and Infrastructure Coordination potential resolution strategies include:

- Coordinate prior to approving plans, land uses, regulations, or the funding of “growth inducing” infrastructure, including utilities and roads;
- Indicate freight routes used by the Navy in local transportation plans and maps; and
- Maintain a Level of Service on designated freight routes consistent with comprehensive plan policies.

On-Water and Shoreline Activities potential resolution strategies include:

- Partner to identify and support projects that expand recreational water access outside military operating areas, and
- Increase boater education and awareness to reduce encounters and security issues.

Transportation potential resolution strategies include:

- Inventory existing conditions of transportation system and parking and evaluate options to mitigate demands in Bremerton,
- Consider special land use zoning or permitting around freight routes,
- Implement pedestrian, bicycle, gate improvements, and parking strategies in Bremerton,
- Prioritize and implement projects identified by KRCC TransTAC/SR 3 Defense Industrial Corridor,
- Implement projects identified by Washington State Department of Transportation (WSDOT) in Gorst and at SR 3/ SR 304 interchange, and
- Update and expand public notice of short-term events affecting transportation (e.g. Hood Canal Bridge closings)

Natural and Cultural Resources potential resolution strategies include:

- Share and coordinate on restoration and conservation priorities,
- Leverage REPI and other such programs to prevent land use conflicts,
- Prioritize working forests conservation,
- Monitor climate change data and government initiatives for appropriate adaptation approaches, and
- Develop MOUs with applicable Tribes to improve land development notification and permitting processes

4.4 Transportation

Regional transportation routes, as well as local intersections and infrastructure, should function for the community and Navy. Issues include:

- Traffic circulation and parking facilities surrounding NBK-Bremerton to support Navy commuters,
- Bremerton traffic surges and pedestrian gate traffic and safety during NBK-Bremerton shift changes,
- SR 3/SR 304 interchange functionality during peak hours,
- Large traffic volumes on Charleston Boulevard, which serves NBK-Bremerton,
- Traffic congestion at the SR 3/SR 16 interchange in Gorst (i.e., Puget Sound Industrial Center – Bremerton),
- Maintaining the Hood Canal and Portage Canal bridges, and
- Providing for safe transport along the freight route serving NAVMAGII.

4.5 Natural and Cultural Resources

All entities are interested in balancing environmental protection with economic development opportunities and preserving ecological or historic resources. Identified issues include:

- Environment regulations that protect resources without encumbering other goals,
- Actual and perceived Navy impacts on the environment,
- Open space and resource lands preservation for ecological, economic, quality of life, recreation, and Navy mission purposes,
- Climate change adaptation needs for Navy operational and installation sustainability and Tribes, Counties, and Cities' ecological, economic, and human health, and
- Awareness of Tribal archaeological sites and associated permitting processes.

Chapter 5: Strategy and Recommendations

Joint Land Use Studies represent the first of three stages of the compatible planning process. Phase I, which has culminated in this report, is the “planning” process. Phase II includes the development of the tools that would implement the recommendations in Chapter 5 of this study, and is commonly referred to as the “JLUS Implementation” phase, which would be overseen by a “JLUS Implementation Committee,” similar to the JLUS Policy Committee which oversaw the JLUS in Phase I. Finally, during Phase III, “Tools Adoption,” the implementation tools recommended by the JLUS Implementation Committee are presented to implementing agencies (e.g., local governments, Tribes, and the installations) for adoption and application.

This process is presented in “Table 5.1. JLUS implementation phases” on page 160 in Chapter 5.

If the communities involved the Joint Land Use Study decide to proceed with JLUS Implementation, the JLUS Implementation Committee should be created and engaged in the process of seeking additional OEA funding, if available, hiring consulting experts, if that expertise is desired, and developing a work plan for implementation. The work plan will prioritize the Implementation Tasks, which are described in the JLUS Strategies and Implementation Matrix in Chapter 5, within the following six Procedural Contexts:

- A. Community Outreach by the Navy
- B. Conservation Programs for Protecting Land Use Compatibility
- C. Strategic Coordination Among Stakeholders
- D. Regional Land Use Planning
- E. Local Government Comprehensive Planning
- F. Land Use and Development

The highest priority Implementation Tasks, within each Procedural Context are:

Community Outreach by the Navy

- Updates to Elected Officials and Other Stakeholders
- Increase Community Awareness of the Navy Mission and Requirements

Conservation Programs for Protecting Land Use Compatibility

- Climate Change/Sea Level Rise
- Lease and Purchase of Development Rights/Potential
- Readiness and Environmental Protection Integration (REPI)

Strategic Coordination Among Stakeholders

- Military Planning and Coordination Committee and Community Workshops
- Memorandum of Understanding
- Growth-Inducing Infrastructure
- Tribal Cultural Resources

Regional Land Use Planning

- Freight Routes Used by the Navy
- Washington Military Alliance

Local Government Comprehensive Planning

- Local Government Comprehensive Plans
- Transportation and Parking Plan
- Recreational Boating

Land Use and Development

- Statutory Notice Area: Comprehensive Plan and Development Regulations
- Notice for Development Permits and Rezonings
- Collaborate to Identify Potential Projects of Concern
- Freight Routes Used by the Navy
- Coordination and Land Use Overlay Zones

The Policy Committee recommended 35 tasks within the six general areas shown to the left. These are described in Chapter 5 and in the JLUS Strategies and Recommendations Matrix. The matrix presents costs, time frames, and responsible parties for each implementation task.

The Policy Committee recognized that each of the tasks is important; therefore, the overall priority given to a particular task is relative to the urgency of the issue to be addressed, overall costs, and, in particular, whether immediate safety and quality of life concerns are implicated. The Policy Committee prioritized the tasks as medium or high priority.

Each of these tasks is described in detail in Chapter 5 and summarized in the “Strategies and recommendations matrix” on page 191.

Acknowledgements

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List of Acronyms

ACEP	Agricultural Conservation Easement Program	ERPM	Environmental Readiness Program Manual
CARA	Critical Aquifer Recharge Areas	ESA	Endangered Species Act
CASP	Critical Area Stewardship Plans	ESPC	Energy Savings Performance Contracts
CDP	Census Designated Place	ESQD	Explosive Safety Quantity Distance
CFR	Code of Federal Regulations	FAA	Federal Aviation Administration
CLT	Cross-Laminated Timber	FEIS	Final Environmental Impact Statement
CNA	Center for Naval Analyses	FEMA	Federal Emergency Management Agency
CPLO	Community Planning Liaison Officer	FHWA	Federal Highway Administration
CPP	County Planning Policies	FONSI	Finding of No Significant Impact
CWPP	Countywide Planning Policies	FIRM	Flood Insurance Rate Maps
DAHP	Department of Archaeology and Historic Preservation	GIS	Geographic Information System
DNR	Department of Natural Resources	GMA	Growth Management Act
DNS	Determination of Non-Significance	HCCC	Hood Canal Coordinating Council
DOD	Department of Defense	HOV	High Occupancy Vehicle
DON	Department of Navy	HSS	Highways of Statewide Significance
EA	Environmental Assessment	ICRMP	Integrated Cultural Resource Management Plan
EIS	Environmental Impact Statement	ILB	Industrial Land Bank
EMS	Environmental Management Systems	INRMP	Integrated Natural Resource Management Plan
EO	Executive Order	JLT	Jefferson Land Trust
EOD	Explosive Ordnance Disposal	JLUS	Joint Land Use Study
EOL	Explosive operating location	KRCC	Kitsap Regional Coordinating Council
EP	Encroachment Partnering	LAMIRD	Limited Area of More Intense Rural Development
EPA	Environmental Protection Agency	LEED	Leadership Energy and Environmental Design

List of Acronyms

LID	Low Impact Development	OSD	Office of the Secretary of Defense
LIO	Local Integrating Organizations	PAO	Public Affairs Office
LOS	Level of Service	PC	Policy Committee
MILCON	Military Construction	PHS	Priority Habitats and Species
MID	Major Industrial Developments	PRTPO	Peninsula Regional Transportation Planning Organization
MOA	Military Operating Area Memorandum of Agreement	PSAR	Puget Sound Acquisition and Restoration
MOU	Memorandum of Understanding	PSIC	Puget Sound Industrial Center
MPCA	Military Planning and Coordination Area	PSNS	Puget Sound Naval Shipyard
MPCC	Military Planning and Coordination Committee	PSRC	Puget Sound Regional Council
MPR	Master Planned Resort	PUD	Public Utility District
NAGPRA	Native American Graves Protection and Repatriation Act	PWD	Public Works Department
NAS	Naval Air Station	RCW	Revised Code of Washington
NAVMAGII	Naval Magazine Indian Island	RDT&E	Research, Development, Training and Evaluation
NBK	Naval Base Kitsap	REIT	Real Estate Investment Trust
NEPA	National Environmental Policy Act	ROW	Right-of-Way
NHB	Naval Hospital Bremerton	REPI	Readiness and Environmental Protection Integration
NNRG	Northwest Natural Resource Group	ROW	Right-of-Way
NOAA	National Oceanic and Atmospheric Administration	SDDC	Surface Deployment and Distribution Command
NPDES	National Pollutant Discharge Elimination System	SECNAV	Secretary of the Navy
NRNW	Navy Region Northwest	SEPA	State Environmental Policy Act
NUWC	Naval Undersea Warfare Center	SFLO	Small Forest Landowners Office
OEA	Office of Economic Adjustment	SHPO	State Historic Preservation Officer
OFM	Office of Financial Management	SKIA	South Kitsap Industrial Area
OPNAV	Office of the Chief of Naval Operations	SLR	Sea Level Rise
		SMA	Shoreline Management Act

SMP	Shoreline Master Program
SRFB	Salmon Recovery Funding Board
SWFPAC	Strategic Weapons Facility Pacific
SWMP	Stormwater Management Program
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plans
TC	Technical Committee
TDR	Transfer of Development Rights
TTF	Trident Training Facility
U&A	Usual and Accustomed
UDC	Unified Development Code
UGA	Urban Growth Area
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	U.S. Fish and Wildlife Service
VFR	Visual Flight Route
WDFW	Washington Department of Fish and Wildlife
WMA	Washington Military Alliance
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation
WSF	Washington State Ferries
WSU	Washington State University

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D. JLUS Strategies and Recommendations by County

Introduction

Chapter

1



Joint
Land Use
Study

NBK & NAVMAGII

Purpose

A Joint Land Use Study is a cooperative land use planning effort between local governments and military installations. The study leads to a policy framework and implementation measures to support a healthy economy, environment, and community, while safeguarding the military mission. The Naval Base Kitsap (NBK) and Naval Magazine Indian Island (NAVMAGII) Joint Land Use Study (JLUS) is an 18-month effort funded by the Department of Defense (DoD) Office of Economic Adjustment (OEA), Kitsap County, Jefferson County, and City of Bremerton . The Naval Base Kitsap and Naval Magazine Indian Island JLUS is one of many studies being developed by communities across the country that are located close to military installations.

Many U.S. military installations were originally located in remote areas, largely due to the availability of land and for defense and security purposes. Other installations were located for strategic reasons (e.g. on U.S. coast lines). Over time however, development increased around these installations, which can at times, cause land use conflicts between base operations and civilian populations. Bremerton and Jefferson, Kitsap, and Mason Counties are planning for significant growth within their urban growth areas by 2040. The three-county area is a destination for tourists, recreationists and, increasingly, retirees.

JLUS objectives are:

- **Compatible neighboring development.** Encourage cooperative land use planning between military installations and the surrounding communities to ensure future civilian growth and development are compatible with military training and operations, and
- **Reduced impacts on neighboring development.** Seek ways to reduce the military's impact on its neighbors.

Completed Joint Land Use Studies

103 Completed as of January 2014
(1985-2014)

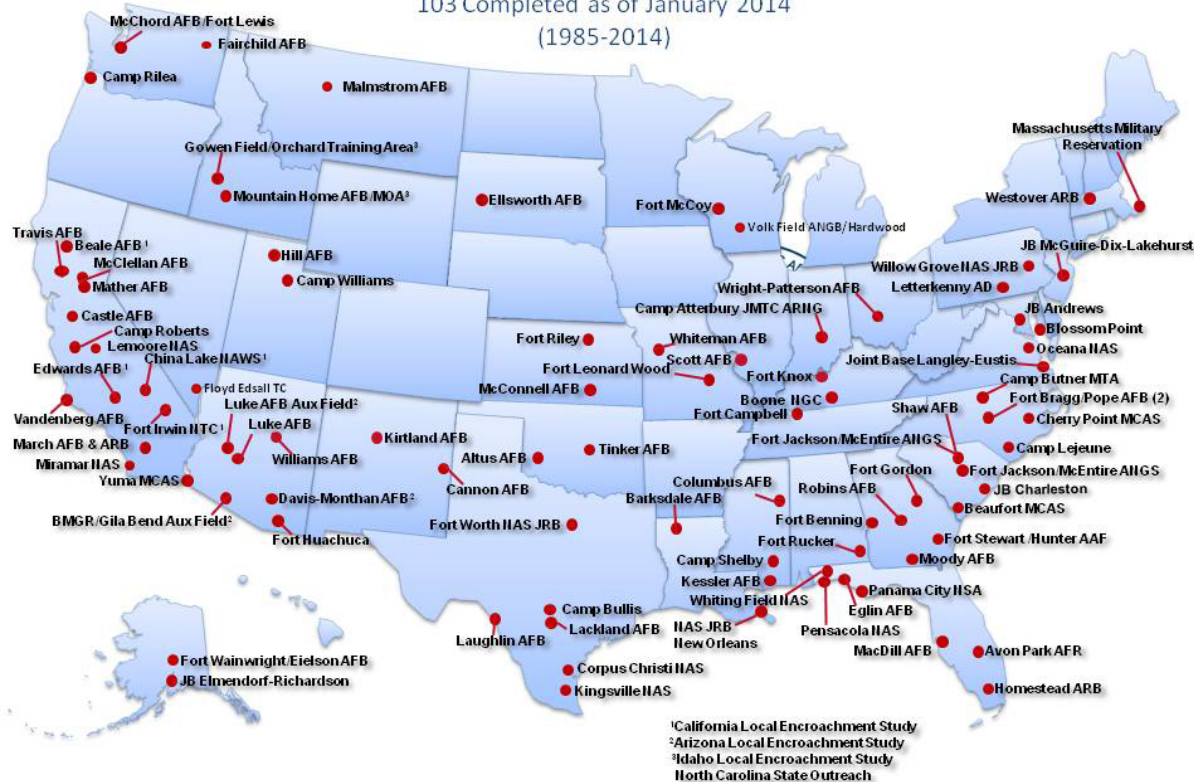


Figure 1.1. Completed Joint Land Use Studies (image credit: OEA)

Military operations can impact nearby civilian communities. At the same time, development near military bases can impact operational effectiveness, by hindering training, logistics, and preparedness. Through the JLUS, a cooperative military and community planning effort, growth conflicts can be anticipated, identified, and prevented.

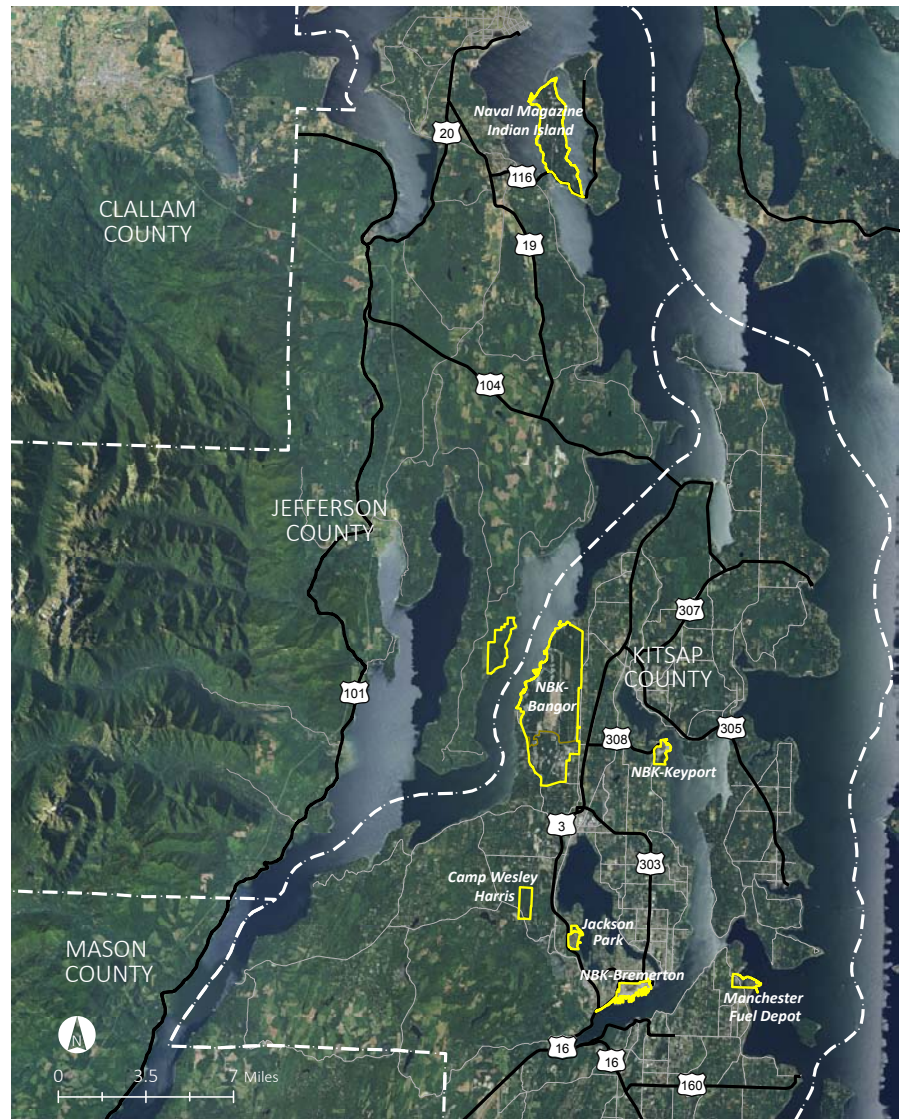


Figure 1.2. Aerial of study area (image credit: Google Maps)

Produced by and for local communities, a JLUS, at its core, aims to protect the quality of life of local residents, private property rights, and the current and future mission of the bases. The JLUS Program aims to ensure lasting compatibility of military installations and the neighboring communities.

Specifically, the NBK and NAVMAGII JLUS aims to:

- Identify current and potential land use issues that may impact the operational utility of Naval Base Kitsap, Naval Magazine Indian Island, and associated military operating areas;
- Identify actions that jurisdictions can use to ensure that incompatible development does not impact the operational utility of Naval Base Kitsap and Naval Magazine Indian Island;
- Protect the viability of current and future missions at Naval Base Kitsap and Naval Magazine Indian Island, while at the same time guide growth, sustain the economic health of the region, and protect public health, safety and welfare;
- Identify current actions the Navy has taken to reduce its impact on the community and potential mitigation actions that would have minimal impacts on Navy operations and training that would positively impact the community

- Create an action plan to guide future planning to benefit all involved parties,
- Undertake a cooperative and proactive planning effort that encourages compatibility between the jurisdictions, the Navy, and their neighbors in order to reduce or minimize development and operational impacts and conflicts. Prepare JLUS findings to integrate into city and county Comprehensive Plan updates. Through 2016, jurisdictions will be preparing updates to address growth over the next 20 years; and
- Fulfill the Growth Management Act requirement that prohibits land use development incompatible with military installations (RCW 36.70A.530).

Process

The development of this NBK and NAVMAGII JLUS report was organized into the following four steps:

1. Introduce Project and Identify Issues

Refine the JLUS work plan, process, and goals; identify potential land use, shoreline use, water traffic, transportation, and infrastructure issues.

2. Refine Issues and Draft Strategies

Update issues considering stakeholder comments; draft conflict resolution strategies for communication and coordination, current and future land use, including regulatory, capital improvement, programmatic, and procedural and operational measures.

3. Refine and Prioritize Strategies

Review stakeholder comments and refine and prioritize strategies.

4. Develop, Refine, and Issue JLUS Report

Prepare the JLUS Report, to include a summary of the above, as well as an implementation strategy with suggested timelines, estimated order-of-magnitude costs, and potential funding mechanisms. Include a recommended organizational structure and process for JLUS participants' continued collaboration.

Policy and Technical Committees

A Policy Committee and a Technical Committee are overseeing JLUS development. The Policy Committee (PC) includes elected and appointed public officials from local jurisdictions, senior military officials, tribal government leaders, and key stakeholder representatives. The PC is responsible for approving the JLUS work plan, policy recommendations, and written reports. The PC will also monitor implementation of Plan recommendations. The Technical Committee (TC) is comprised of staff from local jurisdiction planning departments, military installations, and key stakeholders. The TC meets in conjunction with the Policy Committee and separately to discuss issues, share information, develop recommendations, guide community outreach, and shape project documents. Committee members are identified on page vi.



Figure 1.3. Policy and Technical Committees discuss draft resolution strategies

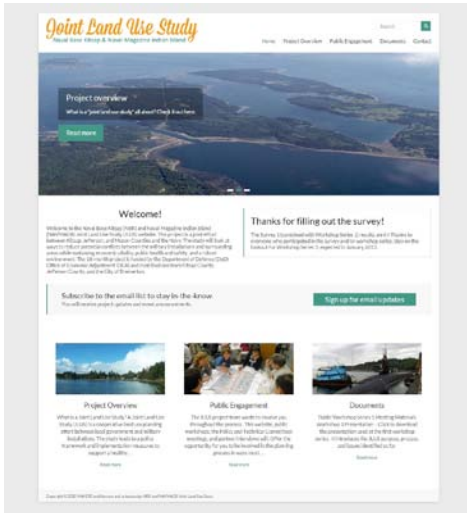


Figure 1.4. JLUS website provides project information and documents and announces surveys, events, and review periods.



Figure 1.5. Public workshop participants in Jefferson County (above) and Bremerton/Kitsap County (below) discuss and rank the extent of issues.

Community Engagement

The JLUS team’s community engagement strategy:

- Offered public engagement opportunities relevant to and inclusive of the affected community;
- Solicited input from community participants about concerns, issues, questions, and insights;
- Requested topic-specific advice and information from key project partners to inform the data gathering and planning process, and;
- Informed participants about the JLUS process and products in an open and transparent way.

The engagement strategy utilized the following variety of communication and engagement tools as appropriate through the project’s four phases.

Public Workshops and Online Surveys

The team facilitated public workshops—informational and interactive events intended for the general public—at three major milestones. Because the NBK and NAVMAG II JLUS study area is large, events were held in both Kitsap and Jefferson Counties. Workshops in Kitsap County were also aired on the Bremerton-Kitsap Access Television (BKAT).

Online surveys were used at strategic points in the process to gather ideas from community members and check in on draft proposals. These provided an opportunity for people who could not attend the meetings in person to engage in the process and provide meaningful input.

A project website (www.kijlus.com) was the hub of background material, project updates, contact information, workshop and survey results, and draft and final documents. The “Contact” page encouraged comments via email. The team maintained a project email list and provided email updates at key points in the process. The project team disseminated informational material (e.g., fact sheets, flyers, posters) to educate community members, the media, and elected officials about the JLUS through the project website and at in-person events. A Facebook page (facebook.com/kitsapwa) also notified interested community members about project events and milestones.

A summary of public outreach efforts is included in Appendix A.

Project Partner Interviews

Local jurisdictions, Tribal Governments, State agencies, and regional councils were identified as project partners and interviewed by the consultant team or Technical Committee. These interviews were instrumental in identifying issues to address in the study.

Ongoing Local Meetings and Public Officials Briefing

As appropriate, Policy and Technical Committee members provided project updates and solicited feedback at County and City Council and Planning Commission meetings and other local meetings throughout the planning process.

Study Area Profile

Chapter

2

Joint
Land Use
Study

NBK & NAVMAGII

Photo credit: [superyeahdon, Flickr](#)

JLUS Geographic Scope

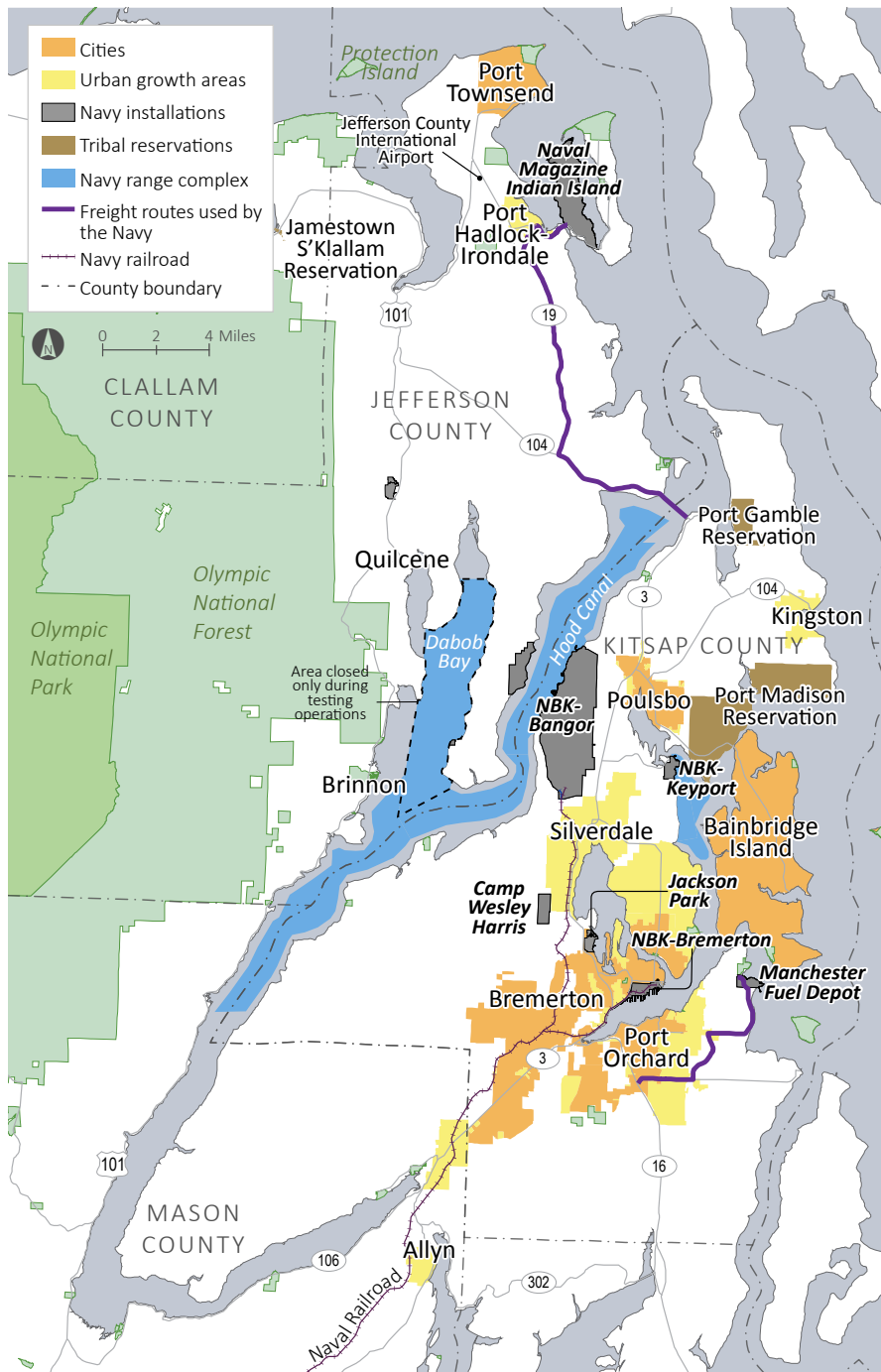


Figure 2.1. JLUS Study Area

The geographic scope of the JLUS identified in Figure 2.1 was established by the JLUS Policy Committee and includes areas near NBK in Kitsap County (including Bremerton, Bangor, Keyport, and Manchester), NAVMAGII in Jefferson County, waterways used for Navy operations, and various land transportation routes.

The JLUS focuses on areas within the Jurisdictions and Military Planning and Coordination Area (MPCA) shown below in Figure 2.2. This includes places where the Navy operations may impact its neighbors and where development and other civilian activities may impact the Navy.

The Study Area Profile first describes the Navy installations and their economic impact. It then introduces the regional context and jurisdictions within the MPCA.

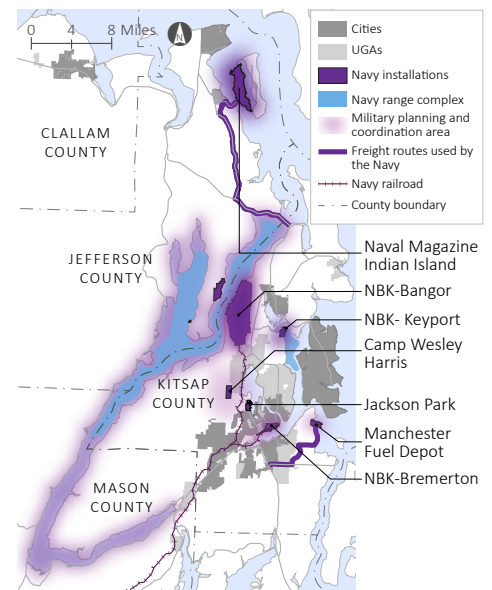


Figure 2.2. Military Planning and Coordination Area

The study area encompasses three counties, multiple naval installations, five federally-recognized Native American Tribes, and over a dozen communities.

Military Installations

This section introduces Naval Base Kitsap and Naval Magazine Indian Island.

Naval Base Kitsap

Naval Base Kitsap is situated approximately 20 miles west of Seattle and is comprised of multiple facilities and locations. Major operational assets include NBK-Bremerton, NBK-Bangor, NBK-Keyport, the Hood Canal Military Operating Area (MOA) and Dabob Bay Range Complex, Manchester Fuel Depot, and Navy Railroad. Other NBK managed facilities include Jackson Park and Camp Wesley Harris.

Naval Base Kitsap is located predominantly within Kitsap County with Military Operating Areas in Puget Sound, as well as in Jefferson and Mason Counties. Naval Base Kitsap is perhaps the most complex base in the U.S. inventory, serving a variety of strategically important missions and commands with a combination of infrastructure, ranges, and services. NBK's primary missions include homeporting and maintenance and repair of submarines, aircraft carriers, and surface ships. Additional missions include weapons handling and Research, Development, Testing, and Evaluation (RDT&E).

FAST FACTS

- 11,200 acres
- 1,853 buildings
- Three flag (Admiral-directed) commands: Navy Region Northwest, Carrier Strike Group Three, and Submarine Group Nine
- Nearly 70 tenants
- ~\$2.3 billion annual payroll
- ~ 34,400 personnel (military, civilian, and contractor)
- ~25,000 retirees

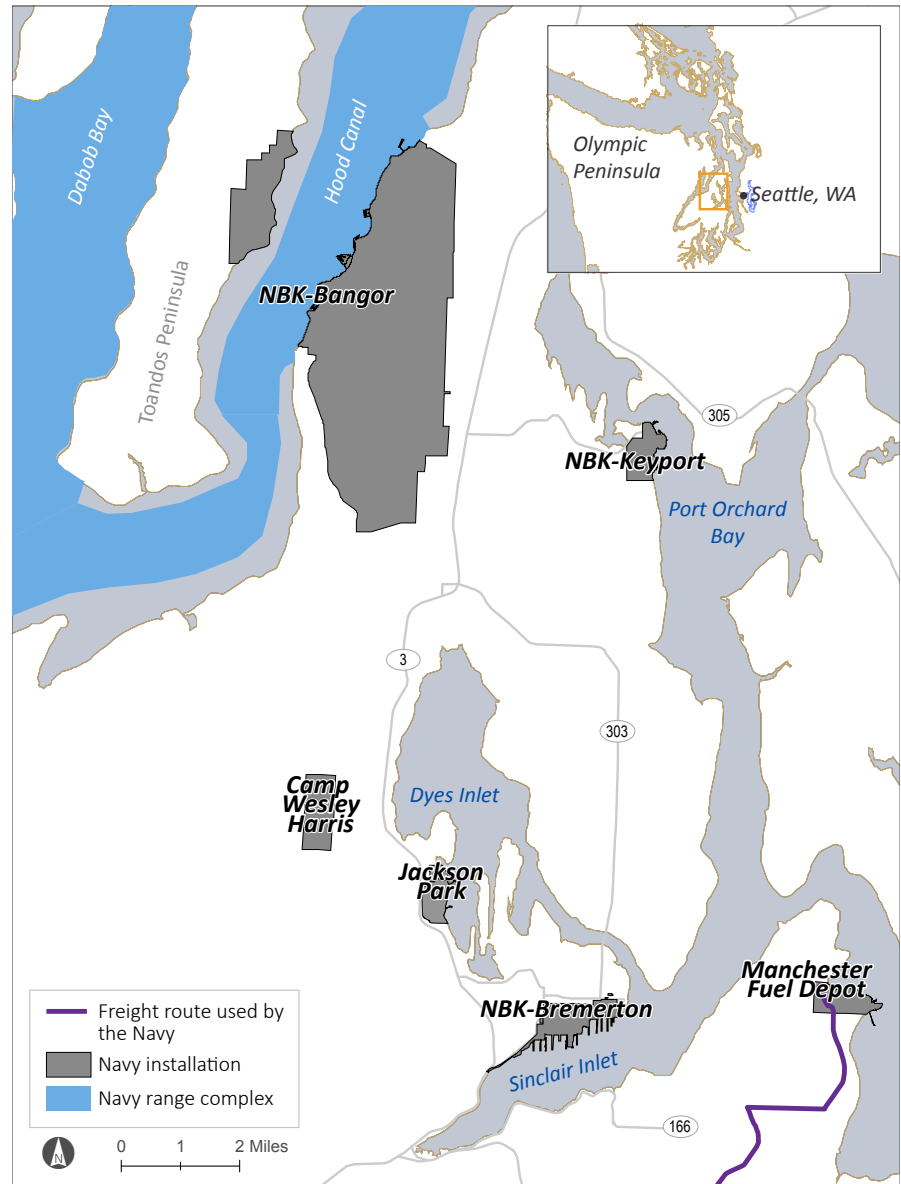


Figure 2.3. Major installations comprising Naval Base Kitsap

NBK-Bremerton

NBK-Bremerton is located on the north side of Sinclair Inlet within the incorporated boundaries of the City of Bremerton in Kitsap County. It encompasses approximately 400 acres of land, 400 acres of submerged marine Right to Use lands, 3.4 miles of shoreline, 382 buildings, and six dry docks for wet or dry berthing of all sizes and classes of vessels.

NBK-Bremerton is one of Washington State’s largest industrial installations. The eastern portion of the naval base is a fenced, high-security area known as the Controlled Industrial Area. The Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS and IMF) is the major tenant command on NBK-Bremerton. Inactive ships are berthed on the west side of the installation; these vessels are in the process of being decommissioned.

FAST FACTS

- Homeport for the USS John C. Stennis and USS Nimitz aircraft carriers and two SEAWOLF class attack submarines
- Home to Supply Center Puget Sound
- One of four naval shipyards capable of repair to nuclear propulsion plants
- Only Pacific NIMITZ class carrier-capable dry dock

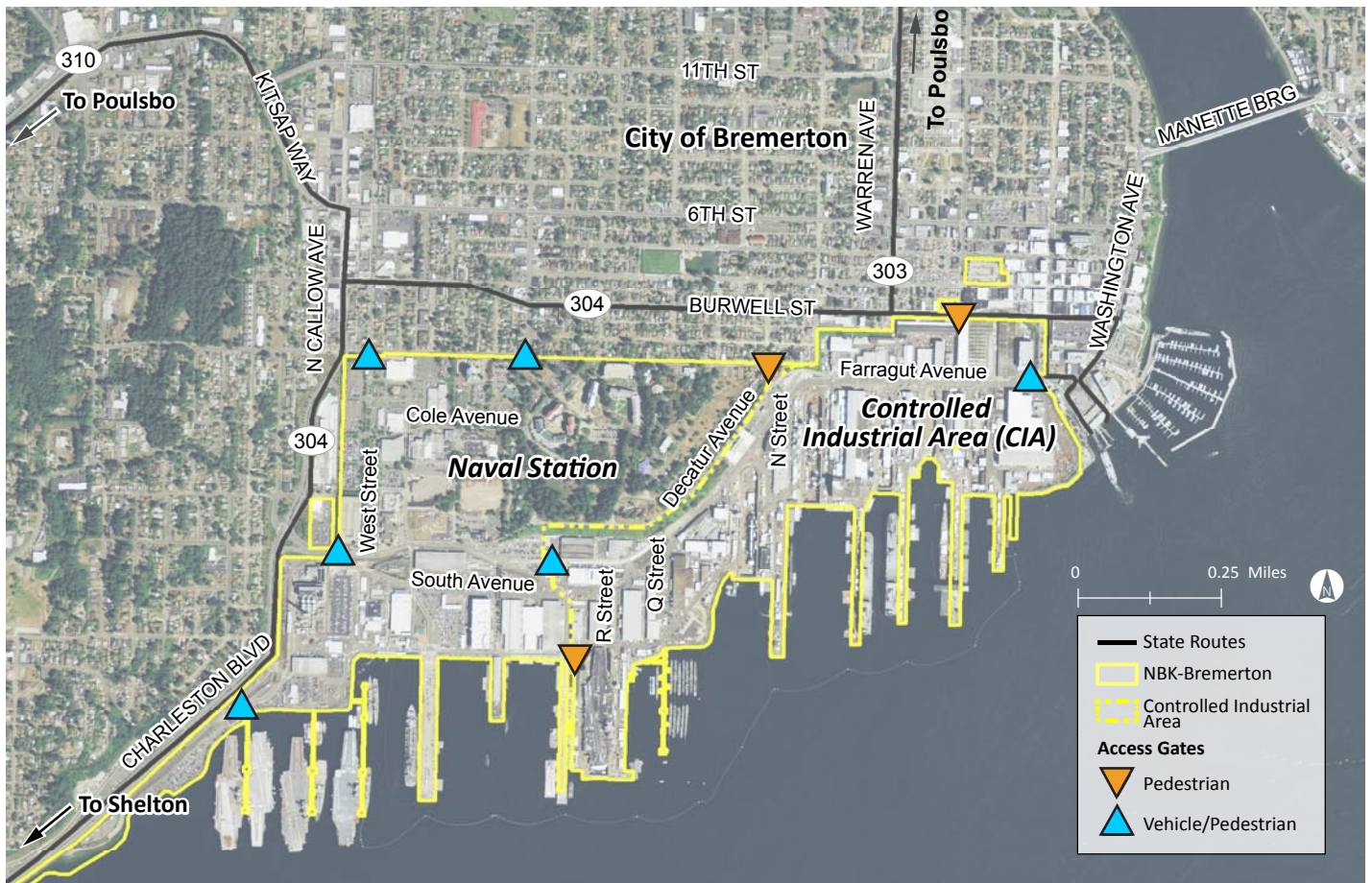
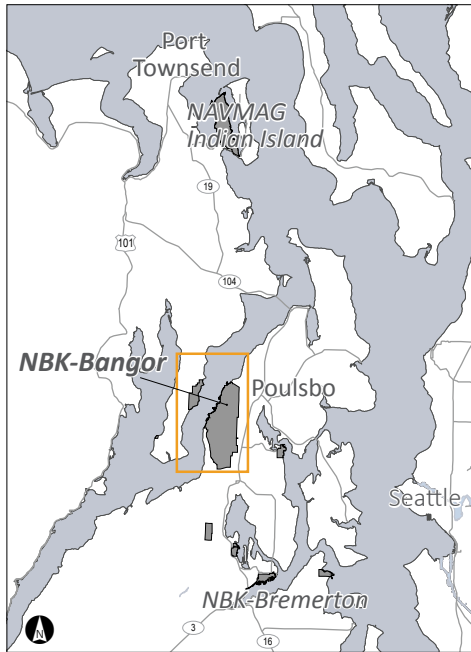


Figure 2.4. Naval Base Kitsap - Bremerton; see vicinity map on prior page

NBK-Bangor

NBK-Bangor is located in unincorporated Kitsap County and occupies 7,200 acres and 4.5 miles of shoreline on the Kitsap Peninsula. It is the West Coast homeport of the Trident Submarine Program and hosts a number of tenant commands, including Strategic Weapons Facility Pacific (SWFPAC) and Naval Surface Warfare Center Detachment Carderock. Naval Base Kitsap-Bangor is a high security Navy facility with enhanced protection (restricted airspace and upland security enclave) around its waterfront.



NBK-Bangor is unique on the West Coast, with its submarine berthing capabilities, dry-dock and maintenance facilities, and an Explosives Handling Wharf. A second Explosives Handling Wharf is currently under construction. The adjacent training and testing ranges and Military Operating Areas in Hood Canal provide vital support for all aspects of this mission. The ability to test and monitor submarines in close proximity to their homeport enhances program safety and provides operational assurances prior to deployment.

The Navy also owns a portion of the Toandos Peninsula across Hood Canal from the NBK-Bangor waterfront. This is intended to limit inappropriate development close to the sensitive mission activities along the Bangor waterfront.

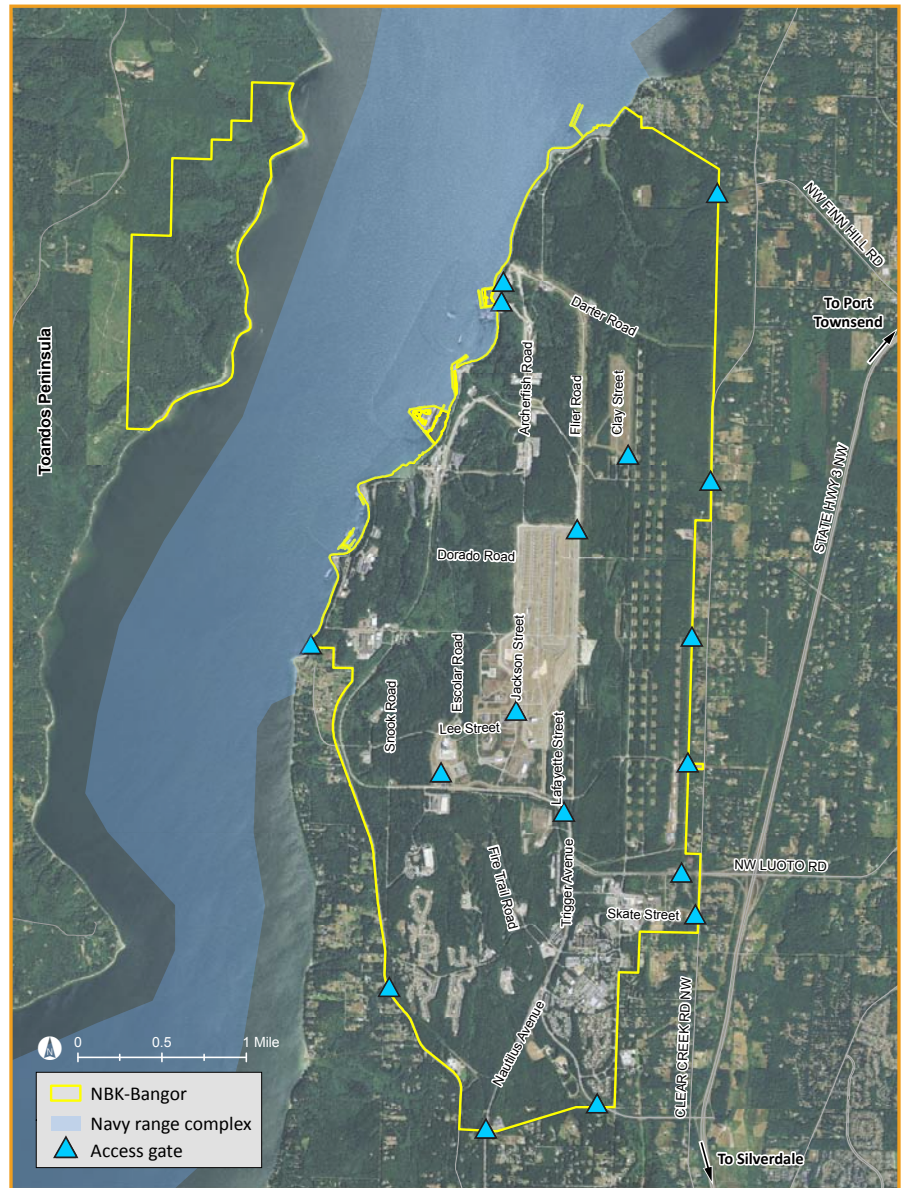


Figure 2.5. Naval Base Kitsap – Bangor; see vicinity map to the left

FAST FACTS

- One of two (and the only Pacific) Strategic Weapons Facilities, supported by the largest Marine Corps Security Force Battalion
- Only homeport for all three submarine classes and the Trident Training Facility
- Hosts the United States Coast Guard Transit Protection System, a unique unit trained and equipped to provide security for NBK-Bangor's submarines
- Home to the marine mammal swimmer interdiction security system, which provides additional security along the Bangor waterfront

NBK-Keyport

Naval Undersea Warfare Center (NUWC) Division, Keyport, the largest tenant at NBK-Keyport, is the Navy’s Northwest premier provider of research and development, cold water test and evaluation, maintenance and repair, fleet support, and industrial base support for undersea weapons, targets, and warfare systems. NUWC Keyport uses NBK-Keyport and NBK-Bangor facilities for torpedo handling, maintenance, and storage, and relies heavily on the Dabob Bay Range and Hood Canal Military Operating Areas for research, development, testing, training, and evaluation. See the following section for more information about the Dabob Bay Range. Additionally, there is a small underwater range adjacent to NBK-Keyport (see Figure 2.7 on the following page).

FAST FACTS

- Navy’s Pacific Heavyweight Torpedo Depot and only Lightweight Torpedo Depot



Figure 2.6. Naval Base Kitsap – Keyport; see vicinity map to the right

Dabob Bay Range Complex

The Dabob Bay Range Complex falls within the waters of Hood Canal in Jefferson and Kitsap Counties. Trident submarines and naval forces use the range for specialized testing and research and development purposes. The Range and adjacent Military Operating Areas (MOA) include over 45 square nautical miles with adjacent tidelands and uplands that serve a variety of uses. The Range also includes five upland parcels, at Bolton Peninsula, Pulali Point, Sylopash Point, Whitney Point, and Zelatched Point.

Dabob Bay offers quiet, deep, cold water in close proximity to the secure NBK-Bangor facility, features and capabilities virtually impossible to duplicate in another location. Continued operational utility of these MOAs, ranges and training areas, as well as Naval Base Kitsap, is vitally dependent on preventing encroachment of incompatible development in surrounding areas.

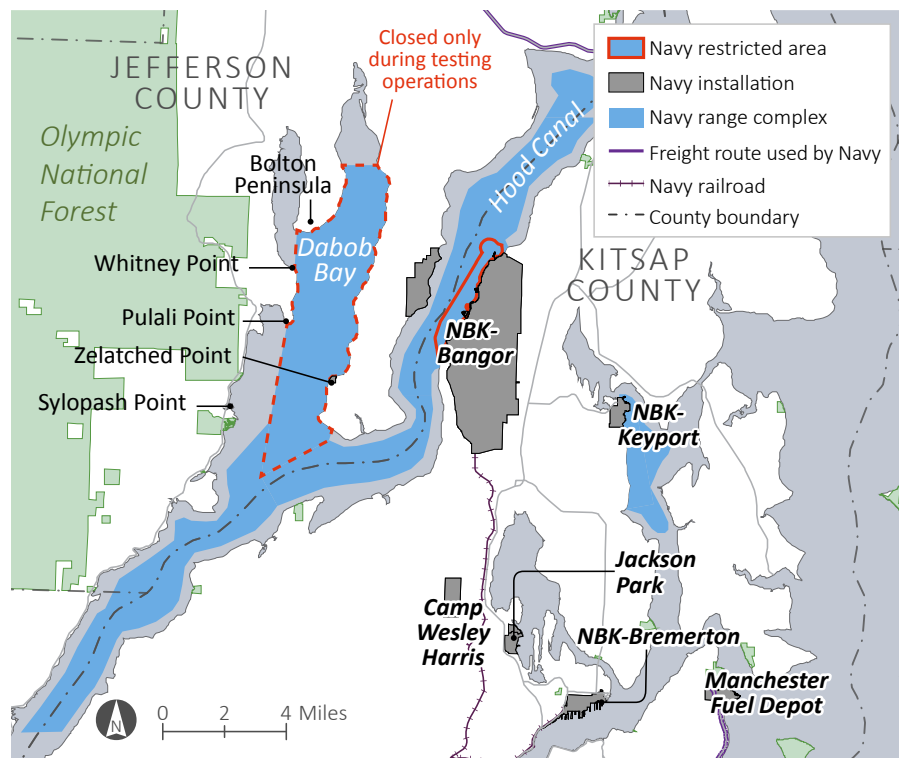


Figure 2.7. Navy range complexes in Dabob Bay, Hood Canal, and adjacent to NBK-Keyport

Manchester Fuel Depot

The Manchester Fuel Depot is located just north of the village of Manchester in unincorporated Kitsap County. The facility lies on Orchard Point on the shores of Puget Sound. The Manchester Fuel Depot provides bulk fuel and lubricant support to area Navy afloat and shore activities. The 234-acre facility was established in 1940 to supply diesel and aircraft fuel to the Navy. Support is also provided to Coast Guard vessels and air stations, other Puget Sound area military activities, and, occasionally, foreign vessels. Customers are serviced via the fuel pier, commercial or Navy barges, and commercial or Navy-owned trucks. The Navy maintains 38 storage tanks with 60 million gallons of fuel and 11 miles of pipeline on-site.

FAST FACTS

- Navy's largest fuel depot within the continental United States

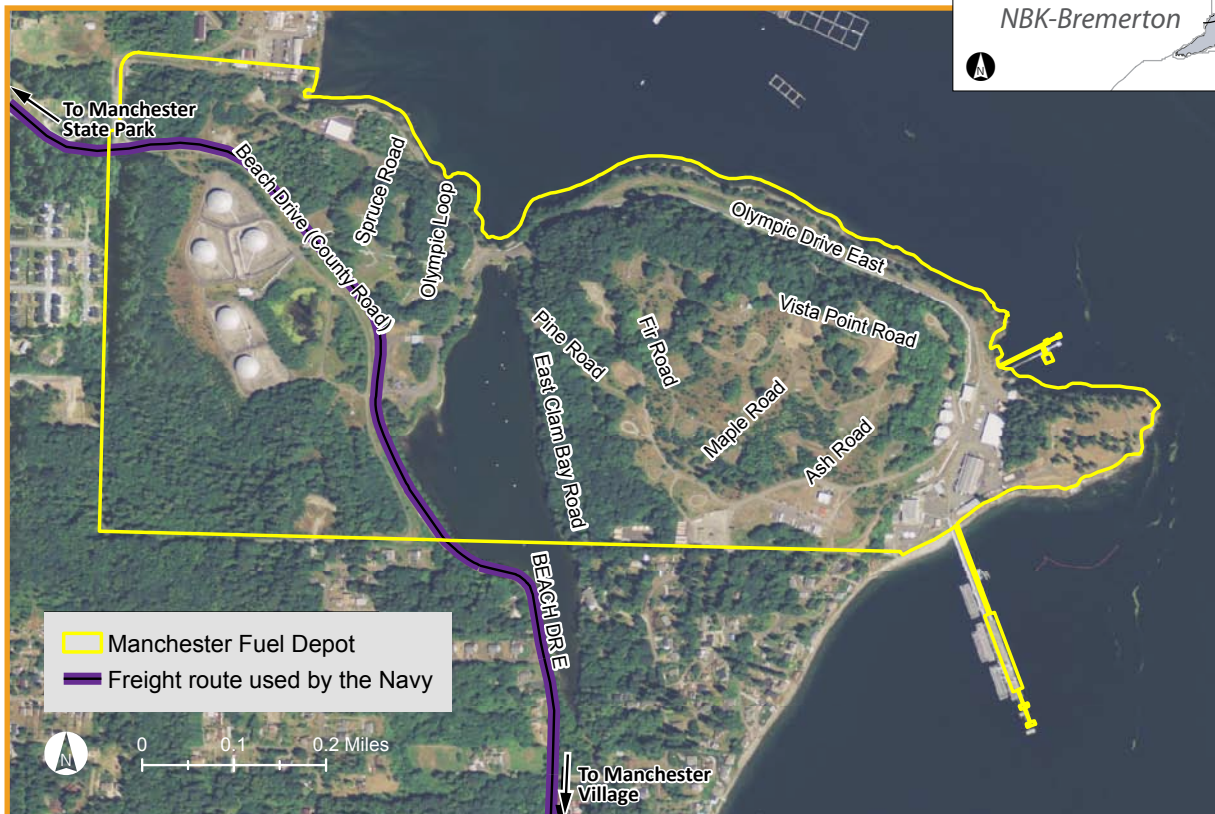
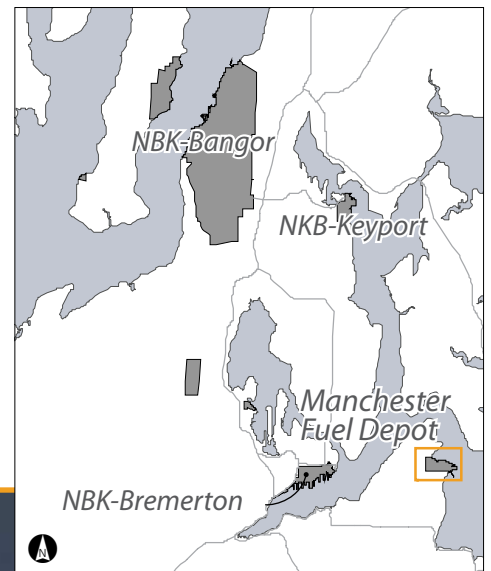


Figure 2.8. Manchester Fuel Depot; see vicinity map in upper right.

FAST FACTS

- 77.4 miles total length
- 48 miles of off-base track and associated real estate
- Also used to transport Kitsap County waste – approximately 180,000 tons per year

Navy Railroad

The Navy depends on the 77 miles of railroad it owns between NBK-Bangor, NBK-Bremerton, and the Port of Shelton. The railroad is managed by a private operator for ordnance and supplies transport.

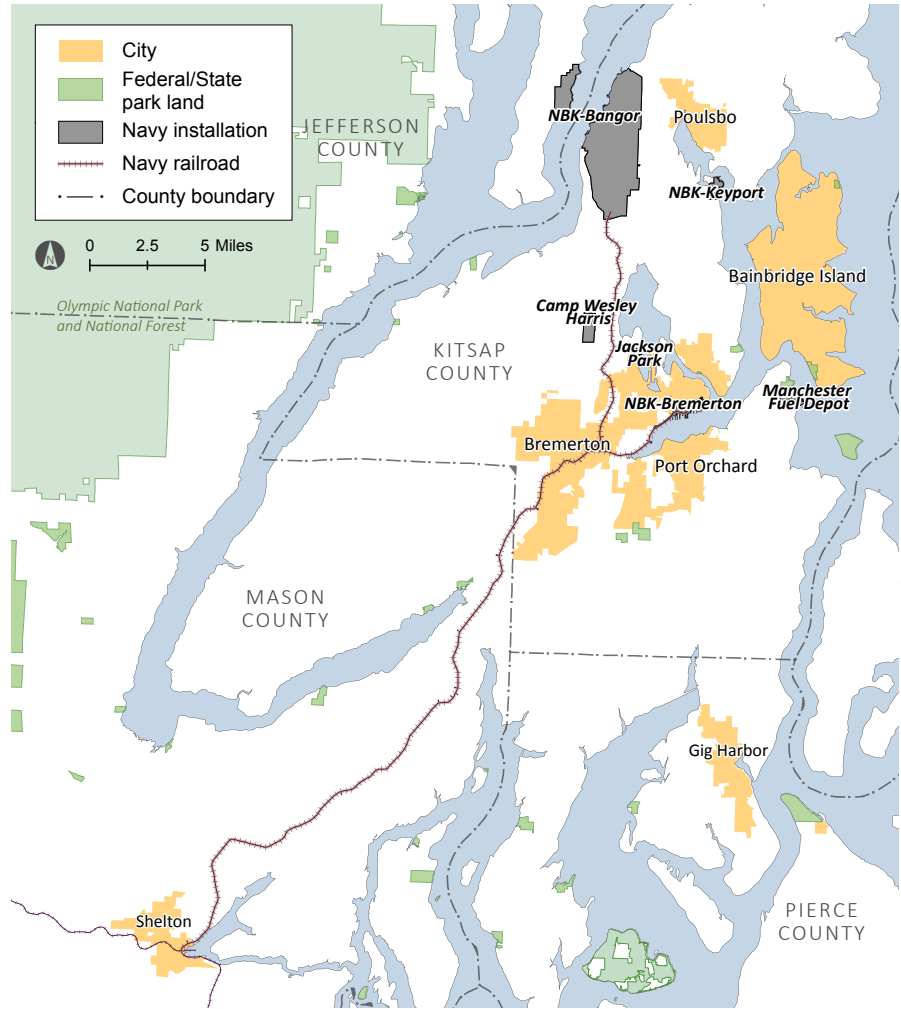


Figure 2.9. Navy railroad

Other NBK Assets

Two other major sites comprise NBK: Jackson Park and Camp Wesley Harris (see Figure 2.3).

Jackson Park is located on Dyes Inlet, northwest of the City of Bremerton. The location hosts Naval Hospital Bremerton, clinical and administrative facilities, bachelors quarters, a child development center, and other facilities. Also located there is The Landings, a public/private venture featuring single-family housing that is primarily for the military with vacant homes available to civilians. Forest City Enterprises, the private partner, will be investing \$65 million to revamp the neighborhood

Camp Wesley Harris is a 387-acre training area managed by NBK, located west of Jackson Park. All outdoor firing ranges on the site have been deactivated. However, NBK currently operates a shoot house facility for recapture tactics team training at Camp Wesley Harris.

FAST FACTS

- Important strategic mission at one-of-a-kind facility
- ~150 personnel (military, civilian, and contractor)
- ~94 Reserve Support

Naval Magazine Indian Island

Located at the connecting waters of the Strait of Juan de Fuca and Admiralty Inlet between the Pacific and Puget Sound, Naval Magazine Indian Island is located on a 2,700 acre island southeast of the City of Port Townsend in eastern Jefferson County.

NAVMAGII provides responsive Operational Ordnance Logistics to the Pacific Command safely, accurately, and efficiently. The location is an essential ordnance loading point for ships in the Pacific Fleet preparing for or returning from deployment. It is also a strategic port for transshipment of joint service ordnance.

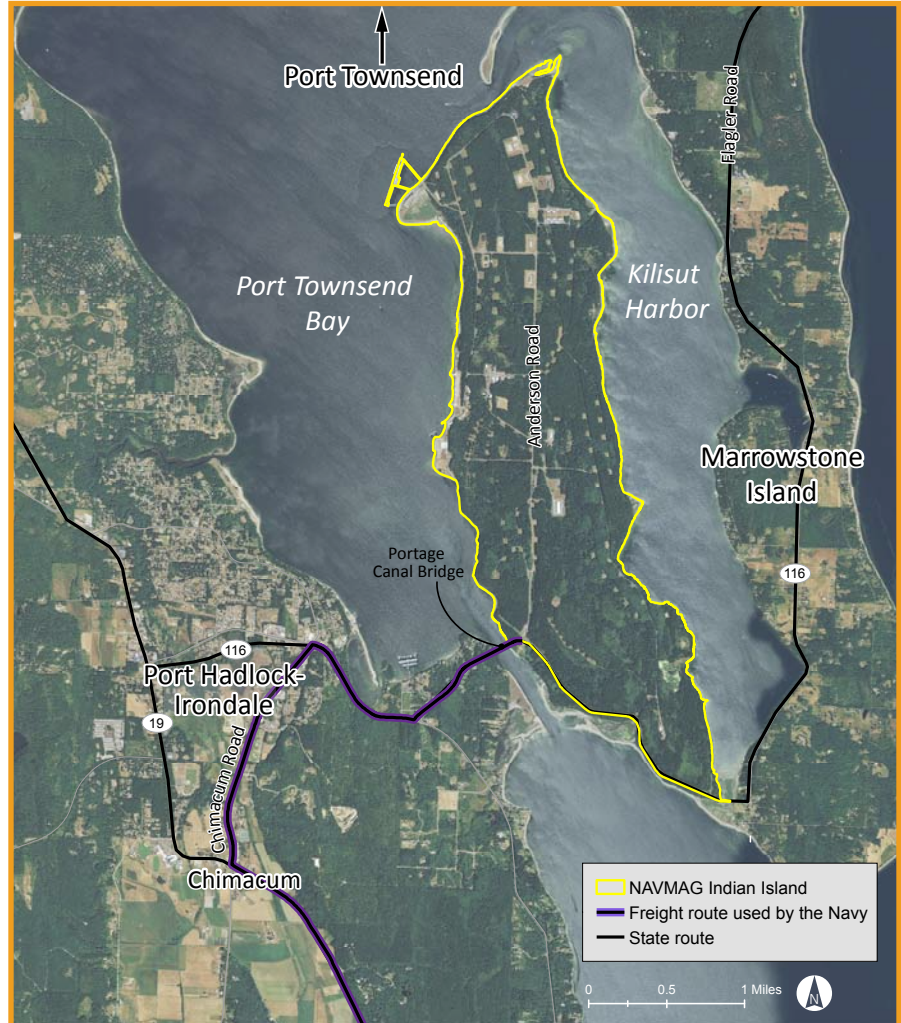


Figure 2.10. Naval Magazine Indian Island; see vicinity map in upper left

Military Economic Impact

To gain an understanding of the economic footprint of NBK and NAVMAGII, data was first collected from existing studies and analysis pertaining to the military and Navy in Washington State. In addition, primary data was collected and analyzed from the Washington Employment Security Department and the Department of Defense (DOD), among other sources. The assessment intends to provide an understanding of the economic footprint of the Navy in Kitsap and Jefferson Counties in terms of overall employment, spending (contracts and wages), and impact of enlisted personnel. The full economic impact summary can be found in Appendix B; its major conclusions are included below.

Previous Studies

As part of the JLUS, data from previous studies on the economic impact of Washington State's military bases were reviewed and tabulated. The following studies provide estimates of the economic impacts of the Navy and military in Washington State as well as impacts associated with Naval Base Kitsap.

Economic Development Council of Seattle and King County Maritime Study (2013)

- In 2012, over \$4 billion in DOD contracts were awarded to Washington State, with nearly \$500 million for Congressional District 6, home of Naval Base Kitsap
- Of the contracts in Congressional District Six, \$200 million in contracts alone were awarded to Puget Sound Naval Shipyard in 2012

Puget Sound Regional Council (PSRC) Regional Economic Strategy: Military (2011)

- There were (at the time of the study) over 100,000 military and civilian personnel residing in Washington state, with more than 33,000 military personnel, civilian personnel, and contractors at NBK
- NBK accounted for 9,000 of the state's 15,000 military contractors

Washington Office of Financial Management (OFM) Economic Impact of the Military Bases in Washington (2004)

- \$115 million in contracts were awarded
- There were 27,375 military and civilian Personnel in 2003 in Kitsap County
- In 2003 there NBK distributed \$254 million in pensions to retired military personnel (out of a statewide total of \$1.153 billion in pensions distributed to retired military personnel)

Joint Committee on Veterans' Military Affairs, Military Bases in Our Community (2004)

- In 2001 there were 68,240 military personnel, civilian personnel, and dependents in Washington State
- \$663 million was paid to military personnel in 2001
- \$1.0 billion was paid to civilian personnel in 2001

For background, the exhibits on the following pages illustrate the concentration of households, current employment and forecasted employment as they relate to the Naval Base Kitsap facilities.

Economic Impact Footprint

Military and civilian personnel both contribute to the local economy. Spending generates local business revenues, which supports additional jobs and wages, as well as sales and business and occupation (B&O) taxes for the state, county and local municipalities. Figure 2.11 depicts the economic footprint of the Navy in Kitsap, Jefferson, and Mason Counties as well as municipalities located within these counties. The figure illustrates economic impacts as dollars circulate through the economy. As previously described, economic impacts are divided among military employment/enlisted personnel and civilian personnel.

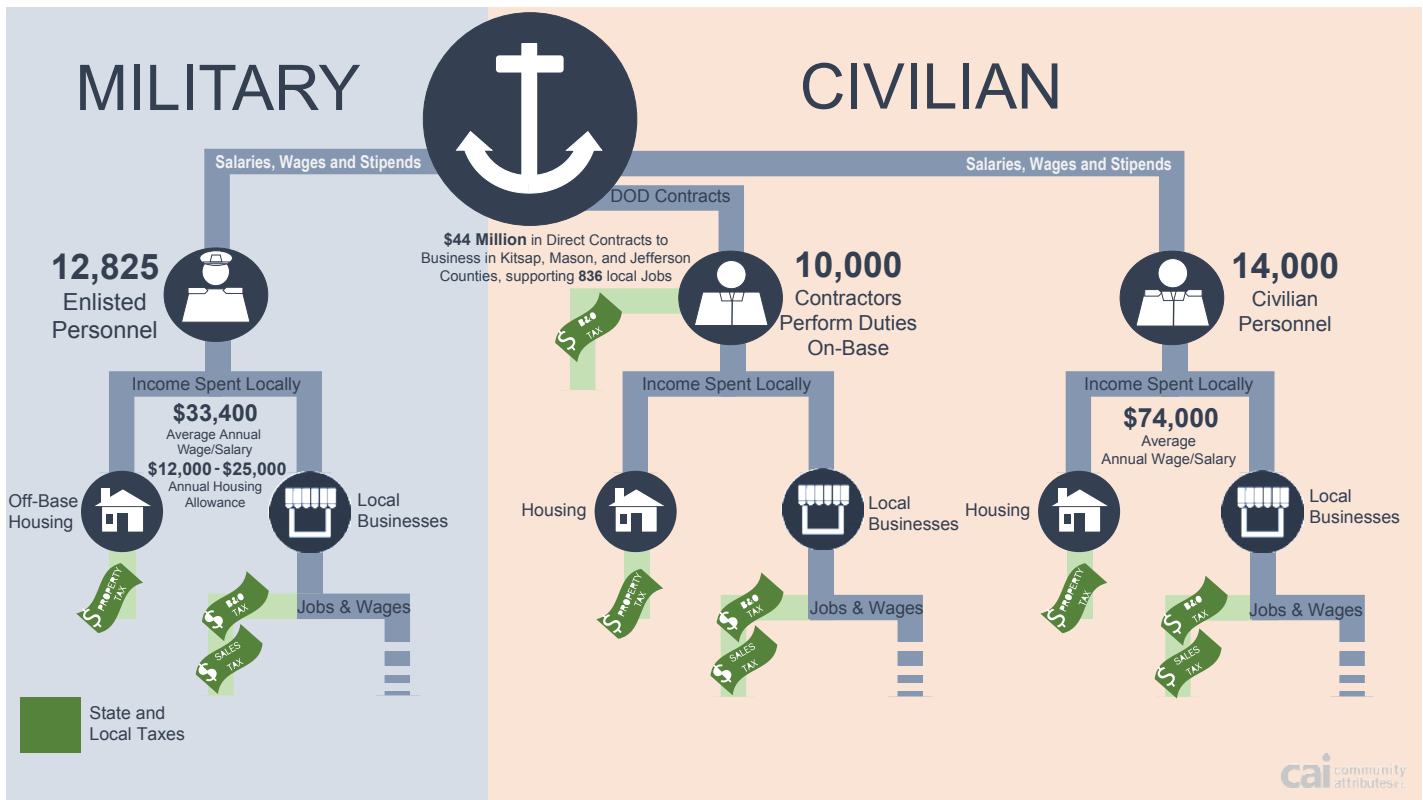


Figure 2.11. Economic and fiscal impacts of Naval Base Kitsap and Naval Magazine Indian Island (Source: Community Attributes, Inc., 2014)

The following sections provide additional details on the economic impacts of military contractors, civilian personnel and military personnel. Key attributes of each category include:

- Number of enlisted/uniformed personnel and number of civilian employed,
- Salaries and wages, and
- Contract values for both goods and services.

Contractors

Figure 2.12 on the following page illustrates spending by the Navy in Washington state and the Kitsap region by zip code (Department of Defense, 2014; Washington Maritime Cluster Study, 2014). The following is a breakdown of DOD spending in Washington State:

- \$7 billion in DOD contracts with Washington companies and organizations (both private and not private sector);
- These contracts include \$4.1 billion via the Navy (see map on next page);
 - \$3 billion of this amount is awarded to Boeing;
- \$768 million of the \$4.1 billion in Navy spending is dedicated to companies and organizations in Kitsap County;
 - Of the \$768 million, \$67 million are direct contracts with local companies (including Naval Magazine Indian Island), and
 - \$44 million worth of contractor activities are directly linked with NBK and NAVMAGII—these activities are performed on base.

Note: There are other contractors completing work for NBK, but are contracted through other government agencies and not included in the above figure.

Civilian Personnel

The impacts of naval facilities in Kitsap and Jefferson Counties can largely be attributed to the civilian employment that the facilities support. A substantial portion of employment in Kitsap County is federal contracted employees, with many of those jobs located in Bremerton (see Appendix B).

- 13,600 of 22,400 government jobs in the county are located in Bremerton.
- Naval Base Kitsap currently employs roughly 14,000 civilian personnel, up from a reported 13,661 in 2011, according to the PSRC.
- As of August 2014, Naval Magazine Indian Island employed 94 civilian personnel and 67 contractor positions.
- 65 percent of federal employees in Kitsap County are employed by Naval Base Kitsap.
- More recently (2013-2014), hiring at the Puget Sound Naval Shipyard and Intermediate Maintenance Facility in Bremerton has resulted in approximately 1,800 additional jobs.

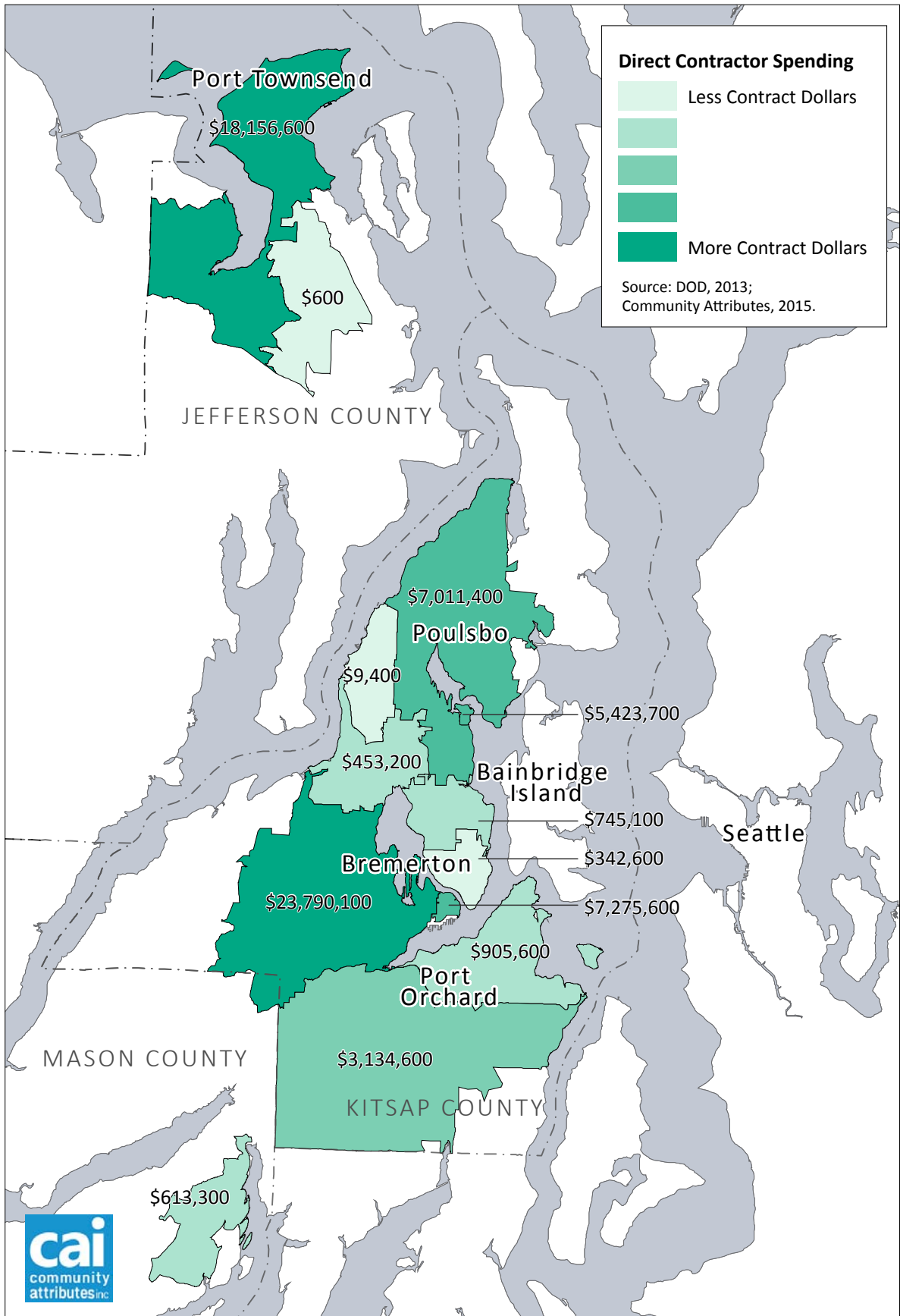


Figure 2.12. Navy contract spending, Washington State, FY2013

Civilian personnel primarily impact their local communities through spending on housing, services, and consumer goods, which in turn impacts local and statewide tax revenues.

- \$827 million in wages were paid to civilian personnel in 2013
- \$74,000 in average yearly salaries and wages per DOD employee in 2013

Table 2.1. Federal/civilian employment by County, 2014

County	Federal Employment
Jefferson County	200
King County	20,400
Kitsap County	16,500
Mason County	100
Pierce County	12,300

Source: Puget Sound Regional Council, 2014

Note: FIRE stands for Finance Insurance and Real Estate; WTU stands for Warehousing, Transportation and Utilities

Military Personnel

According to a 2011 study by the Puget Sound Regional Council (PSRC) the estimated average annual wage of military personnel is approximately \$33,600. NBK is home to a substantial number of enlisted personnel that impact the local economy.

- 12,825 military personnel are currently stationed at NBK
- NBK-Bangor accounted for 5,419 military personnel in 2012, down from 7,253 reported in 2000
- Five military personnel are stationed at NAVMAGII

Table 2.2. Base population, Bangor CDP, 2010-2012

Year	Total Base Population	Total Base Households	Median Household Income
2000	7,253	1,282	\$32,246
2010	6,054	1,104	\$42,568
2012	5,419	NA	NA

Sources: U.S. Census Bureau American Community Survey 2012; U.S. Census Bureau, 2010; U.S. Census Bureau, 2000; PSRC 2011

Note: NA represents cases where data was unavailable.

Military personnel and their families living in the community represent a significant impact on housing and local rents; military stipends paid for housing often represent the maximum rent that landowners can charge to rent out their property.

Table 2.3. Military housing allowance, Bremerton, 2013

Family Composition	Monthly Range		Annual Range	
	Min	Max	Min	Max
W/Dependents	\$1,221	\$2,082	\$14,652	\$24,984
WO/Dependents	\$1,032	\$1,755	\$12,384	\$21,060

Sources: United States Department of Defense (Military.com), 2015

Regional Context

As is mentioned in this chapter’s introduction, the study area encompasses five federally-recognized Native American Tribes, three counties, over a dozen communities, and several regional coordinating councils. To set the context, this section provides some general information about the following entities:

- Tribal governments,
- Kitsap County,
- Jefferson County,
- Mason County,
- City of Bremerton, and
- Regional Councils.

Table 2.4 illustrates the mix of land uses in Jefferson and Kitsap Counties and Figure 2.13 on the following page depicts the distribution of land uses within the larger study area. The land use map shows that Kitsap County features a mix of urban uses, rural residential, and forest land, whereas Jefferson County is predominately forest land with some rural residential and areas of resorts largely along the Hood Canal.

Table 2.4. Existing land use patterns

Kitsap County Land Use	Percent of County Land	Jefferson County Land Use	Percent of County Land
Household, single family units	38.8%	Forest land	60.1%
Undeveloped land	25.1%	Household, single family units	14.2%
Forest land	17.6%	Undeveloped land	12.9%
Open space and Parks	5.4%	Agriculture	4.1%
Institutional	4.9%	Open space and Parks	3.5%
Multifamily Housing	2.4%	Multifamily Housing	1.7%
Retail	1.9%	Resorts, group camps, vacation cabin	1.5%
Transportation and Utilities	1.3%	n/a	0.6%
Agriculture	1.0%	Retail	0.5%
Mining and related activities	0.5%	Institutional	0.4%
Resorts, group camps, vacation cabin	0.4%	Transportation and Utilities	0.3%
Industrial	0.4%	Industrial	0.1%
n/a	0.2%	Marine related Activities	<0.1%
Marine related Activities	0.1%	Mining and related activities	<0.1%
Grand Total	100.0%	Water Areas	<0.1%
		Grand Total	100.0%

Source: Washington State Department of Ecology/Department of Revenue, 2010

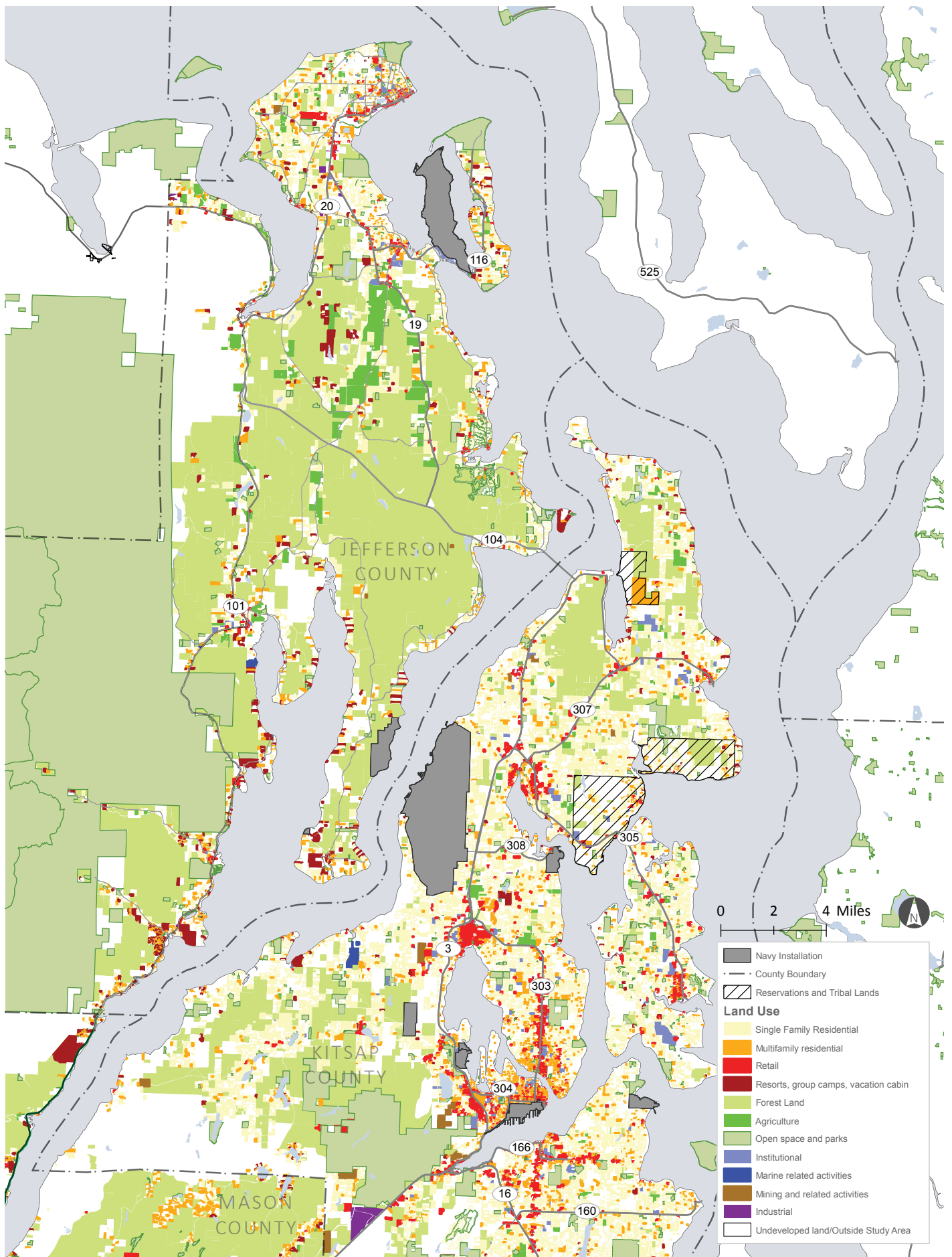


Figure 2.13. Existing land use patterns in the study area

Tribal Governments

Five federally recognized Native American Tribes (i.e., sovereign nations) are in the study area—the Jamestown S’Klallam, Lower Elwha Klallam, Port Gamble S’Klallam, Skokomish, and Suquamish. In the JLUS study area, the Point No Point (Jamestown S’Klallam, Lower Elwha Klallam, Port Gamble S’Klallam, and Skokomish) and Point Elliot (Suquamish and other Tribes) Treaties between Tribal and the U.S. governments preserve reservation lands and Tribal fishing rights. Federally recognized Tribes have Treaty Reserved Rights protected under the 1974 U.S. v. Boldt decision (“Judge Boldt Decision”), which require the United States government to consult Tribal entities if any Tribal resources will be affected in their Usual and Accustomed (U&A) fishing and hunting areas. Tribal U&A fishing, hunting, and gathering rights extend beyond lands formally described in the Treaties to any area used for hunting and occupied by the Tribe over an extended period of time (Washington State Supreme Court, *State v. Buchanan (1999)*). This means that Usual and Accustomed (U&A) areas extend across the JLUS study area, including Navy property and operating areas (see Figure 2.14).

The Navy is generally proactive in consulting with the Tribes to minimize conflicts between land uses. The Navy has agreements with some Tribes allowing access to Navy property for shellfish harvesting. Also, regular consultation during project permitting is required by Executive Order (EO) 13084 and Commander Navy Region Northwest Instruction 11010.14 (policies for consultation with Federally Recognized American Indian and Alaskan Native Tribes).

The Point No Point Treaty Council and other Tribal governments promote environmental stewardship and partner with local jurisdictions, State agencies, and environmental organizations to plan for healthy environments. The protection of Tribal Treaty resources is particularly important as this directly impacts the cultural and economic wellbeing of Tribal members.

Tribal cultural landscapes are found throughout the region. Nearly all shorelines had villages or encampments at some point, and these places hold cultural, historical, and spiritual significance for Tribal members and Washington citizens. Cultural resources are protected under the National Historic Preservation Act and state law. Cultural and historical resource preservation and protection provides educational and cultural values to Washington residents and leads to better understanding between cultures. The Tribal governments and the Department of Archaeology and Historic Preservation (DAHP) review development proposals to help protect cultural resources.

JLUS Issues

For the Tribal governments within the study area, JLUS issues include the following integrally related issues:

- Cultural and archaeological resource protection (see “Tribal Archaeological Sites” on page 154), and
- Environmental protection, largely related to Treaty-protected natural resources issues (see “Environment Regulations” on page 127, “Navy Environmental Impacts” on page 136, and “Open Space and Resource Lands” on page 139).

Although the issue of maintaining fishing, hunting, and gathering rights was raised during the JLUS process, it is not addressed in this document beyond the cultural, archaeological, and environmental protection measures noted above, as the government-to-government consultation process is a more appropriate venue to discuss projects or operations that could affect these rights. The consultation process is intended to be a meaningful, respectful, and two-way dialogue beyond a perfunctory sharing of information with standard review periods

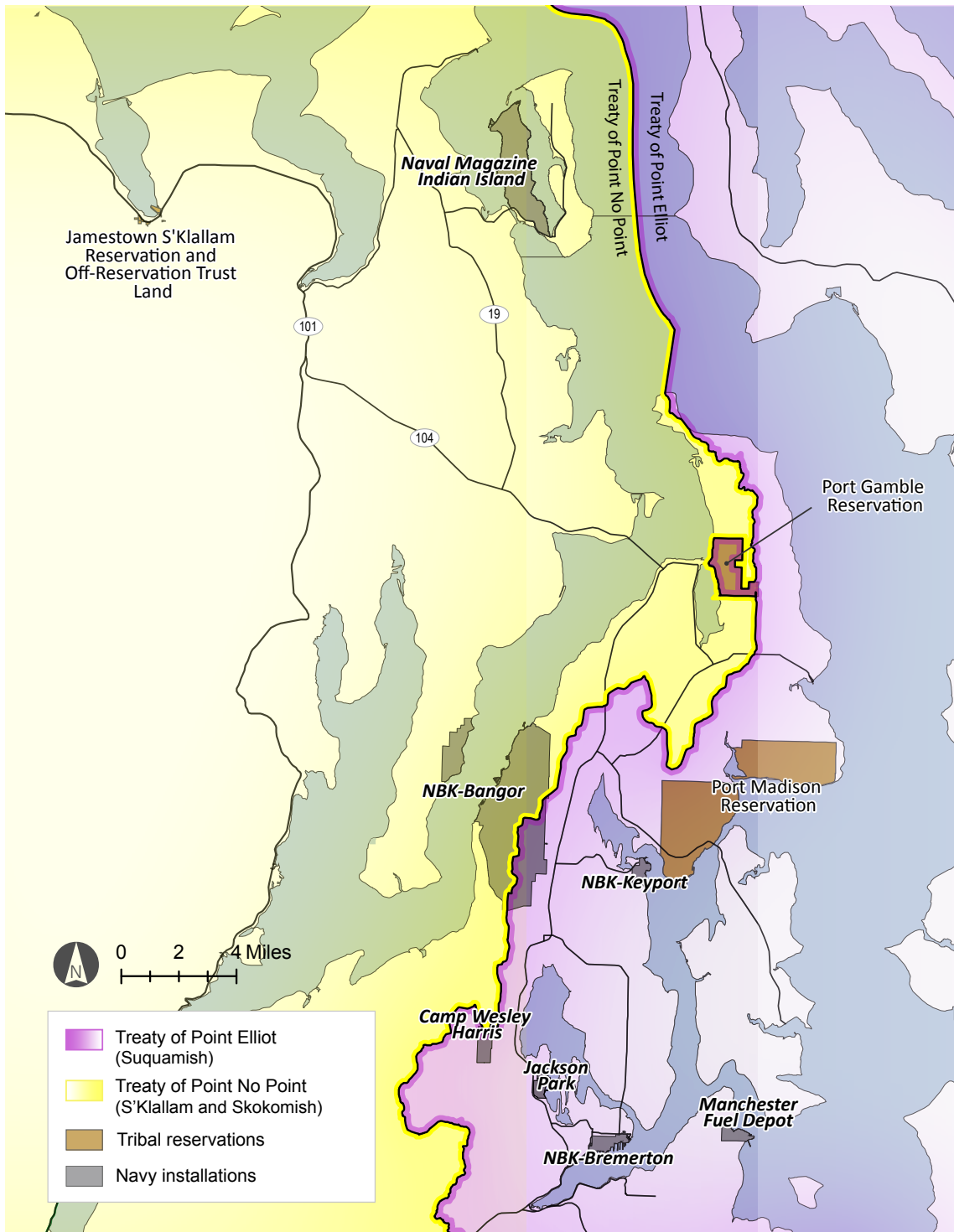


Figure 2.14. Tribal usual and accustomed (U&A) grounds

Kitsap County

Kitsap County is located on the northern end of the Kitsap Peninsula, across the Puget Sound from the City of Seattle (see Figure 2.15). The County is bounded on the west by Hood Canal, Admiralty Inlet to the north, Puget Sound to the east and Pierce and Mason Counties to the south. Kitsap is uniquely situated between the urban areas of Seattle/Tacoma and the wilderness areas that make up Olympic National Park. Kitsap County comprises 393 square miles and is the third smallest county in Washington State by land area. Despite its relatively small land area, Kitsap County is Washington's third most densely populated county and home to more than 250,000 people and population density of 635.9 people per square mile. Its largest city is Bremerton, which is profiled later in this section.

Kitsap County has remained an attractive place to work and live while accommodating rapid growth over the last two decades. People are attracted to its rural character and connection to the water. This maritime connection is dominant in the county's economy, evidenced by the crucial role played by the Navy and Washington State Ferries (WSF). More than 12 million ferry passenger trips originate/end in Kitsap County, which accounts for more than half of all Washington State Ferries ridership.

Urban Growth Areas (UGAs)

In accordance with the Growth Management Act (GMA) and its Countywide Planning Policies (CPPs), Kitsap County has designated the following 10 UGAs, where most growth has been allocated:

- Kingston UGA,
- Poulsbo UGA,
- Silverdale UGA,
- Central Kitsap UGA,
- East Bremerton UGA,
- West Bremerton UGA,
- Gorst UGA,
- Port Orchard/South Kitsap UGA,
- Utility Local Improvement District (ULID) #6/McCormick UGA, and
- Puget Sound Industrial Center – Bremerton UGA.

Rural Areas

The rural areas of Kitsap County allow low density rural development. The GMA requires that Kitsap County contain and control urban development to ensure protection of rural character, critical areas and the conversion of forest, mineral resource, and agricultural land. Kitsap County's 2010 rural population was approximately 106,000 people, up from 98,000 in 2000. By 2035, the rural population is expected to grow by approximately 24,000.

Limited Areas of More Intensive Rural Development (LAMIRDs)

Recognizing that counties often have unincorporated hamlets, villages, crossroads, shoreline development, or other areas built or vested prior to the adoption of comprehensive plans under GMA, RCW 36.70A.070(5)(d) was amended in 1997 and 2005 to provide guidance on LAMIRDs. LAMIRDs are allowed as exceptions to rural plan element requirements. They may contain more intense development in a way that helps protect rural character and operation of rural uses. They also address the needs of rural communities by providing employment opportunities, convenient services, and more varied housing choices, while limiting development impacts. Kitsap County LAMIRDs are shown in Figure 2.15

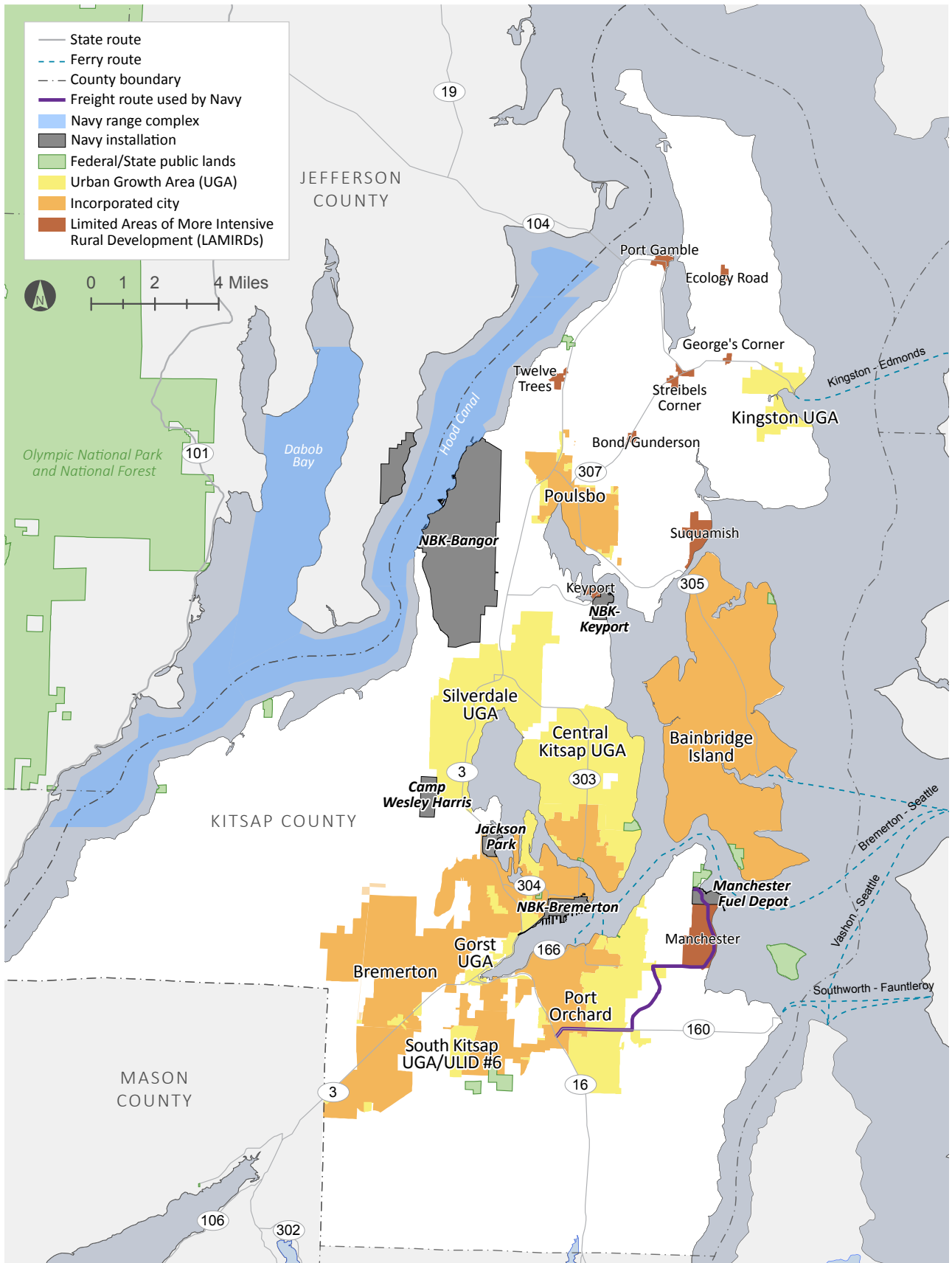


Figure 2.15. Kitsap County Urban Growth Areas and LAMIRDs

JLUS Issues

In Kitsap County, issues of particular interest for the JLUS are listed below. Note, Bremerton-specific issues are introduced in the City of Bremerton section that follows.

1. **Land use compatibility around base perimeters and along Navy transportation routes** (see “NBK-Bangor and Vinland” on page 92, “NBK-Keyport” on page 92, “Land Uses near Transportation Routes” on page 94, and “Structures on Navy Property” on page 102).
2. **Shoreline and upland activities along Hood Canal** (see “Hood Canal and Dabob Bay” on page 103 and “Dabob Bay Range Complex and Hood Canal Easements” on page 148).
3. **Transportation** (see “Hood Canal and Portage Canal Bridges” on page 123, “SR 3/SR 304 Interchange” on page 119, and “SR 3/SR 16 Interchange” on page 121).
4. **Communication and coordination** (see “Communication and Coordination” on page 83).
5. **School facility planning and public service coordination** (see “Communication and Coordination” on page 83).
6. In addition, the following jurisdiction-specific issues were identified (see references above for more information):
 - A. **Port Orchard.** Located across Sinclair Inlet from NBK-Bremerton, Port Orchard is home to Navy personnel, civilian employees, contractors and their families. Transportation and school facility planning are key issues.
 - B. **Poulsbo.** Surrounding the northern portion of Liberty Bay, Poulsbo is located north of NBK-Keyport and east of NBK-Bangor. It is served by three state highways: State Route (SR) 3, SR 307, and SR 305. Poulsbo is also home to Navy personnel, civilian employees, contractors and their families. Transportation and school facility planning are key issues.
 - C. **Silverdale.** Located in central Kitsap County north of Dyes inlet and near NBK-Bangor, Silverdale is served by SR 3 and SR 303, and is anticipating significant residential and commercial growth (designated as a Regional Growth Center by the Puget Sound Regional Council). Silverdale is also home to Navy personnel, civilian employees, contractors and their families. Transportation and school facility planning are key issues. Land use planning surrounding the Navy railway is also an important issue.
 - D. **Gorst.** Strategically located between major population and job centers in Kitsap County, Gorst is also a major transportation hub. The SR 3 and SR 16 highways converge in Gorst, and the Navy railroad traverses the area.

Jefferson County

Jefferson County is located in the north-central portion of Washington State’s Olympic Peninsula. The County is bounded on the west by the Pacific Ocean and on the east by the waters of the Admiralty Inlet and Hood Canal. Clallam County and the Strait of Juan de Fuca define the northern border, while the southern boundaries are defined by Mason and Grays Harbor Counties. Jefferson County comprises approximately 1,800 square miles and is the eighteenth largest of the State’s thirty-nine counties.



Figure 2.16. Jefferson County Urban Growth Areas and LAMIRDS

The Olympic National Park and National Forest, which bisect the County into western and eastern halves, comprise approximately 65 percent of the County's 1.16 million acres. Combined with the County's primarily agricultural and forested land base and rural economy, there is relatively little land appropriate for urban development. Residential development is clustered throughout the County.

Jefferson County is largely a rural County with two urban growth areas (the City of Port Townsend and the Port-Hadlock-Irondale UGA), one Master Planned

community, Port Ludlow, and the Pleasant Harbor Master Planned Resort near Brinnon. In 2010, nearly 96 percent of the County's approximately 30,000 people lived in eastern Jefferson County, primarily in Port Townsend, the Port Hadlock-Irondale-Chimacum Tri-Area, and Port Ludlow. Port Townsend is the County's only incorporated city and has 9,000 residents. Quilcene and Brinnon are the largest communities in the southern portion of the County.

Jefferson's County's rural quality of life is what attracts many residents and tourists. Jefferson ranks 29th of Washington State's 39 counties in terms of population density.

JLUS Issues

In Jefferson County there are four areas of particular interest for the JLUS:

1. **Marrowstone Island.** Marrowstone Island is Naval Magazine Indian Island's neighboring community and both depend on the Portage Canal Bridge for access and some utility connections (see "Hood Canal and Portage Canal Bridges" on page 123 and "Freight Route used by NAVMAG Indian Island" on page 96).
2. **The Port Hadlock-Irondale UGA.** The freight route utilized by East Jefferson County entities, including Naval Magazine Indian Island, traverses this UGA and the Chimacum LAMIRD and compatibility issues could arise as these areas develop (see sections on "Freight Route used by NAVMAG Indian Island" on page 96 and page 126).
3. **Development along the western shores of Hood Canal and Dabob Bay.** Population growth and development in this area could increase water traffic, which could impact the viability of the Navy's in-water operating areas and testing ranges (see "Hood Canal and Dabob Bay" on page 103 and "Dabob Bay Range Complex and Hood Canal Easements" on page 148).
4. **Communication and coordination** (see Section 4.1 starting on page 83).

Mason County

Mason County is situated along the southwestern portion of Puget Sound, and encompasses roughly 970 square miles. It borders Jefferson County to the north, Grays Harbor County to the west and southwest, Thurston County to the southeast, Pierce County to the east, and Kitsap County to the northeast.

Mason County remains a predominantly rural county despite the urban spillover from Thurston and Kitsap Counties. The City of Shelton is the only incorporated area in Mason County and is less than five square miles, or one percent of the County's total land area.

Mason County is a predominantly rural county, despite some urban spillover from adjacent Thurston and Kitsap Counties. Mason County's rich natural resources and open spaces dominate the County's landscape. National, state, and private forests currently account for about 82 percent of the County's land. Mineral deposits underlie Mason County's top soils and at present, these deposits support 21 surface mining operations. Agricultural uses provide an important contribution to the County's economy. Open space within the County hosts wildlife habitat, undeveloped natural areas, and many developed park and recreation sites. These open space areas include 101 sites managed by federal, state, county, municipal, and private interests.

JLUS Issues

There are three areas of particular interest for the JLUS in Mason County:

5. **Area surrounding the Navy railroad.** NBK's railroad traverses Mason County and there are some compatibility issues with surrounding development (see "Naval Base Kitsap Railway" on page 94).
6. **Western shores of the southern portion of the Hood Canal.** Growth in this area could increase water traffic, which could impact the viability of the Navy's in-water operating areas and testing ranges (see "Hood Canal and Dabob Bay" on page 103 and "Dabob Bay Range Complex and Hood Canal Easements" on page 148).
7. **Communication and coordination** (see Section 4.1 starting on page 83).

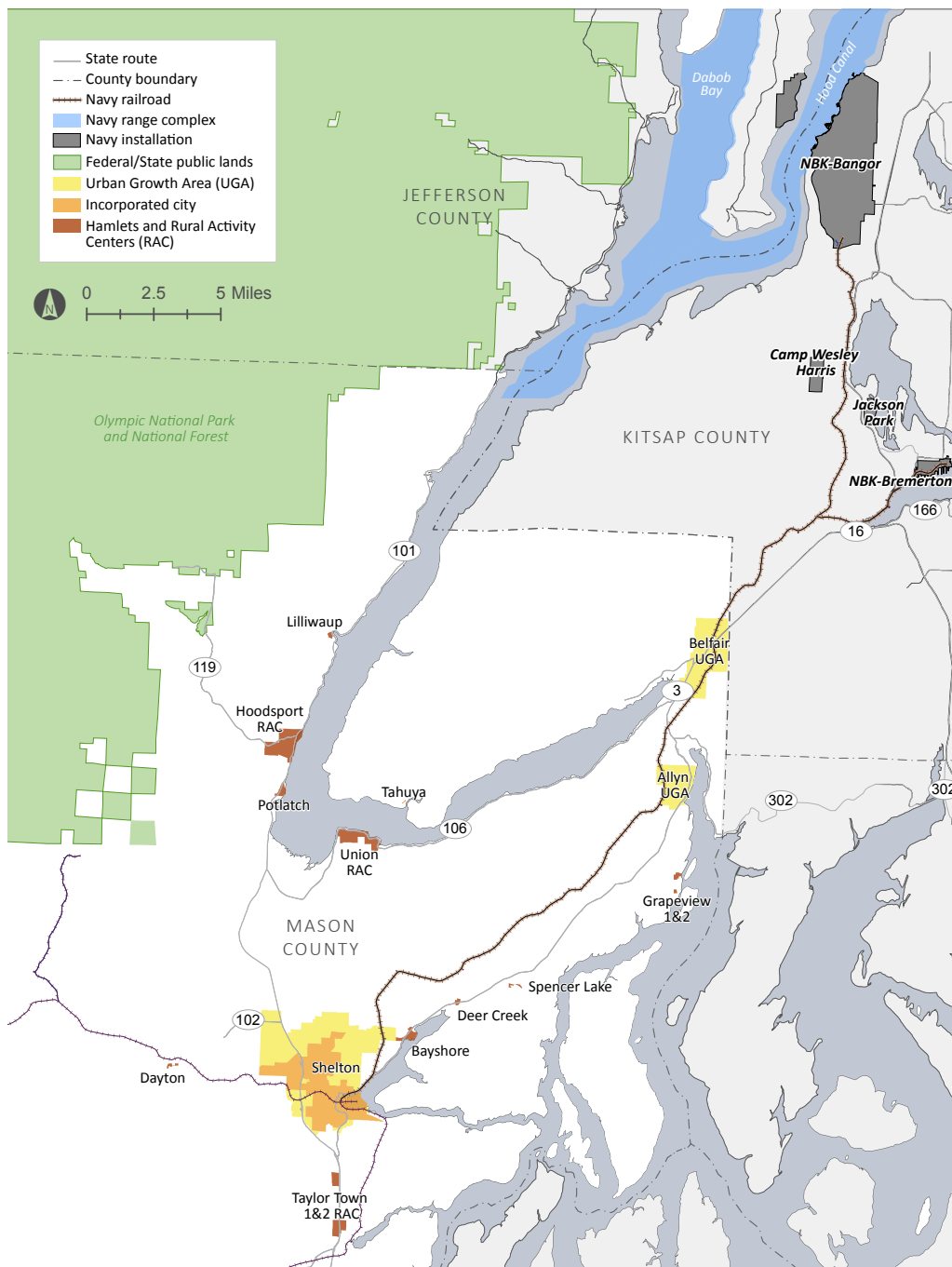


Figure 2.17. Mason County Urban Growth Areas, Hamlets, and Rural Activity Centers (RACs)

City of Bremerton

The City of Bremerton is located along Sinclair Inlet on the eastern half of central Kitsap County. With a land area of approximately 28 square miles and a population of more than 39,000, Bremerton is the largest city in Kitsap County. Bremerton has a well established urban character and good connections to the rest of the region, including ferry service to downtown Seattle. Bremerton has a long maritime history and is home to NBK-Bremerton, which includes the Puget Sound Naval Shipyard and Intermediate Maintenance Facility, which employs approximately 16,000 civilians and active duty military personnel.

Bremerton's downtown core has experienced significant revitalization, guided by its Downtown Regional Center Sub Area plan and anchored by the ferry terminal and Bremerton Transportation Center. The City has experienced increased development along the perimeter of NBK-Bremerton.

JLUS Issues

Due to the existing built environment and the location of the shipyard adjacent to Downtown Bremerton, there are several areas/issues of interest for the JLUS.

1. **Traffic impacts, particularly the morning and afternoon peak rush associated with the NBK-Bremerton** (see "Bremerton – Traffic Surges" on page 118 and "Charleston Boulevard Corridor" on page 120).
2. **Parking and base access for NBK-Bremerton workers** (see "Bremerton" on page 115).
3. **Land use compatibility around the base** (see "NBK-Bremerton" on page 90).
4. **Infrastructure coordination** (see "Infrastructure Coordination" on page 100).
5. **Housing for Navy personnel and contractors** (see "Communication and Coordination" on page 83).
6. **School facility planning and public service coordination** (see "Communication and Coordination" on page 83).
7. **Communication and coordination** (see "Communication and Coordination" on page 83).

Regional Councils

Three multi-jurisdictional coordinating councils operate in the study area.

Hood Canal Coordinating Council (HCCC)

A watershed-based council of governments established in 1985, the HCCC recognized the benefit of cooperating on policy development and decision-making affecting the Hood Canal region. The HCCC is concerned with water quality problems and issues related to natural resources in the watershed. Members include Kitsap County, Mason County, Jefferson County, Port Gamble-Klallam Tribe, and Skokomish Tribe.

Kitsap Regional Coordinating Council (KRCC)

Established through an inter-local agreement amongst its current core members (Kitsap County, the three Kitsap Cities – Bainbridge Island, Port Orchard, and Poulsbo – and the Port of Bremerton), the Kitsap Regional Coordinating Council is a forum for members to work together on issues that affect the entire community. Naval Base Kitsap, an Ex Officio member of KRCC that provides coordination among local and federal actions and Kitsap's two federally-recognized Tribes (Port Gamble S'Klallam and Suquamish) are Associate Members.

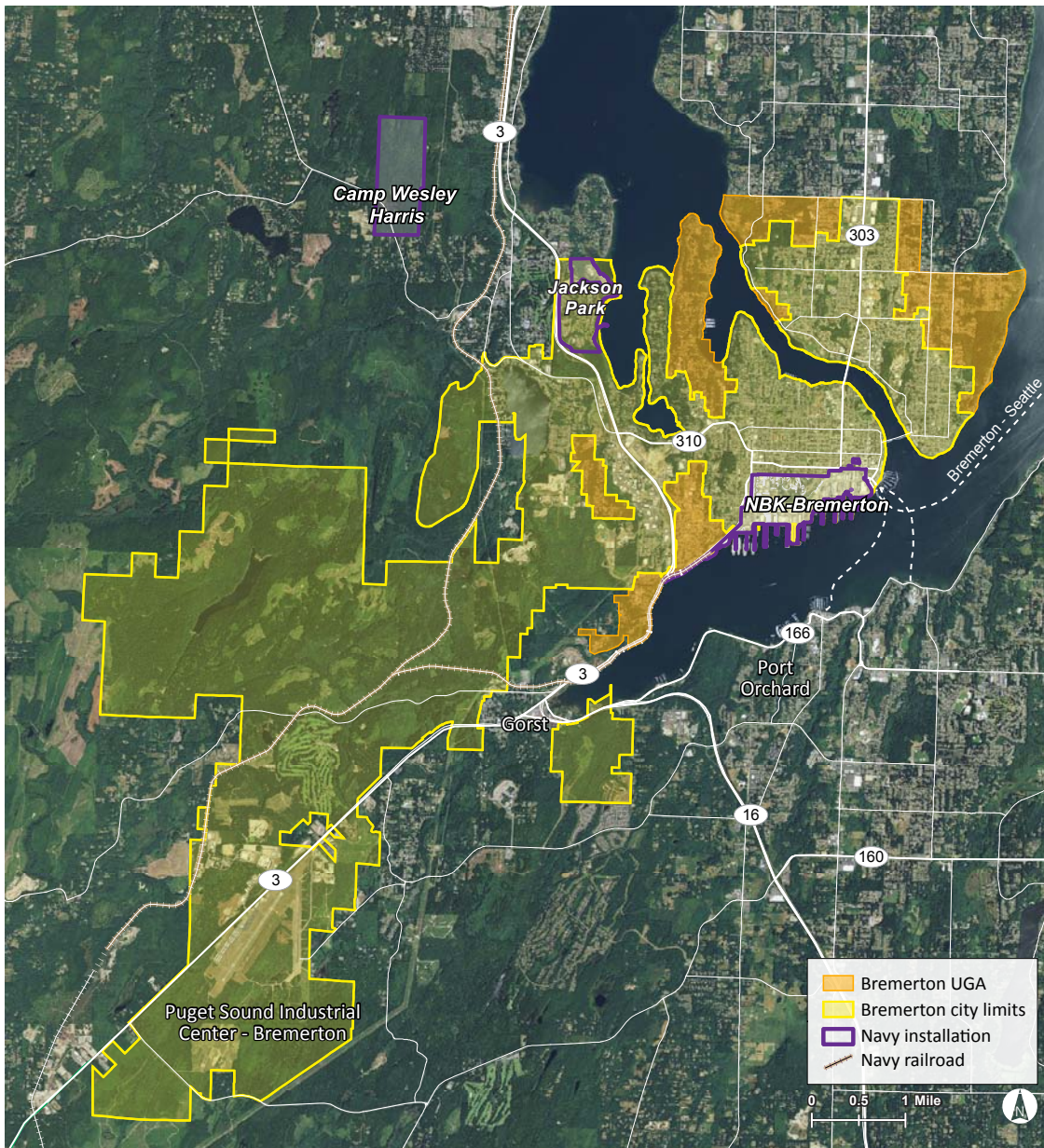


Figure 2.18. City of Bremerton

Puget Sound Regional Council (PSRC)

Comprised of representatives from King, Kitsap, Pierce and Snohomish Counties, their cities and towns, port districts, transit agencies, and the Suquamish Tribe and other Tribes, the PSRC facilitates regional planning for the future, by helping them address interjurisdictional issues. The PSRC is a regional planning association that has specific responsibilities under federal and state law for transportation planning, economic development and growth management.

Transportation Context

The NBK and NAVMAGII JLUS focuses on the naval facilities in Kitsap and Jefferson Counties, and the corresponding transportation infrastructure serving the naval installations. This includes roadways, waterways, railways, transit, and non-motorized facilities. The geographical area of the study is large and as such the transportation study focuses primarily on those areas surrounding the key installations noted previously in this report. Figure 2.19 demonstrates the critical transportation routes along with special areas of focus in this JLUS.

Transportation Network Overview

With a study area covering three counties and multiple cities, the transportation context features a complicated tapestry of governance by multiple agencies managing an extensive transportation system that includes waterways, railways, pedestrian systems, transit systems, and roadways serving the community and freight needs.

The transportation systems reviewed in this study includes the state routes and arterials which serve Kitsap and Jefferson Counties and the naval facilities within. In addition to these roadways, other important facilities include the arterials which serve the City of Bremerton. The transportation systems that are utilized for travel are described in the following sections.

Roadway Network

As seen in Figure 2.19, the state routes connect the region primarily through north-south roadways. Most roadways with available right-of-way have paved shoulders as there was an effort on behalf of both counties to provide non-motorized access where possible. Notably there are roadways without shoulders including SR 116 east of the Portage Canal Bridge in Jefferson County and most streets in downtown Bremerton, where sidewalks are present. Important facilities to note include SR 3 and SR 104 which connect the Kitsap Peninsula and eastern Jefferson County via the Hood Canal Bridge. The state routes generally have four lanes (two lanes in each direction) to six lanes (three lanes in each direction) in rural areas and two lanes (one lane in each direction) to four lanes in urban areas. The posted speeds range from 45 to 60 miles per hour (mph) in rural areas and 25 to 35 mph in urban areas. State Routes 3 and 104 operate at 60 mph outside of urban areas and are generally free-flowing outside of the peak commute periods. The peak commute period occurs between 5:00 a.m. and 7:00 a.m. and 4:00 p.m. to 6:00 p.m. The morning peak-period is most commonly observed between 7:00 a.m. and 9:00 a.m., but in Kitsap and Jefferson Counties the peak hour is earlier than is typical due to shipyard hours and commuter travel from Seattle.

Principal and minor arterial roadways fill in the transportation system in more urban areas and do not generally carry as much traffic as the larger state routes. These roadways generally have two to four lanes with posted speeds between 25 and 50 mph.

The use of the transit and ferry service varies depending on the installation. Kitsap Transit and Jefferson Transit are the primary providers of public transportation in Kitsap and Jefferson Counties. Each has bus routes in the study area that serve the Navy facilities and the surrounding communities. The routes supporting each facility are discussed further in the overview of the naval bases. In addition, Kitsap Transit manages the Worker/Driver program where bus drivers are also employees at employment centers in the area, such as NBK-Bangor and NBK-Bremerton.

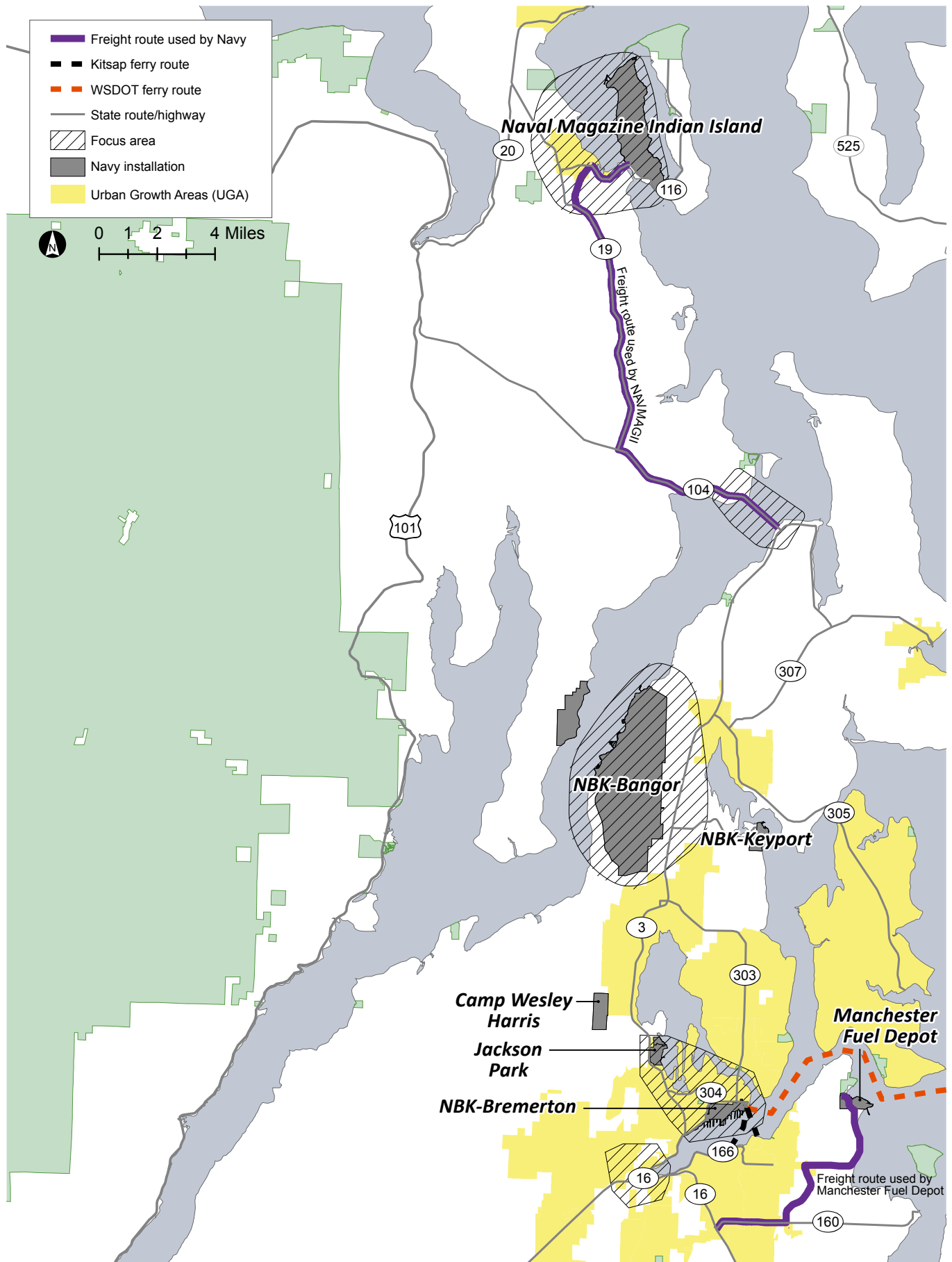


Figure 2.19. Study area transportation context

Employees who work on the base may join this program as a driver, or ride for free. Those who are not federal employees may also ride the Worker/Driver buses for a small fee. There are currently 29 Worker/Driver routes that span the region from Port Gamble in the north to Olalla in the south.

Waterways are extremely important for both Navy operations and community activities. The waterways of the Puget Sound connect the Kitsap Peninsula, Bainbridge Island, Vashon Island, and surrounding communities with Seattle, Tacoma, and Coupeville providing a vital transportation link and opportunities for recreational activity. WSDOT runs five ferry routes serving the Kitsap Peninsula including: Kingston/Edmonds, Bainbridge Island/Seattle, Bremerton/Seattle, Southworth/Vashon Island/Fauntleroy, and Port Townsend/Coupeville. The more frequented routes include Bainbridge Island/Seattle and Bremerton/Seattle. The cost varies depending on the vehicle and passenger type and is available on their website.

Kitsap County provides a foot ferry service across the Sinclair Inlet between Port Orchard, Bremerton, and Annapolis. The foot ferry costs two dollars each way and runs on a seasonal schedule. The ferry serves both routes on weekdays and only the Port Orchard/Bremerton route on weekends. Paid parking is available in Bremerton, Annapolis, and Port Orchard to serve ferry commuters. The Port Orchard/Bremerton route has a 12 minute travel time and provides 70 trips during the weekdays between Port Orchard and Bremerton. The Annapolis/Bremerton route has a five-minute travel time and provides 30 trips and is only served during the weekdays between Annapolis and Bremerton. On Saturday, the Port Orchard/Bremerton foot ferry is in operation. The route runs every 30 minutes from each dock until approximately 8:00 p.m. and provides 46 trips between these locations.

Active Transportation

Non-motorized facilities are primarily planned and maintained by Kitsap and Jefferson Counties in their transportation plans and through the regional efforts of the Kitsap Regional Coordinating Council to develop a coordinated and comprehensive non-motorized transportation system. Both counties have a non-motorized transportation plan which work in conjunction with the KRCC and the Peninsula Regional Transportation Planning Organization Transportation Plan. An overview of non-motorized facilities in Kitsap and Jefferson Counties is included in this report followed by additional detail regarding non-motorized transportation for Navy facilities.

Given the rural nature of Kitsap and Jefferson Counties travel often occurs by motorized vehicle. However, active transportation is an important aspect of a multi-modal transportation system in order to accommodate a variety of users, improve human health and the environment, and also serve as recreational facilities. An effort has been made toward developing and improving active transportation facilities to enhance and promote walking and biking as viable forms of transportation and to provide recreational opportunities. Sidewalks are generally provided in the urban areas of Kitsap and Jefferson Counties. The effort to pave roadway shoulders has provided further accommodation for bicycling and walking in the rural areas of the region.

The construction and recent extension of the trails in the area, including the Larry Scott Trail, the Rick Tollefson Memorial Trail (connecting Chimacum and Port Hadlock), and the Mosquito Fleet Trail will enhance active transportation by providing multi-modal trails that are separated from the roadway. Jefferson

County is planning extensions to the Rick Tolleson Memorial Trail to connect major destinations in the Port Hadlock-Irondale UGA and Chimacum. It would include multi-use trails and frontage sidewalks along the route. As there will likely be associated pedestrian crossings, lowered speed limits and increased traffic congestion are possible. The Mosquito Fleet Trail is a proposed Kitsap County public trail designed to connect the historic Mosquito Fleet ferry docks and landing sites while promoting waterfront access, scenic views, and historic landmarks.

Critical Infrastructure

A review of the transportation system in Kitsap and Jefferson Counties identified a few select roadways in the area which provide critical connections and facilitate travel between the naval facilities and the communities in the region. Specifically these include:

- The Hood Canal Bridge located on SR 104 which connects Kitsap and Jefferson Counties across the Hood Canal and enhances the movement of people and goods throughout the region.
- SR 19, SR 116 in Port Hadlock and the Portage Canal Bridge; these facilities provide the connection to Indian and Marrowstone Islands and accommodate travel to NAVMAGII and the state park on the north end of Marrowstone Island.
- The State Routes and arterial roadways which serve downtown Bremerton and the NBK-Bremerton are vital for commuter traffic. In addition the parking facilities and alternative modes of transportation are important to maintain acceptable traffic operations in the area.
- The WSDOT and Kitsap County Ferries, which provide transportation for motorized and non-motorized travel across the Puget Sound. The WSDOT ferries are designated as non-highway facilities of statewide significance and allow for movement of people and goods between the Kitsap Peninsula, the metropolitan area of Seattle, and other areas.
- The Bremerton – Puget Sound Industrial Center (PSIC-Bremerton) corridor and the SR 16/SR 3 interchange which facilitates freight travel and the movement of goods between Bremerton, its' industrial corridor, and Seattle.
- The SR 3 and SR 304 corridors in downtown Bremerton, which serve NBK-Bremerton and its' employees whose daily assignments require access to the Navy facility in the heart of downtown Bremerton; these roadways are especially important not only to NBK-Bremerton for the operations of the Navy but they also serve the commuters traveling to the Bremerton Transit Center located just east of NBK-Bremerton.

The facilities identified above are vital to the continued operations and success of the Navy facilities and the communities that surround them. As growth occurs on the peninsula and at the Navy facilities, it is imperative to focus on these areas during transportation planning and review so that as change occurs the transportation system can be updated to accommodate the needs of NBK and its surrounding communities.

NBK-Bangor

Primary access to NBK-Bangor is provided by SR 3 which is the major roadway serving the cities of Bremerton, Poulsbo, and Silverdale, and connects Kitsap and Jefferson Counties via SR 104 and the Hood Canal Bridge. SR 3 connects with SR 305 near Poulsbo providing access between NBK-Bangor and Bainbridge Island providing a connection to the WSDOT Ferry Terminal on the Island in addition to the Ferry Terminal in Bremerton. SR 3 is generally free-flowing and is not expected to see a decrease in the level of service given that NBK-Bangor is located in a generally rural area.

Transit service to the base is provided by Kitsap Transit Route 34 which travels between Ohio Street inside the base and the Silverdale Transfer Center. This route operates on weekdays and Saturdays providing connections to Silverdale, Poulsbo, Old Town, Ridgetop, and the Fairgrounds. Kitsap transit also provides vanpool service to NBK-Bangor which is part of the Kitsap Transit Worker/Driver program.

Non-motorized facilities like sidewalks and bike lanes are generally uncommon outside of the base since the roadways are rural in nature. However, roadway shoulders are generally paved and can accommodate walking and bicycling. Inside the base there are generally sidewalks and bike lanes provided. A designated bike route is defined along Clear Creek Road NW, SR 308, and Silverdale Way which connects NBK-Bangor to NBK-Keyport.

Traffic safety along SR 3 was reviewed in previous studies for the section between Bremerton and Shelton. Potential safety improvements for each segment of the corridor were identified and included suggestions to reduce the number of direct access connections to SR 3. These strategies will be discussed further in Chapter 4, Section 4.4.

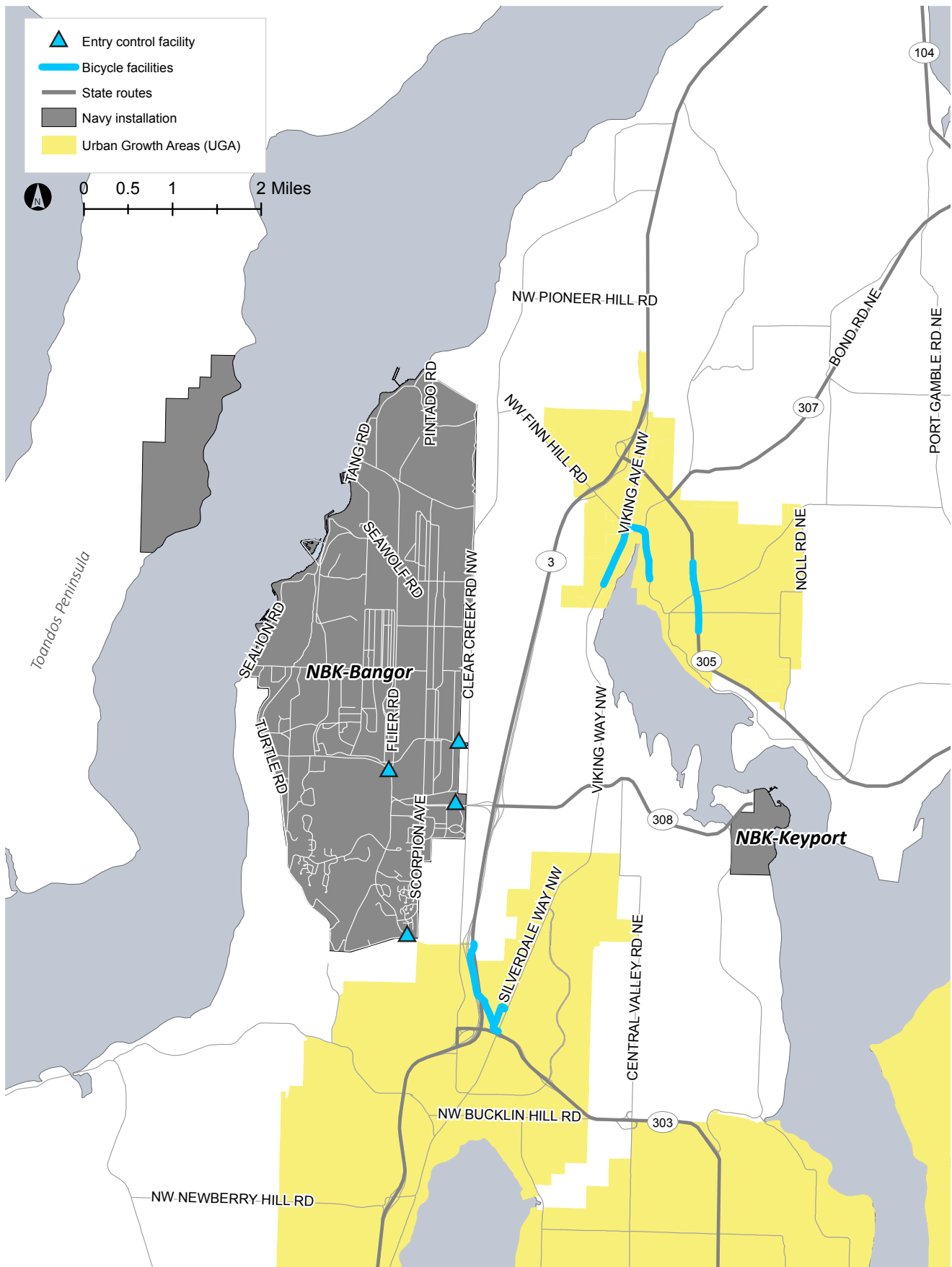


Figure 2.20. Transportation features near NBK-Bangor



NBK-Bremerton

The transportation network surrounding NBK-Bremerton is generally served by principal arterials which provide connections throughout the Bremerton downtown core and to the surrounding roadway network. The primary roadways include SR 303, SR 304, 6th Street, 11th Street, and SR 310 (Kitsap Way). These roadways connect to SR 3 and SR 16 to the south, which serve as regional connectors to the rest of the Kitsap Peninsula. The vehicular access gates to NBK-Bremerton include the Charleston Gate, the Naval Gate, the Montgomery Gate, and the Missouri Gate (see Figure 2.21). Additional pedestrian only gates are provided.

In the City, traffic volumes are highest along the principal roadways in Bremerton during the weekday afternoon peak hour. The highest traffic volumes were observed on Warren Avenue (SR 303), Kitsap Way (SR 310), Burwell Street (SR 304), 6th Street and 11th Street. Surges in traffic volume along Warren Avenue is likely attributable to NBK-Bremerton shift changes and vehicle traffic to and from the WSDOT ferry terminal and the Bremerton Transit Center located near the intersection of SR 304 and Pacific Avenue. Traffic operations on the primary roadways in Bremerton are required to meet the WSDOT Level of Service (LOS) Standards for Highways of Statewide Significance (HSS). The following facilities in the City of Bremerton are currently identified as HSS (as of 2009) per the Washington State Legislature:

- SR 3,
- SR 303,
- SR 304, and
- SR 310.

Traffic operations were most recently measured by the City of Bremerton in their 2004 Comprehensive Plan. At that time the level of service (LOS) observed ranged from LOS A to LOS D with most roadways operating at LOS C or better. The roadways operating at LOS D (and approaching LOS E) included:

- Warren Avenue,
- Kitsap Way (SR 310), 11th Street to National Avenue,
- Sylvan Way from Wheaton Way to Petersville Road, and
- Wheaton Way (SR 303) from Sheridan Road to Riddell Road.

Given the age of the previous operations analysis the observed LOS may have changed on some facilities and this list does not necessarily include all roadways which may currently be operating at LOS D or worse. The Washington Avenue Project completed a review of the Washington Avenue corridor to estimate the level of service at the intersections of Washington Avenue/Manette Bridge and Washington Avenue/6th Street. This review showed that the level of service at these intersections would be LOS D and LOS C, respectively. An updated operations analysis is expected to be performed with the Bremerton 2014 Comprehensive Plan update and should further inform planning for the community and NBK-Bremerton facilities.

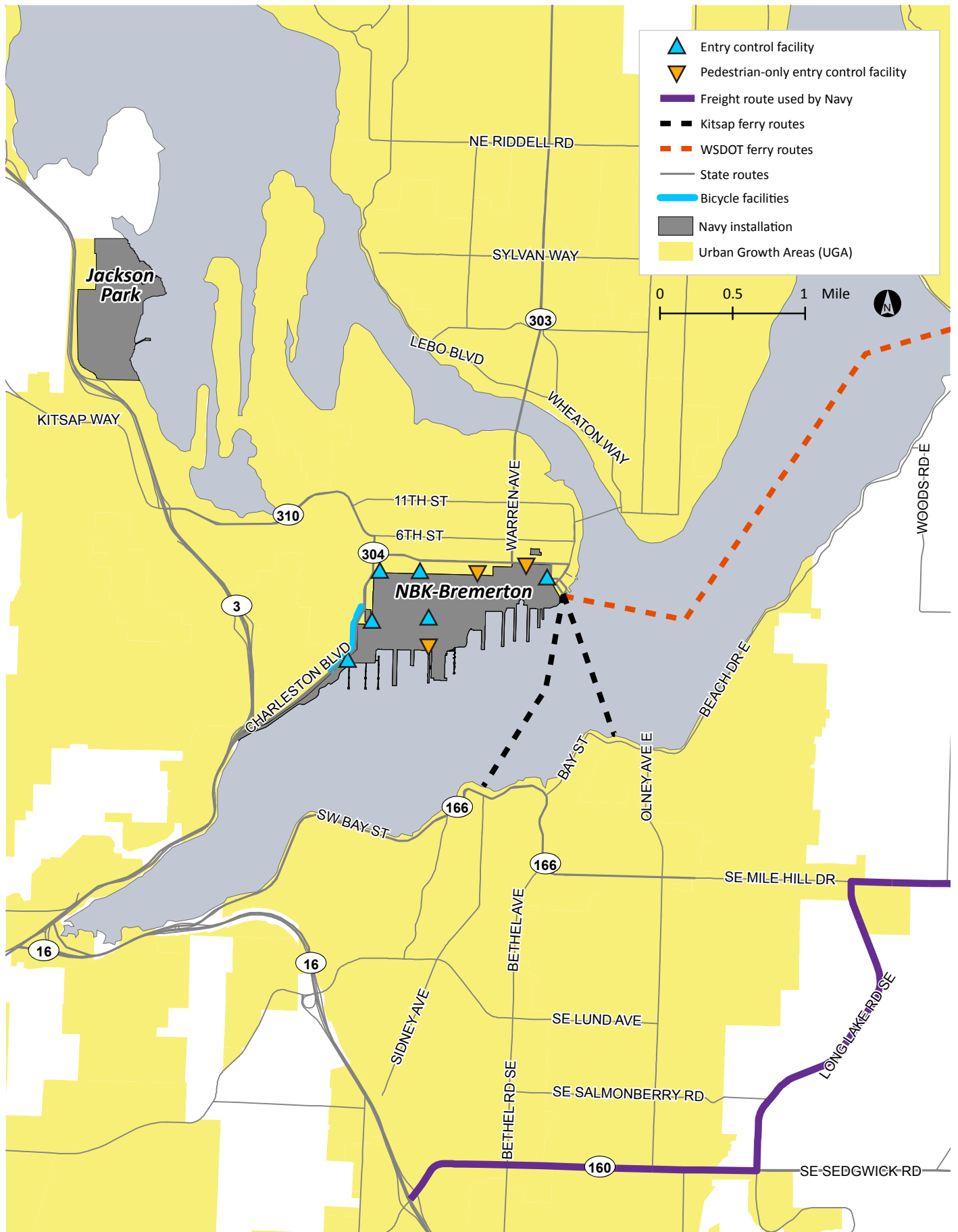


Figure 2.21. Transportation features near NBK-Bremerton

Kitsap Transit, the WSDOT and Kitsap Transit Ferries, and the Worker/Driver program provide transportation options in the area. Bremerton has three transportation centers; they include:

- East Bremerton Transportation Center,
- Bremerton Transportation Center at the WSDOT Ferry Terminal, and
- West Bremerton Transportation Center.

Nine transit routes serve Bremerton with additional trips to and from the ferry terminal to accommodate increased traffic traveling to and from park and rides to commute via the ferry. Five park and ride facilities are provided free of charge to users of Kitsap and Jefferson Transit with a total of 428 spaces available to commuters.

Parking in Bremerton is a priority because it is a large employment center and serves as a transportation hub for travel across the Puget Sound. Parking surveys conducted as part of the *Bremerton Downtown Subarea Plan* (City of Bremerton, 2007) were reviewed as part of the *Traffic Circulation Study* (2010) to identify parking opportunities and strategies to improve and maintain traffic circulation and non-motorized facilities. In addition, PSRC performed a parking survey in 2013. The study focused primarily on the downtown core. Peak parking utilization varies by location and ranges between 25 percent in the area between 6th Street and 11th Street bound by Olympic Avenue and Warren Avenue, up to approximately 55 percent in the immediate area surrounding the Bremerton Transit Center. Some of the parking activity is likely attributable to the activity at NBK-Bremerton.

Sidewalks are provided throughout Bremerton and create a grid network that provides good connections for pedestrian travel. Bike lanes and shoulders are generally not available for bike travel on most roadways in Bremerton. Bike routes are identified in the 2004 *Bremerton Comprehensive Plan* (City of Bremerton, 2004) and include Kitsap Way which has bike lanes west of Corbet Drive that become sharrows and travel east to the downtown area and disappear east of N Callow Avenue. Bike routes are identified along Warren Avenue which connects to 13th Street and 11th Street partly using off-road trail, Burwell Street, Washington Avenue, and Cambrian Avenue N. Currently, bicycle traffic from the ferry must travel north on Washington Avenue in order to traverse west on Burwell Street to access the NBK-Bremerton pedestrian gate on Pacific Avenue. This creates an unsafe situation because bicyclists often choose to traverse the wrong-way on 1st Street or 2nd Street, which are both one-way roadways in the eastbound direction.

Traffic safety was also reviewed in the 2004 *Bremerton Comprehensive Plan Transportation Element*. The study provided a list of intersections which exceeded the safety thresholds with an average of five collisions per year for unsignalized intersections and ten collisions per year for signalized intersections. One of the identified projects to improve operations and safety was the Downtown Bremerton Transportation Center/Pedestrian Improvements project which was completed in 2009. Additional improvements that were identified in the *Bremerton Downtown Traffic Circulation Plan* (Bremerton Department of Public Works and Utilities, 2010) suggested additional pedestrian provisions on Washington Avenue and 2nd Street.

Naval Magazine Indian Island

The roadway network utilized by NAVMAGII consists of SR 19, SR 116, and the Portage Canal Bridge shown in Figure 2.22. These roadways must function adequately in order to safely facilitate freight transport and accommodate recreational users to and from the area. The only connection from NAVMAG Indian Island to the Olympic Peninsula is provided by SR 116 using the Portage Canal Bridge. The Portage Canal Bridge is a state-owned and maintained facility. It is a vital link for NAVMAGII and its neighbor Marrowstone Island. If the connection was lost, the operation of NAVMAGII and the ability to move people or goods via auto-transport to either NAVMAGII or Marrowstone would cease. The only access gate to the NAVMAGII facility is located on SR 116 just east of the Portage Canal Bridge.

The freight route for the facility utilizes the Portage Canal Bridge, SR 116, Chimacum Road, and SR 19. This freight route is specifically utilized in order to avoid the majority of the Port Hadlock community which is primarily located along SR 116, west from the Ness' Corner intersection. Sidewalks are provided in Chimacum along SR 116 at the intersection of Chimacum Road and on a couple of segments to the west where recent development has occurred. Sidewalks are also provided on Chimacum Road south of SR 116 to Church Lane. Transit service is provided by Jefferson Transit. Routes 1 and 7 travel along SR 19 and Oak Bay Road, respectively and provide connections to Port Townsend, Brinnon, and Poulsbo with multiple stops located along Ness' Corner Road and the Irondale Road loop.

Traffic volumes in the area are much lower than volumes observed in more densely populated areas of Kitsap and Jefferson Counties. Traffic operations on these roadways are generally good with level of service (LOS) C or better with the exception of SR 19 which sees a greater amount of traffic and experienced LOS D with a projected LOS E north of Irondale Road in 2031.

Based on the Quimper Peninsula Study, the intersections on SR 116 at Chimacum

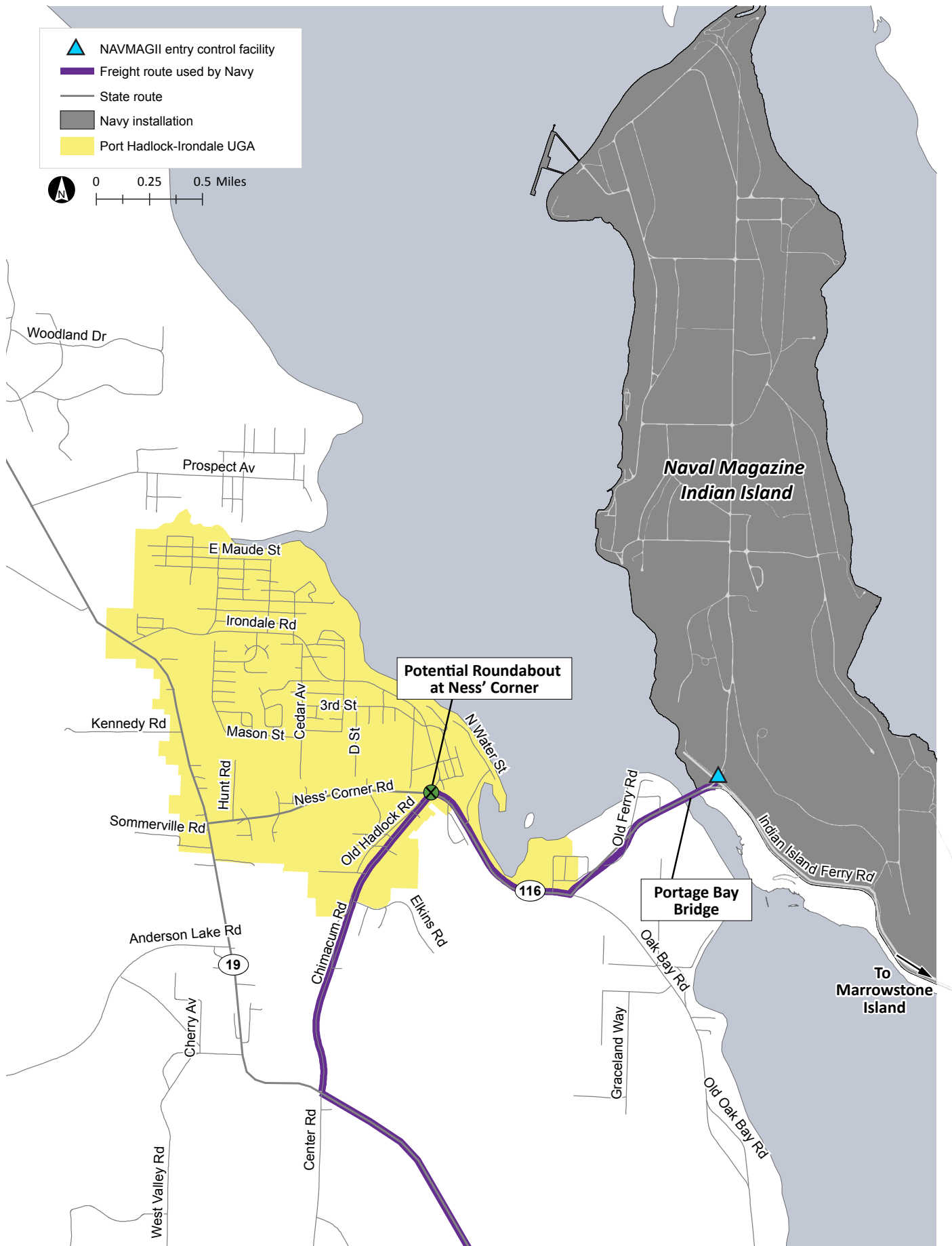


Figure 2.22. Transportation infrastructure near NAVMAGII



Road and Oak Bay Road are expected to operate at LOS C in 2031 and would be expected to continue operating with acceptable LOS. One of the most notable transportation improvements suggested as part of the *Quimper Peninsula Transportation Study* (Transpo Group, 2012) is to construct a roundabout at the intersection of SR 116 and Chimacum Road to improve mobility, safety, and serve as a gateway into the Port Hadlock UGA. Future design of this facility will need to consider the design vehicle and vehicles utilizing this facility on a regular basis.

Pedestrian safety issues were primarily identified on the west side of SR 19 in the vicinity of the Sunfield School, the Chimacum School, Cedarbrook Adventist Christian School, and Chimacum Park. In addition, improvements were suggested to provide enhanced non-motorized access to the residential neighborhoods north of SR 116 and between the commercial area around SR 116 and Chimacum Road to the waterfront east of Lower Hadlock Road.

Manchester Fuel Depot

The Manchester Fuel Depot is located just north of the WSDOT Ferry Terminal at Southworth. Primary access is located on Beach Drive E, about 1/4-mile north of E Jessica Way. Access is generally provided via two-lane highways with narrow to no shoulders, including Colchester Drive E, Mile Hill Road, and SE Southworth Drive. Posted speeds range between 25 and 40 mph. The Manchester Fuel Depot primarily relies on SE Southworth Drive and Colchester Drive E for freight movement from the Southworth Ferry Terminal.

A recent Navy study was conducted that investigated designating alternate freight routes in an effort to minimize impacts to the local community. The alternate freight route would bypass the Village Center and utilize Woods Road E/SE and E Beaver Creek Road. According to the study, this intersection would require turning radius improvements to accommodate large trucks.

Traffic volumes in Manchester range between 1,500 and 13,000 vehicles per day with the majority of traffic traveling from the urban areas which lie west of Colchester Drive E toward the Southworth Ferry Terminal. All roadways in Manchester operate at LOS A with the exception of Mile Hill Drive, west of California Avenue SE which operates at LOS D.

Kitsap Transit Route 86 provides service to Manchester and travels between Port Orchard and the Southworth Ferry Terminal. There are two stops in central Manchester. In addition, a number of stops are provided along California Avenue and Colchester Drive. The nearest Park & Ride facilities are located at the Southworth and Annapolis ferry terminals and at Harper Church on SR 166 just west of Southworth.

The east side of California Avenue has a small paved walkway from Mile Hill Drive to the Manchester Elementary School. The east side of Colchester Drive also has paved shoulders to accommodate bicycles and pedestrian activity and is considered a portion of the Mosquito Fleet Trail. The route runs through Manchester via Colchester Drive and Beach Drive. North of Main Street no pedestrian or bike facilities currently exist. Programmed projects as part of the Kitsap County Transportation Improvement Plan include paving shoulders on

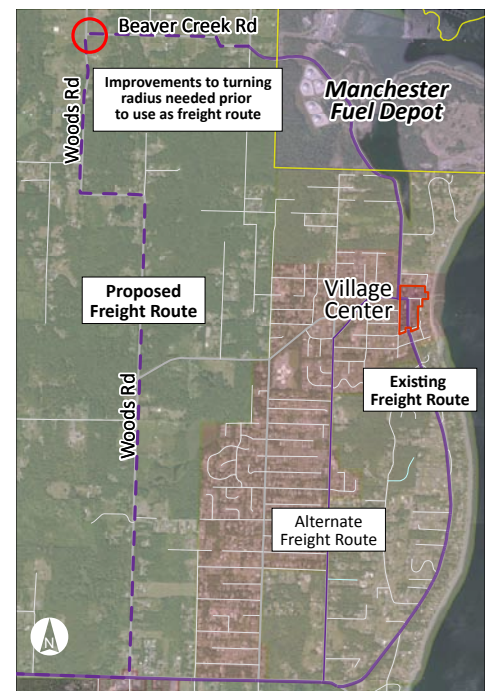


Figure 2.23. Existing and proposed freight routes to Manchester Fuel Depot

Beach Drive, Chester Road/Madrone Avenue, and Alaska Avenue, and stormwater improvements and resurfacing on Colchester Drive between Puget Drive and Miracle Mile Drive.

No safety issues have been identified in previous transportation plans.

Jackson Park

The Naval Hospital Bremerton is a major tenant within Jackson Park located in the northwest corner of the Bremerton city limits on Ostrich Bay. The hospital has nearly direct and easy access to and from SR 3 via Austin Drive. Austin Drive continues east as Olding Road. A proposed major collector would connect Olding Road to Shorewood Drive, providing additional access from SR 310 (Kitsap Way). North of Olding Road, Austin Drive is considered a local roadway.

Kitsap Transit Route 12 serves the Naval Hospital and travels between the Silverdale Transfer Center and the West Bremerton Transfer Center. The route alternates trips between the The Landings and Northlake Way. In addition the Navy recently began running a shuttle between the Naval Hospital and the Madigan Army Medical Center located at Joint Base Lewis-McChord.

Sidewalk is provided along the east side of Austin Drive and through-out The Landings residential area. Separate bicycle facilities are not provided, however a large paved shoulder on Austin Drive would easily accommodate bicycle travel. No traffic safety issues were identified in previous transportation plans.

NBK-Keyport

The primary roadway to NBK-Keyport is NW Luoto Road also known as SR 308 which provides a direct connection to SR 3 via a two lane highway. SR 308 is a minor arterial with a posted speed of 50 mph and a reduced speed of 35 mph just east of NBK-Keyport and in Keyport. The peninsula supports a large residential area with some commercial development along Washington Avenue.

Average daily traffic ranges between 6,000 and 11,000 vehicles with ample capacity for additional traffic. All roadways in the vicinity of the naval base operate at LOS A.¹ The nearest transit is Kitsap Transit Route 33 which is a commuter route that travels between the Silverdale Mall Transit Center and Poulsbo with final service to the Bainbridge Ferry dock. The Keyport community can access this route at the transit stop located at the intersection of SR 308 and Silverdale Way, otherwise known as Keyport Junction. In the future there is a possibility for construction of a Park and Ride at the Keyport Junction location to enhance transit access. The nearest park and ride facilities serving Keyport are located on Old Military Road in Bremerton approximately 7 miles to the south of Keyport or the Park and Ride lot at the Poulsbo Junction intersection of Lindvig Way and Viking Way approximately five miles north of Keyport.

Non-motorized facilities are limited in Keyport, with the majority of sidewalks located in the commercial core along Washington Avenue; one crosswalk currently

¹ *Keyport Community Plan* (Kitsap County Department of Community Development, 2007).

exists at Washington Avenue on SR 308. The Kitsap County bicycle route would run along SR 308 between Viking Way and travel east to Brownsville Highway and continue south, and tie into the City of Bremerton in the Manette neighborhood. The proposed Mosquito Fleet trail would connect five historic sites using separated paths and bike lanes in this area.

Pedestrians and bicyclists use the causeway across Dogfish Bay, located just west of the NBK-Keyport which can pose a safety risk because of the traffic traveling to and from NBK-Keyport. The posted speed on SR 308 is 35 mph across the causeway and increases to 50 mph just west of Brownsville Highway NE. Residents enjoy fishing, watching wildlife, and recreating on the causeway and this location has been a focus of transportation planning efforts.

Growth Trends

Varying amounts of growth are anticipated for the communities in the JLUS study. By 2035, the population of the three-county region within the JLUS study area will increase by nearly a third. Kitsap County is expected to grow by more than 80,000 people between 2010 and 2035. Mason and Jefferson Counties are expected to grow by roughly 20,000 and 7,800, respectively, during the same period (Washington Office of Financial Management). Each county is planning for significant growth within its urban growth areas.

Washington State's Growth Management Act (GMA) encourages development in existing cities, urban areas, and urban growth areas (UGA) to reduce sprawl and ensure adequate infrastructure and services. See Chapter 3 for more details on GMA.

Table 2.5 illustrates 2010 populations and 2035 growth targets for key study area cities, designated urban growth areas, and rural areas (non-UGA's). The highest rates and amounts of growth are anticipated to occur in Kitsap County communities, including Port Orchard (53 percent, combined city/UGA growth), Poulsbo (53 percent, combined city/UGA growth), Bremerton (39 percent, combined city/UGA growth), Central Kitsap UGA (34 percent), and Silverdale (33 percent). Rural Kitsap County growth rates are anticipated to be lower, but still notable (16 percent). The increased population will create additional transportation and public service demands and creates the potential for land use conflicts with Navy operations at NBK.

Within Jefferson County, the Port Hadlock-Irondale UGA is projected to accommodate a considerable amount of growth: 50 percent by 2035 (see Table 2.5). While urban development intensities in this area is currently limited by a lack of sewer, the County is eager to develop centralized sewer service to this area when additional funding can be attained. Anticipated results include, economic development, and additional affordable housing, as the proposed sewer system will enable higher density development. Growth in the UGA will add more vehicular traffic, specifically on SR 19.

Table 2.5. Population growth projections 2010-2035 for JLUS study area

	2010 Pop'n	2035 Targets	Pop'n Growth	% Growth
Bremerton, City	37,729	52,017	14,288	38%
Bremerton UGA	9,082	13,095	4,013	44%
Bremerton Total	46,811	65,112	18,301	39%
City of Bainbridge Island	23,025	28,660	5,635	24%
<i>Port Orchard, City</i>	<i>12,323</i>	<i>20,558</i>	<i>8,235</i>	<i>67%</i>
<i>Port Orchard UGA</i>	<i>15,044</i>	<i>21,279</i>	<i>6,235</i>	<i>41%</i>
Port Orchard Total	27,367	41,837	14,470	53%
<i>Poulsbo, City</i>	<i>9,222</i>	<i>10,552</i>	<i>1,330</i>	<i>14%</i>
<i>Poulsbo UGA</i>	<i>478</i>	<i>4,256</i>	<i>3,778</i>	<i>790%</i>
Poulsbo Total	9,700	14,808	5,108	53%
Central Kitsap UGA	22,712	30,476	7,764	34%
Silverdale UGA	17,556	23,335	5,779	33%
Kingston UGA	2,074	5,006	2,932	141%
Kitsap UGA	145,434	209,234	63,800	44%
Kitsap Rural Non-UGA	105,699	122,337	16,638	16%
Kitsap County Total ¹	251,133	331,571	80,438	32%
Port Townsend UGA	9,113	12,165	3,052	33%
Port Hadlock-Irondale UGA	3,580	5,360	1,780	50%
Port Ludlow MPR	2,603	3,357	754	29%
Pleasant Harbor MPR	--	350	350	--
Jefferson UGA	15,296	21,232	5,934	39%
Jefferson Non-UGA	14,576	17,117	2,541	17%
Jefferson County Total ²	29,872	38,349	8,477	28%
Mason County Total ³	60,699	80,784	20,085	33%

(Source: Washington Office of Financial Management)

- 1 Adopted Kitsap Countywide Planning Policies, Appendix B- November 25, 2013, p. 43
- 2 Preliminary working draft population estimates developed by staff based on official OFM projections, for Jefferson County and Port Townsend, January 2015. The planning period for Jefferson County goes to 2036.
- 3 County Growth Management Population Projections 2010-2040, WA OFM, August 2012, p. 114

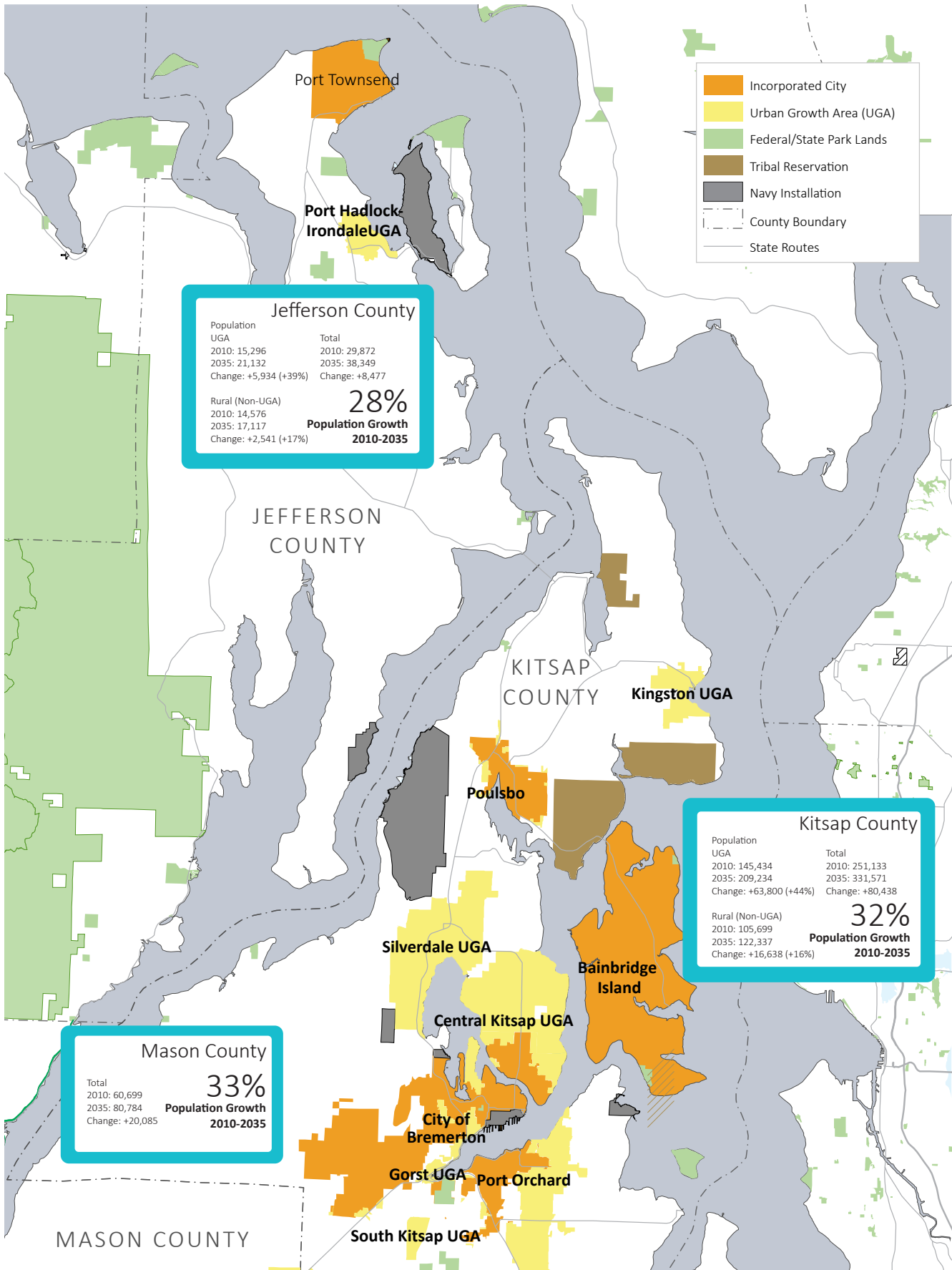


Figure 2.24. 2010-2035 Population Growth projections for JLUS study area

Existing Plans and Programs

Chapter

3



State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA)

Washington State's SEPA creates a method for state and local agencies to evaluate environmental impacts from government decisions. These government actions may include permits for private development, public facilities construction, and adoption of plans, policies, or regulations (e.g., comprehensive plans, critical areas ordinances). Agencies use the SEPA process to evaluate proposals for environmental impacts, suggest changes to the proposal to reduce likely impacts, and apply conditions to or deny a proposal when adverse environmental impacts are identified. Small projects may be exempt from SEPA review.

Cities, counties, and state agencies (if a public project) assess proposals using an environmental checklist that, at a minimum, addresses air, animals, earth, energy, environmental health, land use, plants, public services, transportation, utilities, and water. If the proposal is likely to have no significant adverse environmental impacts, the city, county, or agency issues a determination of non-significance (DNS). However, if significant adverse impacts are likely, a neutral third party must prepare an environmental impact statement (EIS). The EIS must evaluate alternative proposals and identify measures to reduce environmental impacts.

Like Washington State's SEPA, the Navy must comply with NEPA when (re)developing its property. NEPA requires all federal agencies to file an Environmental Assessment (EA) or, when necessary, an EIS for federal actions that have an environmental impact. NEPA requires the military to analyze its impact on the environment and surrounding communities and identify mitigation methods to reduce adverse environmental impacts. The EA and EIS processes require public community participation. A Finding of No Significant Impact (FONSI) under an EA or EIS that considers alternatives to the proposed military action is required and subject to public scrutiny.

Growth Management Act

(RCW 36.70A)

The Growth Management Act, passed in 1990, was a response to concerns about suburban sprawl, environmental protection, quality of life, and related issues. It required that cities and counties develop comprehensive plans that provided a framework for the future growth of their jurisdictions, and development regulations to implement the comprehensive plans. It also requires jurisdictions to establish procedures to revise and update plans and regulations, as well as provide opportunities for public participation.

GMA adopted the following 13 goals, to inform the development of comprehensive plans and development regulations:

1. Concentrated urban growth
2. Sprawl reduction
3. Efficient regional transportation
4. Affordable housing
5. Economic development
6. Protection of property rights
7. Predictable permit processing
8. Maintaining natural resource industries
9. Protection of open spaces and recreation
10. Environmental protection
11. Early and continuous public participation
12. Adequate and effective public facilities and services
13. Preservation of historic resources

Later, a fourteenth goal related to shoreline management was added by the State Legislature.

Specifically relevant to this JLUS, GMA policies require counties and cities to provide notice to military installations and amend “comprehensive plan or development regulations to address lands adjacent to military installations to ensure those lands are protected from incompatible development” [RCW 36.70A.530(4,5)].

Shoreline Management Act (SMA)

In order to protect shorelines of the state from “the inherent harm in an uncoordinated and piecemeal development of the state’s shorelines,” the Shoreline Management Act was enacted in 1971. This legislation applies to the shorelines of the Pacific Ocean, Puget Sound, Strait of Juan de Fuca, and rivers, stream, and lakes above a certain size.

The SMA aims to:

- Accommodate appropriate shoreline-dependent uses,
- Protect shoreline natural resources,
- Protect public access and use of shorelines, and
- Ensure no net loss of ecological functions.

Local governments are responsible for administering this regulatory program, by adopting shoreline master programs that establish goals and policies that are implemented through use regulations.

Endangered Species Habitat Protection

The Washington Department of Fish and Wildlife (WDFW) publishes a list of Priority Habitats and Species (PHS), which includes the federally listed threatened and endangered species. These are incorporated in the jurisdictions’ mapped Critical Areas and are considered to be priorities for conservation and management. In the JLUS study area, species of particular concern include the resident whale, chinook salmon, chum salmon, marbled murrelet (at the western edge of study area), northern spotted owl (also western edge). The comprehensive list for Kitsap and Jefferson County includes:

Table 3.1. Federal and WDFW endangered, threatened, sensitive, candidate, and monitor species

	Kitsap County	Jefferson County
Birds		
Bald eagle	●	●
Brown pelican		●
Caspian tern	●	
Great blue heron	●	●
Harlequin duck	●	
Marbled murrelet	●	●
Northern spotted owl		●
Osprey	●	
Pileated woodpecker	●	●
Purple martin	●	●
Short-tailed albatross		●
Surf scoter	●	
Vaux's swift	●	●
Western bluebird	●	●
Shorebird concentrations	●	
Waterfowl concentrations	●	
Mammals		
Blue whale*		●
California sea lions	●	
Fin whale*		●
Harbor seal	●	
Humpback whale	●	●
Killer whale*	●	
Sea otter*		●
Sei whale*		●
Sperm whale*		●
Steller sea lion	●	●
Southern resident killer whale		●
West Coast DPS fisher		●
Western gray squirrel		●

	Kitsap County	Jefferson County
Fish and shellfish		
Bull trout	●	●
Chinook salmon	●	●
Chum salmon	●	●
Coho salmon	●	
Olympia oyster	●	
Olympic mudminnow		●
Pink salmon	●	
Steelhead trout	●	●
Reptiles		
Leatherback sea turtle*		●
Green sea turtle*		●
Loggerhead sea turtle*		●
Olive ridley sea turtle*		●
Western pond turtle	●	●

*Occur primarily outside of the JLUS study area

Water Quality and Stormwater Runoff

Stormwater runoff (i.e., water from precipitation flowing over impervious surfaces on the ground) is one of the most significant sources of water pollutants because it picks up debris, chemicals, dirt, and other pollutants and then flows into a storm sewer system or directly into a stream, the Puget Sound, a wetland, or other water body. Storm sewer systems (as opposed to sanitary sewer systems) generally do not treat water before discharging into the natural environment. Stormwater management practices that mimic natural drainage systems by treating and infiltrating water close to its source are often called “Low Impact Development (LID)” and “green infrastructure.”

Washington State Department of Ecology’s National Pollutant Discharge Elimination System (NPDES) Western Washington Phase II Municipal Stormwater Permit requires Kitsap County, City of Bremerton, and City of Poulsbo to develop and implement a Stormwater Management Program (SWMP) to reduce pollutant discharge from storm sewer systems they own or operate and protect water quality. The SWMP must include education and outreach, public involvement (e.g., advisory bodies, stewardship programs), illicit discharge detection and elimination, runoff control from (re)development and construction sites, and municipal operations pollution prevention or reduction. Jefferson County and City of Port Townsend, as rural entities, are not NPDES-regulated jurisdictions for stormwater management, and are not required by the State to follow the same stormwater management requirements.

The Navy, as a federal agency in Washington, must obtain similar NPDES permits from the federal Environmental Protection Agency (EPA) Region 10 for regulated municipal stormwater discharges. EPA has not yet issued its comparable stormwater discharge permit for Navy facilities discharging into Puget Sound, but it expects to issue such permit(s) in the next 12-18 months. The federally issued NPDES stormwater permit must protect water quality in the same manner as the State permit. Prior to obtaining formal permit coverage for its regulated municipal stormwater discharges, the Navy complies with federal statutes, including the EPA’s Clean Water Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act of 1990; Rivers and Harbors Act; Safe Drinking Water Act; and others to maintain and improve water quality. In addition, Section 438 of the Energy Independence and Security Act of 2007 and President’s Executive Order 13514 on “Federal Leadership in Environment, Energy, and Economic Performance” require federal agencies to “maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property” for any federal facility with a footprint that exceeds 5,000 square feet.

Local Jurisdiction Planning Tools

Comprehensive Plans

Comprehensive plans are designed to serve as the jurisdiction’s “blueprint” for future land use, infrastructure, public services, and resource conservation decisions. Typically there are three defining features of a comprehensive plan:

1. **General.** A comprehensive plan provides the general guidance that will be used to direct future land use and resource decisions.
2. **Comprehensive.** A comprehensive plan covers a wide range of social, economic, infrastructure and natural resource factors. These include topics such as land use, housing, circulation, utilities, public services, recreational, agriculture, economic development, and many other topics.
3. **Long Range.** Comprehensive plans provide guidance on reaching a future envisioned 20 or more years into the future.

Within the State of Washington, the Growth Management Act (GMA) establishes the primacy of the comprehensive plan. The comprehensive plan is the cornerstone for any planning process and serves as the foundation of the local land use planning. Development regulations (zoning, subdivision, and other controls) must be consistent with comprehensive plans. In addition, state agencies are required to comply with comprehensive plans and development regulations of jurisdictions planning under the GMA.

According to the GMA, local comprehensive plans are to include chapters on the following topics: land use, utilities, housing, transportation, capital facilities, and shorelines. Counties must also include a chapter on rural planning.

Cities and counties fully planning under the GMA are to renew their comprehensive plans and ordinances at least every seven years and ensure compliance with state legislation.

Countywide Planning Policies (CPPs)

Developed collaboratively between counties, and cities, Countywide Planning Policies are statements that provide a framework to enable county and city comprehensive plans to be developed consistently, as required by RCW 36.70A.100. At a minimum, GMA suggests Countywide Planning Policies address:

- Designation of Urban Growth Areas (UGAs),
- Orderly development and provision of services to UGAs,
- Siting of public capital facilities of a countywide or statewide nature,
- Countywide transportation facilities and strategies,
- Consideration for affordable housing,
- Joint County and City planning within UGAs,
- Countywide economic development and employment, and
- Analysis of fiscal impacts.

At the present time, Kitsap County is the only study area jurisdiction with CPPs that address the military.

Element M in Kitsap County's CPPs contains policies to promote communication and coordination between Cities, the County and the federal government (including the Navy). These policies recognize the importance of military installations to national security and Washington State's economic health and the fact that growth could potentially affect the viability of Navy missions. They require governmental agencies to be informed and continuously involved in regional and local planning.

Puget Sound Regional Council's Vision 2040 Plan

Communities in the Puget Sound region also must consider the growth policies of the Puget Sound Regional Council (PSRC), including:

- VISION 2040 is a common, overarching vision for directing growth into urban areas and regional growth centers in an environmentally responsible way, fostering economic development, and providing efficient transportation; and
- Transportation 2040, the region's long-range transportation plan, was developed in 2009 to build on VISION 2040's transportation policies with a program for addressing transportation improvements.

Kitsap County Comprehensive Plan

Kitsap County's last major comprehensive plan update was in 2006, with some legal revisions in 2012. The 2006 update included a public involvement strategy with stakeholder meetings, website updates, public display boards, and public scoping and visioning meetings (in multiple locations). However, a major update is now underway and the timing of this project provides an opportunity to integrate JLUS provisions into the comprehensive plan. As part of the update process, current vision statements and goals and policies are being reviewed in order to determine if they have been accomplished or are still applicable. The intent is to move in a direction that is implementable, affordable, and action oriented.

The following elements are included in the plan:

1. Introduction (and Vision Statement)
2. Land use element
3. Rural and resource lands element
4. Natural systems element
5. Economic development element
6. Housing element
7. Utilities element
8. Transportation element
9. Shoreline element
10. Parks, recreation and open space element
11. Capital facilities element
12. Kingston Sub-Area Plan 2005
13. Poulsbo Sub-Area Plan 2001
14. Silverdale Sub-Area Plan 2006
15. Port Orchard/South Kitsap Sub-Area Plan
16. ULID #6 Sub-Area Plan 2003
17. Community and neighborhood plans
18. Implementation

Kitsap County's policies for Coordination with Federal Government:

- Incorporate meaningful and substantial opportunities for early and continuous federal government participation into local/regional planning activities.
- Develop intergovernmental cooperative agreements promoting coordination and involvement in activities of mutual interest when possible, recognizing constitutional/statutory provisions constraining federal agencies.
- Encourage coordination of plans among and between governments and agencies to make plans as consistent and compatible as possible for properties over which they have authority or activities they authorize and the adjacent areas affected.
- Encourage federal agency participation in City, County and joint comprehensive planning and development activities that may affect them.
- Promote planning that considers the impact of new growth to reduce encroachment potential on military readiness activities, when developing zoning ordinances and designating land uses that affect military facilities. In doing so, jurisdictions and the Navy should coordinate types of development and areas of interest to the Navy, method of notice and opportunities for comment.
- Through the Kitsap Regional Coordinating Council, jurisdictions should monitor issues that arise in implementing these policies, and identify areas for improved coordination.
- Include all County, City, and federal government agencies in normal public notice and comment procedures, and keep jurisdictions and agencies informed of matters of interest to them (RCW 36.70A.530).
- Encourage County, City, and federal government agencies to keep one another informed of matters of local/regional interest by mutually agreeable means and schedule.

KITSAP COUNTY

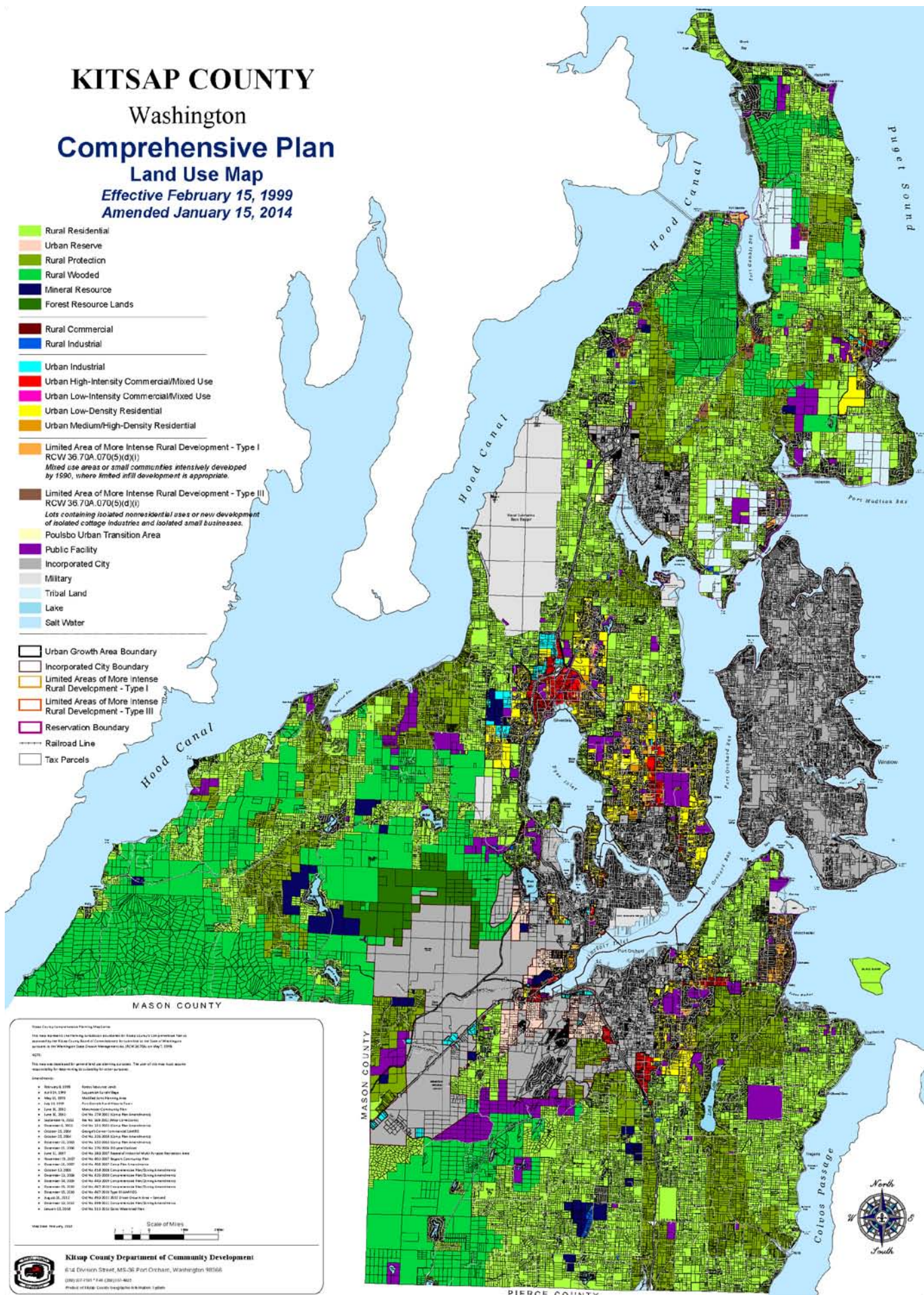
Washington

Comprehensive Plan

Land Use Map

Effective February 15, 1999
Amended January 15, 2014

- Rural Residential
- Urban Reserve
- Rural Protection
- Rural Wooded
- Mineral Resource
- Forest Resource Lands
- Rural Commercial
- Rural Industrial
- Urban Industrial
- Urban High-Intensity Commercial/Mixed Use
- Urban Low-Intensity Commercial/Mixed Use
- Urban Low-Density Residential
- Urban Medium/High-Density Residential
- Limited Area of More Intense Rural Development - Type I
RCW 36.70A.070(5)(d)(i)
Mixed use areas or small communities intensively developed by 1990, where limited infill development is appropriate.
- Limited Area of More Intense Rural Development - Type III
RCW 36.70A.070(5)(d)(i)
Lots containing isolated nonresidential uses or new development of isolated cottage industries and isolated small businesses.
- Poulsbo Urban Transition Area
- Public Facility
- Incorporated City
- Military
- Tribal Land
- Lake
- Salt Water
- Urban Growth Area Boundary
- Incorporated City Boundary
- Limited Areas of More Intense Rural Development - Type I
- Limited Areas of More Intense Rural Development - Type III
- Reservation Boundary
- Railroad Line
- Tax Parcels



MASON COUNTY

PIERCE COUNTY

Scale of Miles

Kitsap County Department of Community Development
 614 Division Street, MS-36 Port Orchard, Washington 98366
 (206) 877-7161 • Fax (206) 877-4622
 Product of MapInfo Geoprocessing Software System

Figure 3.1. Kitsap County Comprehensive Plan Land Use Map (map credit: Kitsap County)

One of the primary tools of the comprehensive plan under GMA is the ability to delineate Urban Growth Areas (UGA's). UGAs identify areas where urban growth should occur and establishes a clear separation between urban and rural development. The primary purpose of the UGAs is to encourage growth first in areas with existing public services and facilities. Below are relevant goals and policies associated with UGA planning:

- **Policy LU-2.** Plan for approximately 76 percent of countywide population to occur in urban areas and 24 percent in rural areas, consistent with the CPP.
- **Goal 3.** Enact and implement reasonable measures to ensure that growth in urban areas is consistent with Plan growth targets.
- **Goal 4.** Accommodate the 20-year projected population growth consistent with the County's adopted population targets, within designated urban areas.
- **Goal 5.** Provide public services and capital facilities necessary to support planned urban growth at adopted levels of service for the 2025 planning horizon.
- **Goal 6.** Encourage and reinforce development patterns within UGAs that are distinct from those in rural areas.

Top vision themes from participants emphasized natural environment and open space protection balanced with growth, protecting the county's rural character, defining and distinguishing urban areas as livable, healthy, connected, safe, and innovative.

The presence of the Navy bases is recognized as a significant contributor to the County's economy in the Economic Development Element. The County notes that it exhibits many signs of a healthy and stable economy via its median household income, jobs-housing balance, low unemployment rate, and a favorable job growth rate. It notes that much of this stability is derived from the military's presence.

Given the Navy's large physical and economic presence in the County, nearly all of its goals and policies relate to the Navy in some direct or indirect way. The rural and resource protection goals are particularly important in protecting encroachment on Navy activities at NBK-Bangor and within the Hood Canal Military Operating Area and Dabob Bay Range Complex.

- **Goal 1.** Retain the rural character of the County outside of designated urban areas, as described in this chapter.
- **Goal 7.** Allow for the designation of LAMIRDS outside of the UGA based on existing rural residential communities or villages, areas of mixed use activity, isolated areas of small and moderate-scale commercial/industrial activity, and historic towns.
- **Goal 9.** Retain and preserve land suitable for agricultural production and encourage the continued practice of farming within the County through regulatory and non-regulatory means.
- **Goal 11.** Preserve and enhance natural resource-based activities, such as agriculture, forestry, mineral extraction, and aquaculture (as addressed and defined in the Kitsap County Shoreline Management Master Program) in the rural areas through non-regulatory and regulatory means.
- **Goal 12.** Retain land suitable for timber production and encourage the continued practice of forestry within the County through regulatory and non-regulatory means.
- **Goal 19.** Develop a long term strategy for addressing the future use of properties historically used for timber production, but currently designated as rural.

Kitsap County Subarea Plans

After the first comprehensive plan was adopted in 1998, the County began developing a series of sub-area plans to address the unique needs and features of specific geographical areas. Once adopted, the sub-area plans became components of the Comprehensive Plan. Below are the subarea plans for communities that are particularly relevant to the JLUS.

Urban Growth Areas:

- Poulsbo Subarea Plan 2001
- Silverdale Subarea Plan 2006
- Port Orchard/South Kitsap Subarea Plan 2006
- South Kitsap Industrial Area (SKIA) Subarea Plan 2003

Rural Areas:

- Suquamish LAMIRD Rural Village Subarea Plan 2005
- Manchester LAMIRD Subarea Plan 2002, Updated in 2007.
- Keyport LAMIRD Subarea Plan 2007

Bremerton Comprehensive Plan

The City of Bremerton's last major comprehensive update was in 2004, with annual amendments. A major update is underway with expected City Council adoption in 2016. This effort recognizes that while the overarching principles and concepts from the 2004 Comprehensive Plan continue to be applicable, some minor alterations are needed to reflect subsequent changes in economic climate and community goals. The timing of this JLUS project coincides with the comprehensive plan update and provides an opportunity to incorporate policies that will address how the Navy and Bremerton can better coordinate planning efforts.

The current comprehensive plan, adopted in 2004 addresses seven elements:

- Community character,
- Land use,
- Housing,
- Transportation,
- Environment,
- Economic development, and
- City services (utilities and capital facilities).

Through the visioning process, participants identified nine themes that would guide the development of the Comprehensive Plan, which include:

- Distinctive Growth – Viable neighborhoods & activity centers, convenience and choices;
- Enticing New Development – Focus on the downtown;
- Supportive Transportation – Seamless, efficient and varied options;
- Improved Accessibility – Pedestrian orientation;
- Quality Housing – Broader Choices;
- Business Support – Increased opportunity;
- Environmental Management – Integrating natural systems;
- Community Service – Focus on assets; and
- Design Review – Quality urban development.

The “Shaping Bremerton” visioning process (used to develop the City’s Comprehensive Plan) identified mixed-use, walkable Centers as a strategy to attract and direct new housing, jobs, and transit. Several types of Centers were employed to respond to local context and effectively provide public services:

- Neighborhood Centers: Haddon, Manette, Perry Avenue, Sylvan Pine, Oyster Bay, Kitsap Lake (Reserve);
- District Centers: Charleston, Wheaton/Sheridan, Wheaton/Riddell;
- Employment Center: Harrison, Northwest Corporate Campus;
- Manufacturing and Industrial Center: Puget Sound Industrial Center-Bremerton (formerly South Kitsap Industrial Area); and
- Downtown Regional Center.

Several centers have subarea plans, in conjunction with the Comprehensive Plan’s vision, to guide future development and growth including Wheaton-Riddell, Downtown Regional Center, and South Kitsap Industrial Area (SKIA). In addition, subarea plans have been established for the following planning areas: Bay Vista (formerly Westpark), East Park, and Gorst (Bremerton Municipal Code 20.80.080).

Many of the City’s comprehensive planning goals are impacted by NBK-Bremerton in the downtown area. In particular, transportation, housing, and economic development are areas where the City and the Navy have mutual interest in meeting Bremerton’s goals.

The Transportation Element of the Comprehensive Plan recognizes the Navy impacts on the Downtown area. For example, Policy TC5 states, “Inventory and assess parking capacity needs in the Downtown area” and work with the Navy and other major employers in the Downtown Core to ensure adequate parking for employees and visitors.

The Housing Element notes Bremerton’s unique housing demands due to the arrival and departure of Navy ships and their crews at PSNS, resulting in a high degree of fluctuation on vacancy rates.

City of Bremerton Official Land Use Map

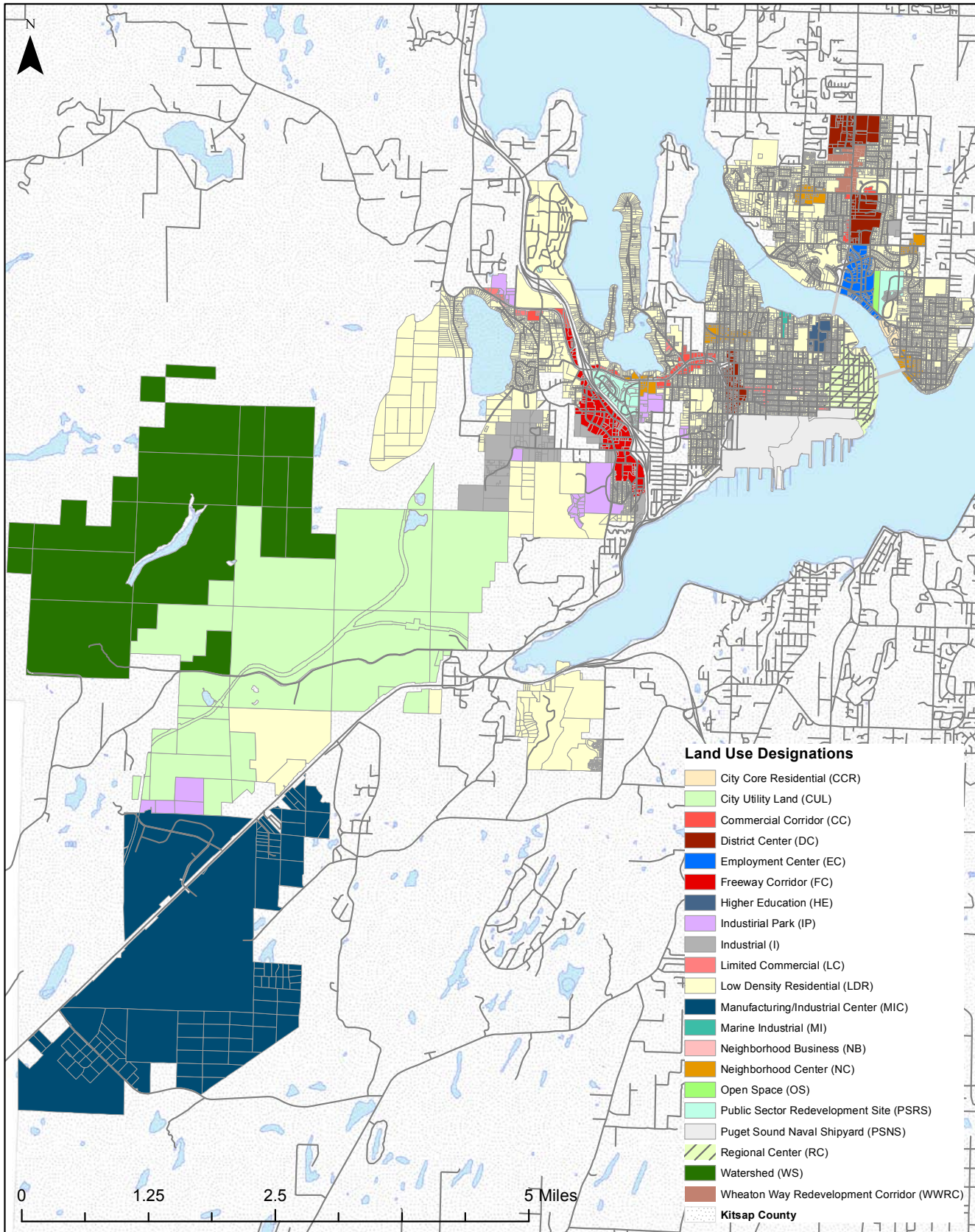


Figure 3.2. City of Bremerton Comprehensive Plan Land Use Map (map credit: City of Bremerton)

Jefferson County Comprehensive Plan

The last major update of Jefferson County's Comprehensive Plan was in 2004, and the County is currently undergoing its periodic update, with adoption expected in 2016. Jefferson County's Comprehensive Plan complies with Countywide Planning Policy (CWPP), adopted jointly by the City of Port Townsend and Jefferson County in 1992. The County's associated development regulations were implemented in 2001.

The current Comprehensive Plan includes the following chapters and elements:

1. Introduction-Implementation
2. Irondale/Hadlock Urban Growth Area Element
3. Land Use and Rural Element
4. Natural Resource Conservation Element
5. Housing Element
6. Open Space, Parks and Recreation, and Historic Preservation Element
7. Economic Development Element
8. Environment Element
9. Essential Public Facilities Element
10. Transportation Element
11. Utilities Element
12. Capital Facilities Element

Most of Jefferson County's land is rural. To maintain primarily rural areas with some concentrated areas of more land use intensity, the Comprehensive Plan's key policy guidelines state that the County must ensure that:

- An adequate supply of rural residential land is available to accommodate the projected rural residential population growth;
- Areas which may have more platted lots than needed to address population growth (and allow for market factors) are designated for low-density residential development such as 1 residential unit per 5 acres (1:5), 1:10, and 1:20;
- Rural areas of more intensive residential, commercial and industrial development are contained in a manner that preserves rural character; and
- Rural commercial development located outside designated Urban Growth Areas is appropriately scaled to serve the needs of the local rural community and the traveling public, and to protect and enhance rural character.

Designated growth areas in the JLUS study area include the Port Hadlock-Irondale UGA, the Port Ludlow Master Planned Resort, Pleasant Harbor Master Planned Resort, and the Quilcene and Brinnon Rural Village Centers (discussed below). Only the UGAs and Master Planned Resorts may receive "urban-style development and infrastructure" (Goal LNG 10.0), though light industrial uses may be conditionally permitted outside of the UGA provided they "meet all the criteria set forth in RCW 36.70A.365," and they "cannot be developed as a commercial shopping development or as multi-tenant office parks" (Policy LNP 11.2). The Comprehensive Plan protects rural, natural, and open space land outside of growth areas through a range of goals and policies:

- **LNG 10.0/UGA-G 2.0.** Limit the establishment or expansion of urban-style development and infrastructure to Urban Growth Areas and Master Planned Resorts.

- **NRG 1.0.** Encourage the conservation of resource lands and the long-term sustainable use of natural resource-based economic activities throughout Jefferson County.
- **NRP 1.2.** Require land use activities adjacent to resource lands to be sited and designed so as to minimize conflicts with resource based economic activities.
- **NRG 3.0.** Conserve and protect Forest Resource Lands for long-term economic use.
- **NRG 4.0.** Minimize potential conflicts between forest management activities and land use activities within or adjacent to designated forest lands.
- **NRG 5.0.** Encourage the continuation of forestry on lands which are not designated as commercial forest resource lands.
- **NRG 10.0.** Conserve and protect the agricultural land base and its associated economy and lifestyle.
- **NRG 11.0.** Conserve and protect aquaculture lands and associated facilities in order to ensure a long-term commercial and recreational resource base.
- **LNG 12.0.** Locate new natural resource-based industries in rural lands and near the resource upon which they are dependent, in accordance with RCW 36.70A.365.
- **OSG 1.0.** Preserve and enhance the existing open space lands.
- **OSG 2.0.** Identify and develop an interconnected County-wide network of naturally occurring and planned open spaces.
- **ENG 5.0.** Allow development along shorelines which is compatible with the protection of natural processes, natural conditions, and natural functions of the shoreline environment.
- **EDP 6.1.** Use land use designations such as Industrial Land Banks (ILBs), Major Industrial Developments (MID), Urban Growth Areas (UGAs), Limited Areas of More Intense Rural Development (LAMIRD), Rural Village Centers, Rural Crossroads, and the allowed uses specific to each designation to support regional alliances and economic clusters to attract investment and sustain economic activity.
- **EDP 6.2.** Encourage the establishment of new sustainable natural resource-based activities in rural areas to increase employment opportunities. Natural resource-based activities shall be located near the agriculture, mineral, aquaculture or forest resource upon which they are dependent.
- **EDP 6.7.** Conserve and enhance existing agriculture and encourage future innovative agriculture ventures and technologies.
- **EDP 8.2.** Encourage efforts to preserve scenic open space, historic and native villages and local cultural resources that are attractive to both local residents and visitors.
- **EDG 9.0.** Encourage economic development that sustains natural resources and open spaces, protects environmental quality and enhances Jefferson County's overall quality of life.

Port Hadlock-Irondale UGA

Jefferson County has one UGA, Port Hadlock-Irondale UGA. Zoning in the UGA was updated in 2009 to address Western Washington Growth Management Hearings Board concerns about GMA compliance with the prohibition of developing at urban densities without providing all urban services. The County's capital facilities plan was modified to demonstrate the phased provision of sanitary sewer service to the entire UGA; and a Transitional Rural Zoning overlay was established to apply

rural development standards to areas that were not yet served by sewer.

UGA Goals and Policies pertinent to the JLUS include:

- **LNG 9.0/UGA-G 1.0.** Encourage a balance of commercial and industrial uses for urban-scale and regional-scale economic activities within Urban Growth Areas (UGAs).
- **LNG 9.1/UGA-G 1.1.** Provide for the orderly development of urban land uses in urban growth areas consistent with the provision of adequate and feasible urban levels of public facilities and services.
- **LNP 9.1.** Encourage and facilitate regional-scale economic activities in UGAs which provide employment opportunities within the County.
- **LNP 9.2.** Encourage urban-scale and regional-scale commercial land uses in UGAs to provide goods and services that exceed the standards for rural commercial levels of service established by this plan.
- **LNP 9.5.** Encourage growth in the Tri-Area UGA commensurate with the appropriate level of existing urban public facility and service capacities consistent with adopted plans and interlocal agreements.
- **TRG 4.0.** Encourage land use types, mixes, and densities that promote efficient multimodal transportation systems.
- **EDP 6.8.** Direct new industrial/associated commercial development in the Glen Cove area to areas within the logical boundaries established under the provisions of RCW 36.70A.070(5)(d) while continuing to work with the City of Port Townsend, Port of Port Townsend, PUDs, economic stakeholders and economic development agencies regarding capital facility and land use.

Port Ludlow Master Planned Resort

Port Ludlow is designated Master Planned Resort (MPR), acknowledging that it is outside of a UGA but has more intense land uses than typical rural areas. It has a large residential community served by a Village Commercial Center. The Plan's goals and policies for the area focus on maintaining and enhancing Port Ludlow's recreational and community amenities and preserving the quality of life.

Relevant Port Ludlow goals and policies include:

- **LNP 14.5.** Encourage small-scale marine trades activities, in Port Hadlock, Port Ludlow, Nordland, and Quilcene.
- **LNG 23.0.** Maintain the viability of Port Ludlow as Jefferson County's only existing Master Planned Resort (MPR) authorized under RCW 36.70A.362.
- **LNP 23.3.** No new urban or suburban land uses will be established in the vicinity of the Port Ludlow Master Planned Resort.
- **LNP 23.4.** The total number of residential lots allowable within the MPR boundary shall not exceed the 1993 Port Ludlow FEIS total of 2,250 residential dwelling units.
- **LNP 23.6.** Support efforts to preserve and protect Port Ludlow's greenbelts, open spaces and wildlife corridors.

Pleasant Harbor Master Planned Resort

The Pleasant Harbor Master Planned Resort site is located approximately 1.5 miles south of Brinnon, on the Black Point Peninsula, on the western shores of the Hood Canal. The master planned resort zoning designation was adopted into the Comprehensive Plan in 2009. A Draft Supplemental EIS was issued on November 19, 2014 analyzing impacts of various development alternatives.

There are two primary alternative proposals being considered in the EIS for the 231 acre site. Each alternative includes various levels of development for a golf course, residential units, commercial area, resort amenities and natural area. Additional project requirements following the EIS and yet to be completed include Interior zoning, development standards/regulations, and a development agreement with County.

The 350-slip marina at Pleasant Harbor is not part of the EIS analysis. It is being re-developed under an existing Binding Site Plan.

Quilcene and Brinnon Rural Village Centers

Quilcene and Brinnon, designated Rural Village Centers, are located in rural areas that offer significant recreational and scenic amenities, including access to the Olympic National Park, Olympic National Forest and Hood Canal. Popular recreational activities in the area include boating, fishing, shellfish gathering, hiking, camping, birdwatching, and historical sites. These areas are gradually transitioning from a primarily natural resource-based economy to one that is also dependent on the tourism industry. Their commercial zones are intended to provide employment and business opportunities that make use of Highway 101's adjacency to the Olympic National Park. These areas also support the community goal of an extended care or assisted living facility to allow elderly residents to stay in the community. Also, the Quilcene Industrial Area accommodates light industrial uses.

Quilcene and Brinnon relevant goals and policies include:

- **LNG 4.0.** Establish and maintain the size and configuration of the county's Rural Village Centers and provide for the development of appropriately scaled commercial uses.
- **LNG 7.0.** Foster economic development in rural areas which is small-scale recreational or tourist-related and that relies on a rural location and setting.
- **EDG 8.0.** Promote the development of tourist and tourist-related activities as a provider of employment and business opportunities in Jefferson County.

Mason County Comprehensive Plan

The Mason County Comprehensive Plan, last updated in 2005 and with a planning horizon of 2014, includes the following chapters and elements:

1. Introduction
2. Planning Goals and Integrated Planning Policies
3. Land Use
4. Housing
5. Capital Facilities
6. Utilities
7. Transportation
8. Shoreline Management Program
9. Economic Development Element
10. Urban Growth Area Plan
11. Health and Human Services Element

Mason County Vision Statement

Mason County will remain a primarily rural county where residents will enjoy peace and quiet, privacy, natural views, and rural enterprise. Although rural character means different things to different people, aspects of it include: natural vistas, wildlife, and natural ecosystems; fewer restrictions and more privacy than in an urban area; the easy operation of resource based industries such as timber, mining and agriculture; and the close ties of family and community to the land.

The Urban Areas

The City of Shelton and the communities of Belfair and Allyn will serve as the County's principal economic, civic, and social centers. Each will have a core business area anchored by retail, service industries, government, and education facilities. Shelton will also hosts a multi-county medical industry that serves the Olympic Peninsula region, and regional retail centered in the City's Olympic Highway North area. The three urban areas will provide a strong employment and tax base.

The Rural Areas

Natural resources will continue to provide the foundation of the County's economy. Forestry, agriculture, aquaculture including shellfish and other fisheries industries, Christmas tree farming and mining will provide employment for County residents. The County's abundance of natural amenities including mountains, lakes, rivers, and wildlife will continue to support the County's thriving tourist industries, including Master Planned Resorts. The County's land use regulations will protect natural resource lands and industries against encroachment from incompatible, competing uses.

Housing

Residential growth within the County will be centered in Shelton urban area, the communities of Allyn and Belfair, and a new fully contained community. Mason County will offer a range of affordable rural and urban housing choices including single family, multifamily, and mixed-use. The Environment and Open Space Mason County Comprehensive Plan - April, 1996 (updated 2005)

Planning Goals

Mason County will protect the environment in a way which is compatible with the needs of a growing population. One focus will be watersheds and their water quality. The county will also conserve an open space network that will include wildlife habitat and corridors, greenways, estuaries, parks, trails and campgrounds. This system will help preserve the County's environment and rural character, support the County's tourism industry, and meet the recreation needs of County residents.

Shelton is the only incorporated city in the county, and Allyn and Belfair are the only UGAs. Three rural activity centers and nine hamlets exist in the County.

The Economic Development Element background information recognizes the impact of the Navy Shipyard in Bremerton on traffic. Some policies relevant to the JLUS include:

- **CWPP 1.1.** Designate Urban Growth areas around the incorporated city of Shelton and two unincorporated areas of Belfair and Allyn.
- **CWPP 1.4.** Encouraged mixed use developments, multi-family developments, employment centers, and other urban land uses are appropriate development to be encouraged within designated Growth Areas, in order to protect rural character in the remainder of the County.
- **CWPP 2.2.** Comprehensive plan policies will be designed to protect rural lifestyles and values.
- **CWPP 5.3a.** Establish a rural land use system that provides for continued vitality of limited areas of more intensive rural development. The categories of these areas include rural activity areas, hamlets, commercial/industrial areas, and tourist/recreational areas.
- **CWPP 5.1.** Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.
- **CWPP 8.2.** Maintain and enhance natural resource-based industries including productive timber, agriculture, mining and fisheries industries. Encourage the conservation of productive natural resources, and discourage incompatible uses. Assure that adjacent land uses do not contribute to the demise of the long term commercial forest and agricultural production lands and the resource based industries associated with these areas.
- **CWPP 1.5a.** Identify and prioritize open space areas, both urban and rural, which should be purchased with public funds or conserved through other public means such as conservation easements, life estates, and/or conveyance to a land trust. Assure that private property rights are protected. Through regulations and/or incentives, continue to allow low impact rural uses and densities in environmentally fragile areas designated as open space, consistent with critical area regulations.
- **CWPP 3.7.** Identify and encourage the preservation of lands, sites, and structures that have historical or archeological significance.
- **9.2.** The county shall consider alternatives for improving access and utilization of the existing Navy-owned rail corridor to expand rail freight service capabilities.

Zoning Regulations

Each of the jurisdictions within the study area contains zoning regulations that are required by GMA to be consistent with their comprehensive plans noted previously. Details on applicable zoning provisions are discussed within the JLUS compatibility analysis of Chapter 4.

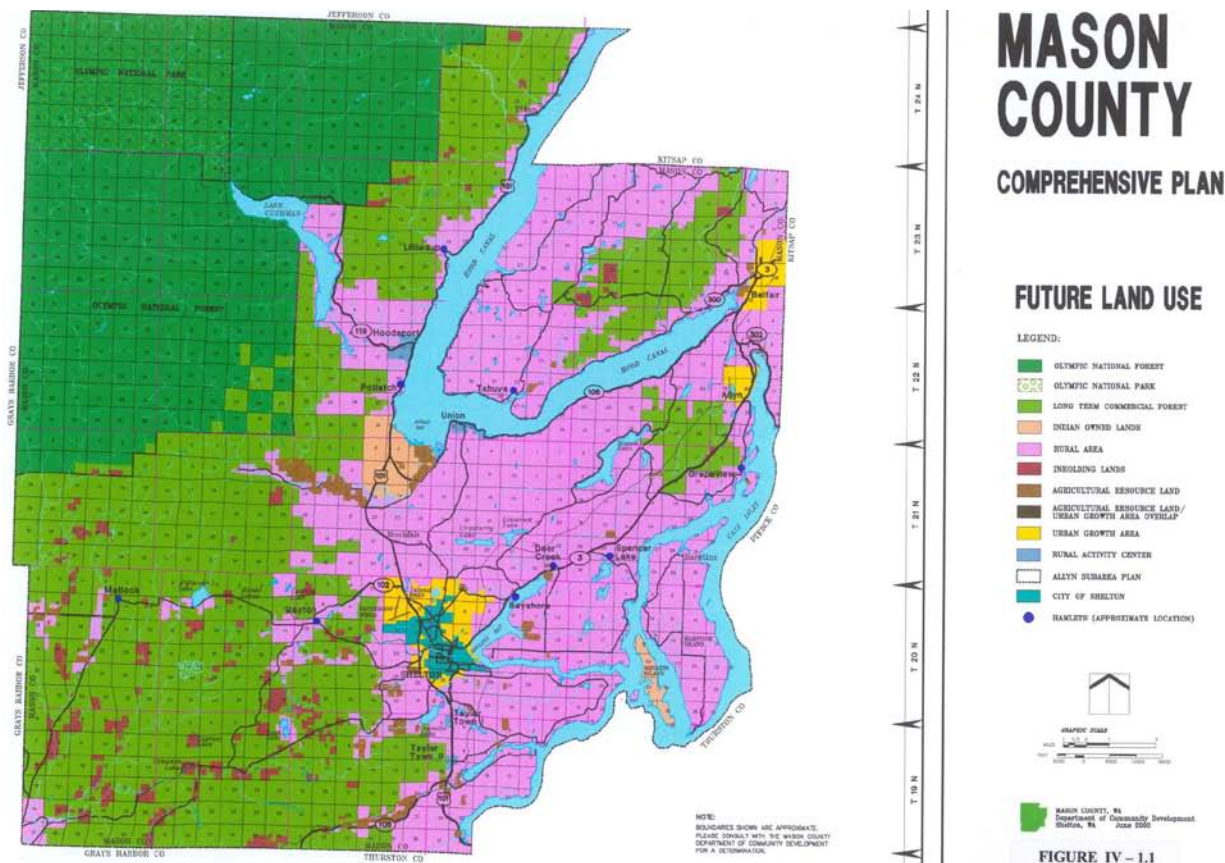


Figure 3.5. Mason County land use plan map (map credit: Mason County)

Shoreline Master Programs

Washington State’s Shoreline Management Act requires jurisdictions to manage shoreline uses to protect natural resources, provide public access to water, and plan for water-dependent uses. Working with the Department of Ecology, the jurisdictions delineate environment designations (i.e., zones for different shoreline uses) and develop local policies, regulations, and standards ranging from natural conservation to allowances for high intensity commercial. Any development in the shoreline jurisdiction (typically 200 feet inland from the ordinary high water mark) must mitigate any impacts on the environment. The jurisdictions are also required to prepare restoration plans identifying opportunities for environmental improvements to help the jurisdiction reach the “no net loss” of habitat functions goal. A map of Shoreline Environmental Designations can be found on page 129.

SMPs are based on regulations in the SMA and state guidance, but are tailored to the specific geographic, economic, and environmental needs of local communities. Under a jurisdiction’s SMP, no substantial development is permitted on the state’s shoreline without obtaining a permit from the local jurisdiction.

The Navy follows the Federal Coastal Zone Management Act, which alongside its own requirements, asks federal agencies to comply with the State program to the extent practicable. NBK and NAVMAGII also follow their Integrated Natural Resource Management Program (INRMP) to protect their shorelines.

The status of SMPs in the JLUS study area is summarized below.

Table 3.1. Status of local shoreline master programs: comprehensive updates

Town, City, or County	Ecology Region	Local Update ¹	State Review and Approval ²	Effective Date of State-Approved Program	Approved SMP documents ³ (all files are in PDF)	Notes
Bremerton	Northwest	Completed	Completed	December 2013	Bremerton SMP	Contact: (425) 649-4309 Misty Blair
Jefferson County	Southwest	Completed	Completed; Description of state review process	21-Feb-14	Jefferson County SMP	
Kitsap County	Northwest	Completed	Under way	24-Dec-14		Contact: (425) 649-7145 Joe Burcar
Poulsbo	Northwest	Completed	Completed Description of state review process	27-Feb-13	Poulsbo SMP Shoreline Designation Maps	
Port Townsend	Southwest	Completed	Completed	14-Feb-07	Port Townsend SMP	
Mason County	Southwest	Under way				
Port Orchard	Northwest	Completed	Completed Description of state review process	28-Mar-13	Final documents are being prepared by the local government	

1 During this step of the update process, the town, city or county updates their local shoreline master program based on public input. They prepare and send the draft program to the state Department of Ecology. Links to local SMP web page can be found in this column.

2 The state must approve local Shoreline Master Programs. During this step, the Department of Ecology reviews the draft local program. The Department of Ecology may approve the draft as submitted by the local government, approve the draft with required changes, or send the draft back to the local government for changes before approving it. If the draft is “Approved with required changes”, the program is sent back to the town, city or county for changes. The local elected officials must formally accept the changes before the program becomes effective. See state approval process for more information. Links to Ecology web pages can be found in this column.

3 Local governments are responsible for ensuring the state has the current version of their shoreline master program. If the final documents are not posted here, please contact your town, city, or county planning office for the most up-to-date copies of the shoreline master program.

Critical Areas

State law mandates local jurisdictions to classify, designate, and protect critical areas, i.e., “(a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas” (Washington State RCW 36.70A.030(5)). Protection and management of these critical areas are important to the preservation of ecological functions of the natural environment, as well as the protection of the public health, safety, and welfare of the community.

Wetlands. Any development proposal for a site containing a State Department of Ecology regulated wetland or its buffer is required to map the wetland, prepare a mitigation report, and outline erosion and sedimentation control measures. Generally, development is prohibited in the wetland and buffer, and the area’s condition must be retained as undisturbed or enhanced. When exceptions are allowed, the development must follow the EPA’s mitigation sequence: 1) avoid adverse impacts, 2) minimize adverse impacts if impacts are unavoidable, and 3) compensate for unavoidable adverse impacts which remain.

Fish and wildlife habitat conservation areas support federal, state, and local regulated species or habitats (see Endangered Species Habitat section above). Buffers and setbacks around these habitats must remain as undisturbed natural vegetation areas except where enhancement would improve its function. Careful consideration is given to stream crossings, trails, road/street repair and construction, pesticide use, and forest practices in the conservation areas and buffers.

Geologically hazardous areas are steep slopes, potential landslide, erosion, channel migration, and seismic hazard areas and are protected for human safety and environmental protection. Protection standards include drainage and erosion control, clearing and grading, vegetation retention, and buffers.

Flood Hazard areas are mapped by the Federal Emergency Management Agency (FEMA) and regulated by FEMA’s National Flood Insurance Program (NFIP). Development in these areas requires special permits to ensure buildings, their structural systems, materials, and utilities are resistant or resilient to flood damage. Among other building techniques, the base floor is required to be one foot or more above the base flood elevation, or for non-residential buildings, the lower area must be floodproofed. In floodways, new development is not allowed and any variance may not result in increased flood levels.

Critical Aquifer Recharge areas are places where groundwater is used for a community’s drinking water. These are protected to prevent pollution to potable water.

Climate change studies and developing regulatory requirements will create the need for flexibility to identify, address, and plan for impacts to critical areas and infrastructure.

Compatibility Analysis

Chapter

4



Joint
Land Use
Study

NBK & NAVMAGII

Photo credit: U.S. Navy photo by Mass Communication Specialist 3rd Class Ryan Riley, Flickr

Issues Introduction

The following sections describe issues identified by the Policy and Technical Committees, public workshop and online survey participants, and partner and stakeholder interviews. For each issue, this report:

- Describes the perception of the problem,
- Provides background information to fully understand and analyze the issue, and
- Offers potential tools and strategies to continue successful practices and enhance, expand, or create new practices to address the issue.

The issues are grouped in the following subsections:

- **Section 4.1 Communication and Coordination, on page 83.**
This section captures a range of communication and coordination issues that relate to many of the issues described in section 4.2 through 4.5.
- **Section 4.2 Adjacent Land Uses and Infrastructure Coordination, on page 89.**
This section addresses the interface between the Navy perimeter and adjacent land uses.
- **Section 4.3 Onwater and Shoreline Activities, on page 103.**
This section discusses how increasing boat and seaplane traffic in the waterways around naval bases and training ranges could compromise essential underwater testing operations, conflict with Navy vessel movements, and complicate security and public relations.
- **Section 4.4 Transportation, on page 115.**
This section explains how regional transportation routes, as well as local intersections and infrastructure, are functioning for the community and Navy.
- **Section 4.5 Natural and Cultural Resources, on page 127.**
This section elaborates on balancing environmental protection with economic development opportunities and preserving ecological or historic resources.

Communication and Coordination

Section 4.1

Good communication between the Navy, its neighboring jurisdictions, and the public is the key to proactively identify potential issues and address them. The Navy and its neighbors currently work well together and the numerous ongoing efforts are detailed in Chapter 5. However, there is room for some improvement in the following areas:

More effective communication from the Navy to jurisdictions and the public about operations and potential changes.

There may be a general lack of understanding about the Navy mission and local economic contribution as well as some misconceptions about what occurs on the bases by the general public. Though the Navy follows NEPA mandates and provides notice/takes input on major projects, this communication is project specific and at times not user-friendly or easy to access. Proactive communication about Navy plans is challenging for several reasons. Local bases and personnel have relatively limited control over headquarters decisions affecting base operations and, due to the nature of the mission, the amount of notice before such changes can be minimal. This can be difficult for jurisdictions, adjacent businesses, and the general public.

More effective communication to the Navy about proposed land use changes and major projects.

This issue is complex due to the number of jurisdictions and variety of compatibility concerns in the study area. (Note: Compatibility issues identified during the JLUS process are summarized in other sections of this chapter.) For example:

- There are no standard procedures to notice the Navy of proposed land use changes or major projects in the study area. For example, Kitsap County and the City of Poulsbo send notice NBK for all major projects and plan updates; the City of Bremerton sends notices to the Navy for projects near NBK-Bremerton; Jefferson County notifies NAVMAGII of projects triggering SEPA, related to boat/dock access, and marijuana operations; and the Navy does not currently receive notices from Mason County or Port Orchard.
- Further, if the Navy is sent all project notices indiscriminately, it is difficult and time consuming to identify projects of concern. On the other hand, jurisdictions do not have the resources to review all projects and identify/send those of specific concern to the Navy.

Communication issues that surfaced during the JLUS process

The following issues were identified through this project's online survey, community meetings, partner and stakeholder interviews, and/or by TC or PC members:

- Communication between NBK-Bremerton and the public, especially regarding drilling, noise, and carrier dockings;
- Communication between NBK-Bangor and the public, especially regarding traffic delays at the Hood Canal bridge;
- Communication between NAVMAGII and the public, specifically regarding potential risks and plans for emergency response in the area; and
- Increasing coordination with the City of Poulsbo, specifically regarding plans to potentially enlarge their UGA.

Maintaining and enhancing coordination on infrastructure planning, funding, and maintenance

Section 4.2 discusses the complexities of infrastructure coordination between the Navy bases and surrounding jurisdictions. Though there is a long history of communication and coordination to address infrastructure issues, there is room for improvement to ensure the systems will serve present and future needs of the bases and surrounding communities.

Analysis

Planning context

Kitsap County is the only study area jurisdiction with adopted policies addressing communication and coordination with federal agencies, including the Navy. These policies are listed in Chapter 3 on page 61. Other study area jurisdictions, however, have standards that require state, federal, and local agencies be notified of certain types of land use and development projects.

Existing practices

Navy/Tribal coordination: The Navy regularly engages with Tribal governments in the study area. They coordinate at multiple levels around numerous issues, such as: access to usual and accustomed (U&A) fishing grounds, cultural resource protection, water quality impacts, habitat enhancements, etc.

Navy/community coordination: At the local level, the Community Planning Liaison Officer (CPLO) serves as the Commanding Officer's primary resource to coordinate with jurisdictions, specifically their planning departments. Installations and jurisdictions also connect on multiple additional levels; e.g., public works departments to base public works, emergency services to base security and fire departments. NBK's Navy School Liaison Officer is the primary point of contact between the military installations, local schools, school districts, transitional families, and the community. JLUS participants noted that more effective communication about population influxes is warranted for school facility planning and housing.

Navy/regional organization coordination: NBK and NAVMAGII also actively participate in the following regional organizations that facilitate communication and coordination with Tribal governments and neighboring jurisdictions:

- **Kitsap Regional Coordinating Council.** NBK is an Ex Officio member of the Executive Board. The CPLO attends the Planning Directors Forum, which meets monthly "to share information, develop proposed policy recommendations for review by the Council's Executive Board and individual members, and collaborate on more efficient ways to provide services to residents throughout Kitsap County." The Navy also participates in the Council's two transportation committees (Policy and Action).
- **Jefferson Economic Development Council (Team Jefferson).**
- **Hood Canal Coordinating Council.**
- **Kitsap Economic Development Alliance.** The NBK Public Affairs Officer is part of the Executive Committee for the Board of Directors.
- **Peninsula Regional Transportation Planning Organization (PRTPO).** The NAVMAGII CPLO is a participant.

However, there are some regional and local planning entities which could benefit by inviting Navy participation.

Navy annual briefing: At the request of elected officials, coordinating councils, and other business and community organizations, NBK and NAVMAGII Commanding Officers present annual State-of-the-Station and topical presentations.

Emergency service coordination: The Navy and local service providers have a history of working together to provide emergency services. NAVMAGII and NBK have mutual aid agreements with surrounding jurisdictions to reinforce capabilities and share resources. In addition, NAVMAGII is incorporated in the Jefferson County Emergency Planning documents and conducts training and emergency response with mutual aid agencies regularly.

School District emergency planning is included in each County's Comprehensive Emergency Management Plan - see <http://www.kitsapdem.org/emergency-plans.aspx> and <http://www.jeffcoec.org/library.htm> for more information.

Public understanding

Misconceptions about Navy operations have surfaced and will continue to surface over time. These misunderstandings can unnecessarily perpetuate fear and confusion. This is exacerbated by post-9/11 security requirements that limit the public's ability to easily access the bases. See the table below for a short list of urban myths mentioned during the JLUS planning process.

Table 4.1. Urban myths about NBK and NAVMAGII

Myth	Information
Condemnation of Gregory Way properties.	There are no plans to condemn Gregory Way properties- this action would be funded by a Military Construction Project (MILCON) and there are no such projects being consider. Condemnation is considered a last resort for mission- critical needs and would require an extensive evaluation process with public notice as required by NEPA.
Secret submarine tunnels between NBK-Bangor and NAVMAGII.	These do not exist. There are no records of construction or environmental evaluation for such a project.
The Navy has not disclosed information about an accidental ordnance drop off NAVMAGII.	There are stringent requirements today that are intended to prevent accidents from happening, apply if they do, and require documentation and follow up to protect public safety. However, historic / WWII wartime practices were different and what may or may not have occurred by the military or anyone else traversing through the waterway is unknown.
NAVMAGII's emergency plan to respond to a ship fire is to push it into the bay.	There are multiple layers of safety protocols in place. Considerable improvements have been made over the years in storage and handling of munitions and modern ship design. The Port Townsend Bay "scuttling area" was officially disestablished in January 2010. Current emergency management and firefighting regulations and protocols require fighting shipboard fires dockside and these procedures are trained and practiced through the mutual aid agreements. There is no authority, process, plans, or means to scuttle a burning Navy ship in Port Townsend Bay.
The Navy is a major polluter, not held to the same standards as the private sector.	The Navy must meet federal requirements set by the EPA and other agencies, the National Environmental Protection Act, and the statutory obligations of State environmental law. Locally the Navy installations have consistently won awards for their environmental stewardship. Refer to Naval Environmental Impacts Section (page 136).
This Navy does not protect historic resources, not held to the same standards as the private sector.	The Navy must meet federal requirements set by the National Historic Preservation Act and works with the State Historic Preservation Officer to implement the act and meet obligations under Section 106.

Potential Strategies

1. Continue to participate as members or liaisons with the regional planning agencies to remain aware of land uses issues impacting the bases and vice versa and to facilitate compatible development (see Implementation Task D3 in Chapter 5).
2. Coordinate with the Washington Military Association on statewide military planning strategies; including the recent OEA grant related to the potential for reduced defense spending (see D2 in Chapter 5).
3. Collaborate to develop a streamlined system for each jurisdiction to identify and communicate potential projects of concern to the military. Map shared-interest planning areas that identify specific areas, projects, or design features (such as height) of potential concern. Work with jurisdictions to develop efficient processes to send notice to the military according to this map. As a starting point, areas and land uses of interest are detailed in the other sections of this chapter (see F3 in Chapter 5).
4. Consider adopting statutory notice requirements and identify areas where additional notice is appropriate and develop a draft map of compatibility review areas (see F1-F3, and F5 in Chapter 5).
5. Prioritize coordination and early CPLO involvement in efforts that could result in significant land use changes in areas of concern. This could include Comprehensive Plan or Shoreline Plan updates, UGA amendments, zoning changes, or major projects including utility and road expansions. Invite the Navy to join pre-application meetings for significant projects of potential concern (see B4-B8, C3, D3, E4, E5, and F1-F5 in Chapter 5).
6. Develop planning policies supporting coordination with the Navy in local jurisdiction comprehensive plans, shoreline plans, and other land use planning documents (see “Ongoing efforts” and all Implementation Tasks in “E. Local Government Comprehensive Planning” in Chapter 5).
7. Incorporate the JLUS planning process and recommendations into comprehensive plan updates within existing plan elements or as a separate military or Navy element (see E1 in Chapter 5).
8. Update elected officials and jurisdictions annually, when major projects are announced, or as requested on base planning, operations and anticipated changes. In addition to or in lieu of in-person updates, provide written updates and hard copy fliers. Provide notice and opportunity for comment to the JLUS Jurisdiction’s planning departments and other affected agencies (e.g., school districts) of significant land use changes (e.g., Commissary closings, gate or boundary location changes, shift changes). Analyze, coordinate, and mitigate any parking, urban design, transportation, or other impacts (see A1 in Chapter 5).
9. Undertake a community awareness campaign to proactively update jurisdictions and the public about military operations and major changes expected on the bases. As communication should be user friendly and easily accessible by the general public, the Navy should consider hiring a communications firm. Jurisdictions should continue to actively engage the Navy and provide forums that support this campaign (see A2 in Chapter 5).

- A. Establish an annual “planners training” with local government planners sponsored by the Navy to brief planners on current topics of interest such as Navy mission changes, encroachment concerns, and communication protocols to be used by the Navy and local jurisdictions for the benefit of the public.
 - B. Publicize annual state-of-the-station briefs to attract more community members.
 - C. Plan should utilize a variety of strategies including town-hall style public meetings, press releases, and user-friendly online tools. Hold a community workshop at least once every five years to explain base planning efforts and review community input and concerns.
 - D. The Navy and local jurisdictions and organizations should take a proactive approach to ‘myth busting’ to correct inaccurate information about navy operations. Collaboratively develop and advertise a running list of issues to dispel rumors and correct misconceptions. Continue to open bases for tours and community events as much as is feasible.
 - E. Periodically calculate and advertise the economic contribution of NBK and NAVMAGII on local communities. Track where personnel (military, civilian, and contractors) live and work.
 - F. Work with local emergency responders to share information about emergency response plans and mutual aid agreements.
10. Work with real estate interests and local jurisdictions and evaluate the authority and need for real estate disclosure form and disclosure requirements in target areas. Disclosures could help increase awareness of Navy operations and reduce potential future conflicts adjacent to bases and alongside in-water testing ranges (see F6 in Chapter 5). This could apply to:
- A. Properties abutting Navy installations. This would notify owners and potential purchasers of their adjacency to Navy installations, describe the types of operations likely to occur within those installations, and clarify property lines.
 - B. Properties along the Hood Canal and Dabob Bay shorelines. This would notify owners of underwater testing areas, use, and typical protocols.

See Section 4.2 Adjacent Land Uses.

See Section 4.3 Onwater and Shoreline Activities.

Adjacent Land Uses and Infrastructure Coordination

Section 4.2

There are a number of compatibility and coordination issues that have been identified during the JLUS process associated with Navy base fence lines and the interface with surrounding perimeter area land uses. They include:

- Land use compatibility around base perimeters,
- Explosive safety quantity distance (ESQD) arcs,
- Land use compatibility around Navy transportation routes,
- Building heights near the NBK-Bremerton perimeter,
- Coordinating infrastructure planning, development and maintenance, and
- Private structures built on Navy-owned property within base perimeter areas.

Land Uses around Installations

Increases in the intensity of land uses surrounding all installations have the opportunity to increase conflicts with neighbors. Also, accommodating new missions, security requirements, contractor leases, environmental protection regulations, and vehicular parking can be complicating factors associated with base perimeter compatibility. Perimeter land use conflicts could lead to the following:

- Compromise Navy's ability to conduct training exercises (or modify operations),
- Complicate security monitoring, and
- Greater opportunity for noise, light, glare, traffic, and overflow parking impacts on neighboring populations.

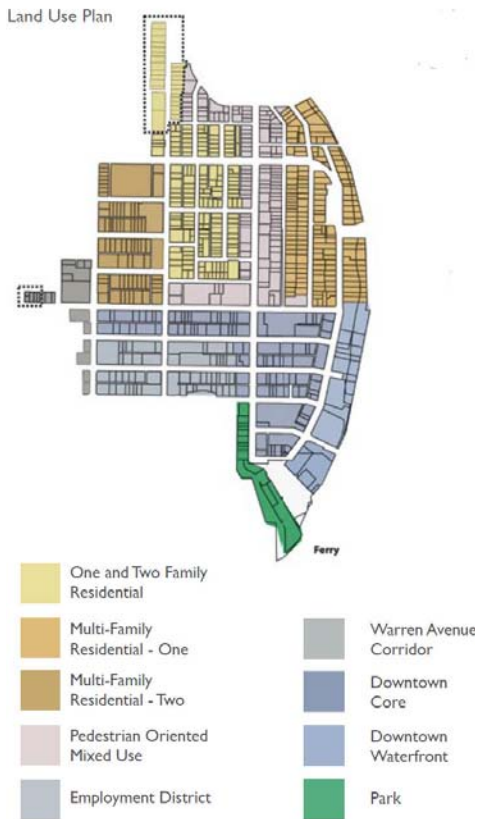


Figure 4.2.1. Bremerton Downtown Subarea Plan land use designations (map credit: City of Bremerton)



Figure 4.2.2. Vision for Downtown Bremerton per the 2007 Downtown Subarea Plan (map credit: City of Bremerton and VIA Architecture)

The base perimeter issue varies by installation. While applicable city and community profiles are discussed in Chapter 3, the most notable base perimeter land use areas are described below. Transportation corridor land use issues are addressed in the Transportation Section. Land use issues associated with on-water resources are addressed in the On-Water and Shoreline Activities section below.

Analysis

NBK-Bremerton

NBK-Bremerton resides in the urban context of Downtown Bremerton. Downtown is designated as a Metropolitan Growth Center by PRSC’s Vision 2040 and as such is anticipated to accommodate a significant part of Kitsap County’s growth. As this growth occurs, pressures for the installation to modify operations increase. The installation’s location adjacent to downtown increases the chances that noise, light, glare, traffic, and overflow parking associated with base operations may impact neighbors.

The Downtown Subarea occupies the northeast perimeter of NBK-Bremerton. Bremerton adopted an award winning Subarea Plan for Downtown in 2007. Figure 4.2.1 highlights the land use designations in downtown near the NBK-Bremerton perimeter. Key perimeter districts include:

- **Downtown Core.** The most fully developed area of the City is the hub for business, communications, office, and hotels. The core also features a number of large surface parking lots that are frequently used by Navy personnel and employees and other downtown users. The plan envisions ambitious mixed-use growth in the core to help achieve a “vital, 24 hour a day Downtown. The plan includes design principles and adopting regulations associated with creating a comfortable walking environment, promoting growth while respecting historic resources, and preserving views.
- **Downtown Waterfront.** This district lies to the north/east of the ferry terminal. Key principles are an active streetscape, high quality public open space, a comfortable walking environment, and buildings featuring the tower-podium concept. (See Figure 4.2.2)
- **Western Harbor Employment District.** This district lies immediately north of the NBK-Bremerton and now features an imbalance of uses with a high concentration of surface parking lots to accommodate NBK-Bremerton workers and others who commute to Downtown. The Plan’s vision is to expand the existing industrial clusters located at the Navy base. One consideration was to explore a second large consolidated parking garage in the area.

As Figure 4.2.3 to the right implies, a tremendous amount of investment has occurred in the downtown/NBK-Bremerton perimeter area over the past 15 years (including the time since the plan’s adoption). But the large expanses of surface parking areas that remain illustrate that there are still tremendous development opportunities in the blocks of downtown that surround the NBK-Bremerton.

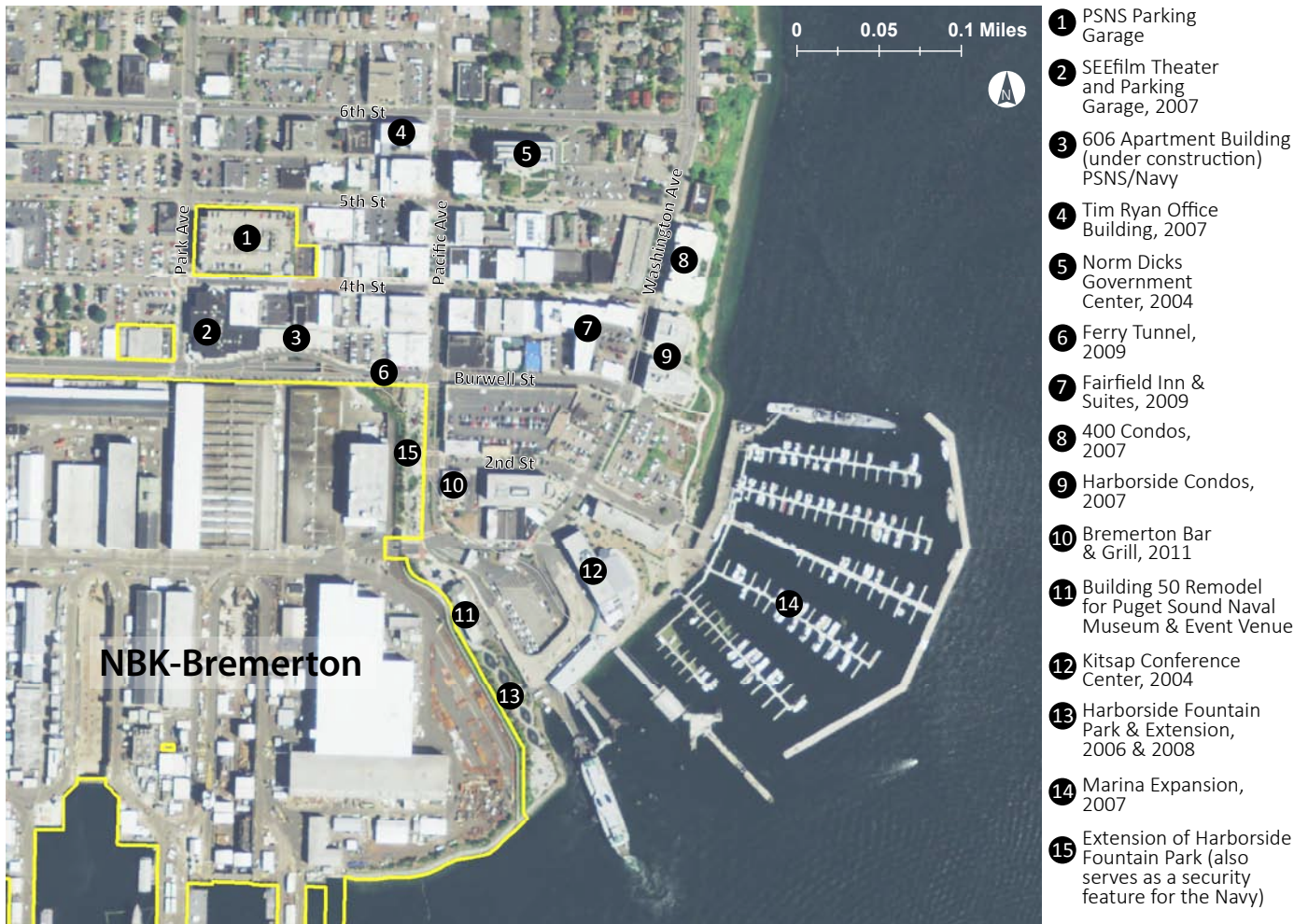


Figure 4.2.3. Recent physical improvements in downtown Bremerton

Figure 4.2.6 on the next page illustrates the zoning context of the larger NBK-Bremerton perimeter. Other than a sliver of Limited Commercial zoned land in the half-block south of Burwell Street between Chester and Warren Avenues (which contains the Bremerton Police Station), the northern perimeter abuts a long established single family area. Both the Comprehensive Plan designation and zoning support the preservation of this area as a single family neighborhood and thus significant changes are not likely. The close proximity of this area to the base and the broad range of uses occurring within the base, however, make this neighborhood sensitive to changes and activities that occur on the base. Several blocks of the neighborhood lie immediately across an alley (Mahan Avenue) from the base fence line.

The Charleston commercial district (zoned DCC, District Center Core) lies to the northwest of the base perimeter and Industrial Park zoning lies to the west opposite Callow Avenue S (near the Farragut Avenue entrance). A low density single family area sits to the west of Charleston Boulevard (SR 304).

New construction at Navy installations is reviewed under NEPA. The NEPA process includes public outreach and disclosure.



Figure 4.2.4. NBK-Bremerton perimeter context near the Naval Gate (looking southeast) (image credit: Google Earth)



Figure 4.2.5. NBK-Bremerton and Downtown Bremerton (image credit: Google Earth)

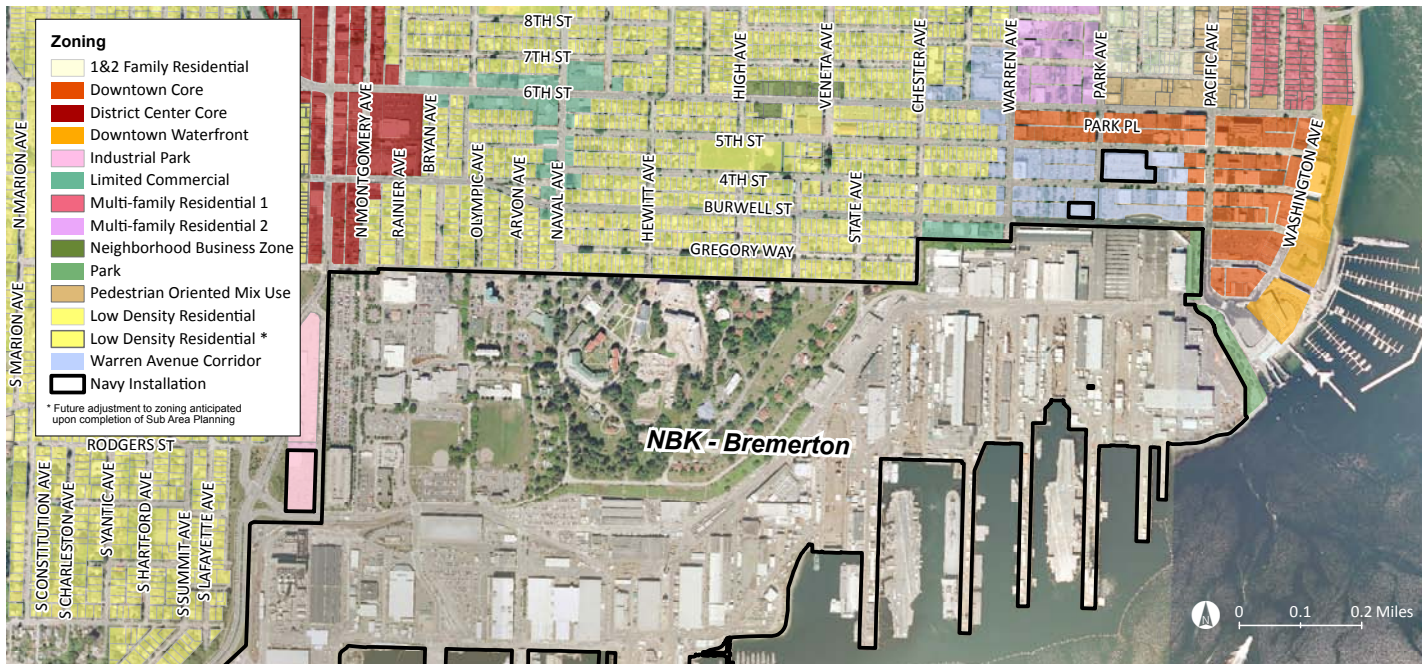


Figure 4.2.6. City of Bremerton zoning around NBK-Bremerton



Figure 4.2.7. NBK-Bangor and Vinland context (aerial photo credit: Google Earth)



Figure 4.2.8. NBK-Keyport context with surrounding Keyport community (aerial photo credit: Google Earth)

NBK-Bangor and Vinland

The community of Vinland resides adjacent to the northern boundary of NBK-Bangor along Hood Canal. Vinland is zoned Rural Residential, classified by Kitsap County as a Type 1 LAMIRD (Limited Area of More Intense Rural Development), and not anticipated to change much over time. With the community’s close proximity to the base, however, Vinland residents are sensitive to traffic and noise generated by construction activities at the Navy waterfront area. As a courtesy, Navy personnel issue a press release before operations and certain construction activities.

NBK-Keyport

The community of Keyport sits adjacent to NBK-Keyport. Keyport is an unincorporated Kitsap County community classified as a Limited Area of More Intense Rural Development (LAMIRD) and a rural village. About 90% of its 61 acres are residential and it features less than 2 acres of supporting commercial, service, and light industrial uses. Pursuant to the area’s Comprehensive Plan designation and zoning, substantial changes to the community are not anticipated. A subarea plan was developed for Keyport in 2007 (see “Kitsap County Subarea Plans” on page 64 for relevant goals and policies).

Due in large part to the enclosed nature of NBK-Keyport activities and the modest scale of the base and surrounding communities, no significant land use conflicts have occurred along this perimeter.

Potential Strategies

1. Continue to publish press releases prior to explosive ordnance disposal (EOD) operations (see Implementation Tasks A1 and A2 in Chapter 5).
2. (Navy) Provide notice and opportunity for comment to the JLUS Jurisdictions' planning departments and other affected agencies (e.g., school districts), of significant land use changes (e.g., PX/Commissary closings, gate location changes, shift changes) (see A1 and A2 in Chapter 5).
3. As part of an effective planning process encourage Navy participation with associated processes/boards/organizations prior to the jurisdiction approving plans, land uses, regulations, or the funding of "growth inducing" infrastructure, including utilities and roads (see C2, E1, and F1-F3 in Chapter 5).
4. As part of an effective planning process encourage Navy participation with associated processes/boards/organizations prior to taking action on or proposing amendments to existing UGAs (see E1 in Chapter 5).

See related communication and coordination strategies in Section 4.1 on page 86.

See related building height strategies on page 99.

See related Bremerton parking strategies in Section 4.4 on page 122.

Explosive Safety Quantity Distance Arcs

An Explosive Operating Location (EOL), such as a magazine, transfer point, or operating building will normally cast what is termed an Explosive Safety Quantity Distance (ESQD) arc, or "explosive arc". The ESQD arc size and shape depends on the function of the EOL and the quantities/types of explosives permitted in the EOL. ESQD arcs are protected from disclosure by federal statute as disclosure may pose a risk to national security.

During the JLUS process, members of the public expressed concern that area outside base boundaries were within explosive arcs. In accordance with requirements set by Naval Ordnance Safety and Security Activity, NAVMAGII or NBK ESQD arcs do not extend over any inhabited areas. No portion of any communities neighboring NBK or NAVMAGII is within any explosive arc.

Land Uses near Transportation Routes

Navy railway lines and freight routes provide a critical function to the Navy mission. Land use and development activity have the potential to compromise the function of these routes to delay shipment and pose possible safety risks. These routes are also important to the livability of communities and landowners that surround them, and thus, the Navy's use of these corridors has the potential to impact surrounding land uses.

Analysis

Naval Base Kitsap Railway

NBK's 77 mile railway (of which 48 miles is off-base) crosses Kitsap and Mason Counties (see Figure 2.9 in Chapter 2 for railway location). The main line extends from Shelton northeasterly up the Kitsap Peninsula along a route that generally follows the State Route (SR) 3 corridor to the Puget Sound Industrial Center-Bremerton and then splits north to NBK Bangor and northeast to NBK Bremerton. This railway is owned by the Navy and maintained by Puget Sound & Pacific Railroad (PSAP). Within Mason County, the majority of the land along the route is designated Rural. Other designations between the City of Shelton and the Kitsap County line are Long Term Commercial Forest and the Urban Growth Areas of Belfair and Allyn. Portions of the railway in Kitsap County traverse a great variety of land uses areas, including the large Puget Sound Industrial Center- Bremerton, Gorst, Bremerton, Silverdale, and Rural Residential lands between the designated Urban Growth Areas. There are a number of compatibility issues that have been brought up in this study:

- Increases in development intensity in the areas surrounding the railway have the potential to create land use conflicts. This could include more easement requests, trespassing, and environmental impacts.
- Increasing demands for rail uses in the right-of-way. Mason County includes a Comprehensive Plan Policy (9.2) that states: "The County shall consider alternatives for improving access and utilization of the existing Navy-owned rail corridor to expand rail freight service capabilities."
- Community interest in use of the right-of-way as a walking and cycling trail may complicate transit operations and security monitoring. Moreover, in many areas of the Navy right-of-way there is not sufficient width to safely offset a trail from the railway.
- The railway and its bridges are highly visible to the surrounding community and can impact the visual quality of the surrounding area. Overcrossings are frequently "tagged" with graffiti, yet infrequently painted over and cleaned up.
- For impediments within the right-of-way, see "Structures on Navy Property" on page 102.
- The Silverdale UGA is an area that's projected to grow substantially over the next 20+ years. Coordination with the Navy on changes to land use designations and zoning for properties adjacent to the railway will be particularly important in maintaining the function of the existing railway.

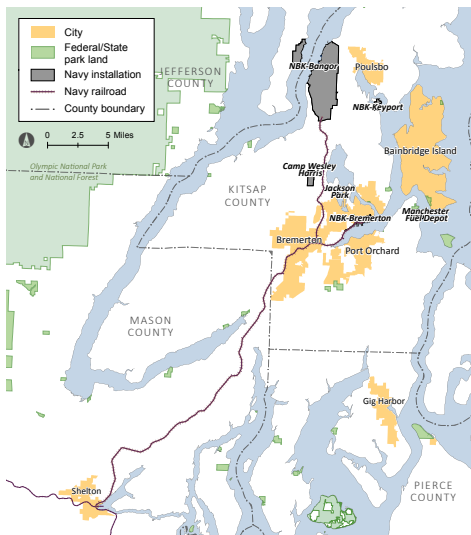


Figure 4.2.9. NBK's railway stretches from Shelton to NBK-Bremerton and Bangor (see page 16 for a full size map).

Freight Route used by Manchester Fuel Depot

Trucks servicing Manchester Fuel Depot must currently travel a designated route through Manchester's Village Center. Manchester is relatively dense due to its historic platting pattern set in the early 1900s and its Limited Area of Intense Rural Development (LAMIRD) zoning. Manchester is Kitsap County's largest LAMIRD encompassing over 1,000 acres and approximately 6,000 residents. Figure 4.2.10 illustrates the zoning designations and development patterns along the existing freight route.

As the area develops, more people may be impacted by the 24-hour fueling operations because of noise, light pollution, and truck traffic. In addition to land use intensity, uses that house vulnerable populations (i.e., schools, daycares, hospitals, and senior centers) pose compatibility challenges for the freight route.

A recent Navy study conducted while replacing their fuel tanks investigated designating alternate freight routes to minimize impact on the local community. The proposed freight route (see Figure 4.2.11 below) would allow fuel truck traffic to bypass the more intense land uses associated with the Village Center, traveling north on Woods Road E/SE, then east on E Beaver Creek Road. This route would require turning radius improvements at the Woods Road E/E Beaver Creek Road intersection and widening of shoulders at certain points in order for the route to be feasible.

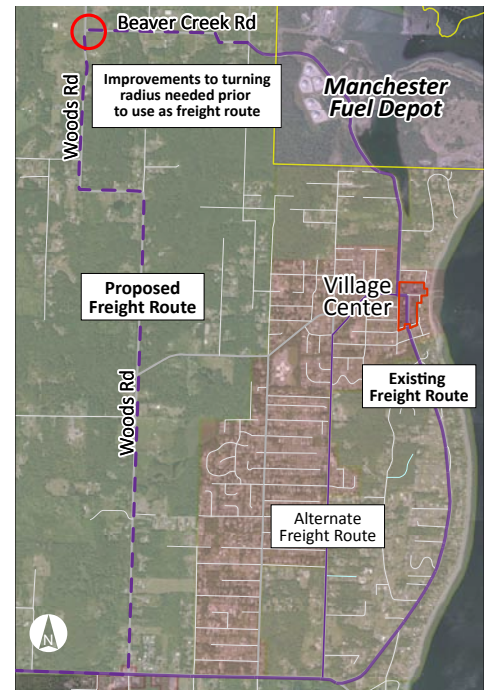


Figure 4.2.10. Existing and proposed freight route used by the Manchester Fuel Depot



Figure 4.2.11. The freight route used by the Manchester Fuel Depot travels through the middle of the Manchester community (image credit: Google Earth)



Figure 4.2.12. Pedestrians on Ness' Corner Road (SR 116) west of the freight route

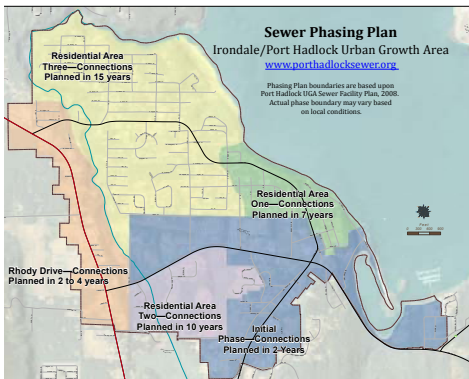


Figure 4.2.13. Port Hadlock-Irondale UGA sewer phasing plan

Freight Route used by NAVMAG Indian Island

NAVMAGII relies on a WSDOT/PRTPO designated freight route that connects Indian Island with Kitsap Peninsula and NBK installations. This route is used to ship supplies, personnel, and ordnance. The route includes, from Indian Island, Portage Canal Bridge and SR 116, Chimacum Road, SR 19, and SR 104. This route travels through the community of Chimacum and the Port Hadlock-Irondale UGA (see Figure 4.2.14). The UGA includes 1,320 acres and a population of approximately 2,829 (U.S. Census 2010 plus the projection to 2013). While the area is now served by septic and drainfields, a centralized sewer facility has been designed which will serve the UGA. Both inside the UGA and in the surrounding rural zones, urban levels of development are planned to occur when this sewer service is made available. Construction of the sewer facility may begin in a few years (Figure 4.2.13 for sewer phasing).

Figure 4.2.14 illustrates the freight route and the intended zoning of the Port Hadlock-Irondale UGA and surrounding rural areas. This zoning would apply as sewer infrastructure is completed. The Port Hadlock commercial core centers around the four-way stop intersection of Chimacum Road and SR 116. The freight route follows Chimacum Road southward and out of the UGA and into Chimacum (a designated LAMIRD), avoiding a concentration of commercial uses along SR 19 within the Port Hadlock-Irondale UGA. The County is beginning to plan the Rick Tollefson Memorial Trail, a bicycle and pedestrian trail that would serve major destinations in the UGA (conceptual ideas illustrated in Figure 4.2.14).

Physical changes to the freight route (roadway improvements), the intensity of development adjacent to the freight route, and the type of development adjacent to the freight route have the potential to impact the ability of commercial users and the Navy to safely transport materials along this route. Uses that house vulnerable populations (i.e., schools, daycares, hospitals, and senior centers) and high density uses pose potential compatibility challenges for the freight route.

Potential Strategies

1. Include Navy transportation routes and associated issues and safety standards in the local comprehensive plans. Strive to maintain a Level of Service on the designated routes consistent with Comprehensive Plan policies (see Implementation Task E6 in Chapter 5).
2. Indicate Navy transportation routes in Peninsula Regional Transportation Planning Organization (PRTPO) transportation plans (See D1 in Chapter 5).
3. Conduct a design study to identify needs for the alternative freight route used by Manchester Fuel Depot and designate the new route as a freight route. A design study will allow the community to assess the feasibility of and the need for alternative routes for military freight and to identify areas where concentrations of "vulnerable populations" (e.g., schools, daycare facilities) should be avoided (see D1 in Chapter 5).
4. Consider adoption of a "freight transport overlay corridor," in order to (a) maintain safe military freight transport; (b) protect public safety/quality of life; and (c) meet bike/pedestrian, urban design, and planning objectives. Such an overlay may limit the intensity and certain types of uses such as schools, daycares, hospitals, senior centers, along designated freight routes (existing and proposed) if the adopting agency sets restrictions for the overlay area (see F4 and F5 in Chapter 5).











See "Freight Route used by NAVMAG Indian Island" on page 126 for related strategies.

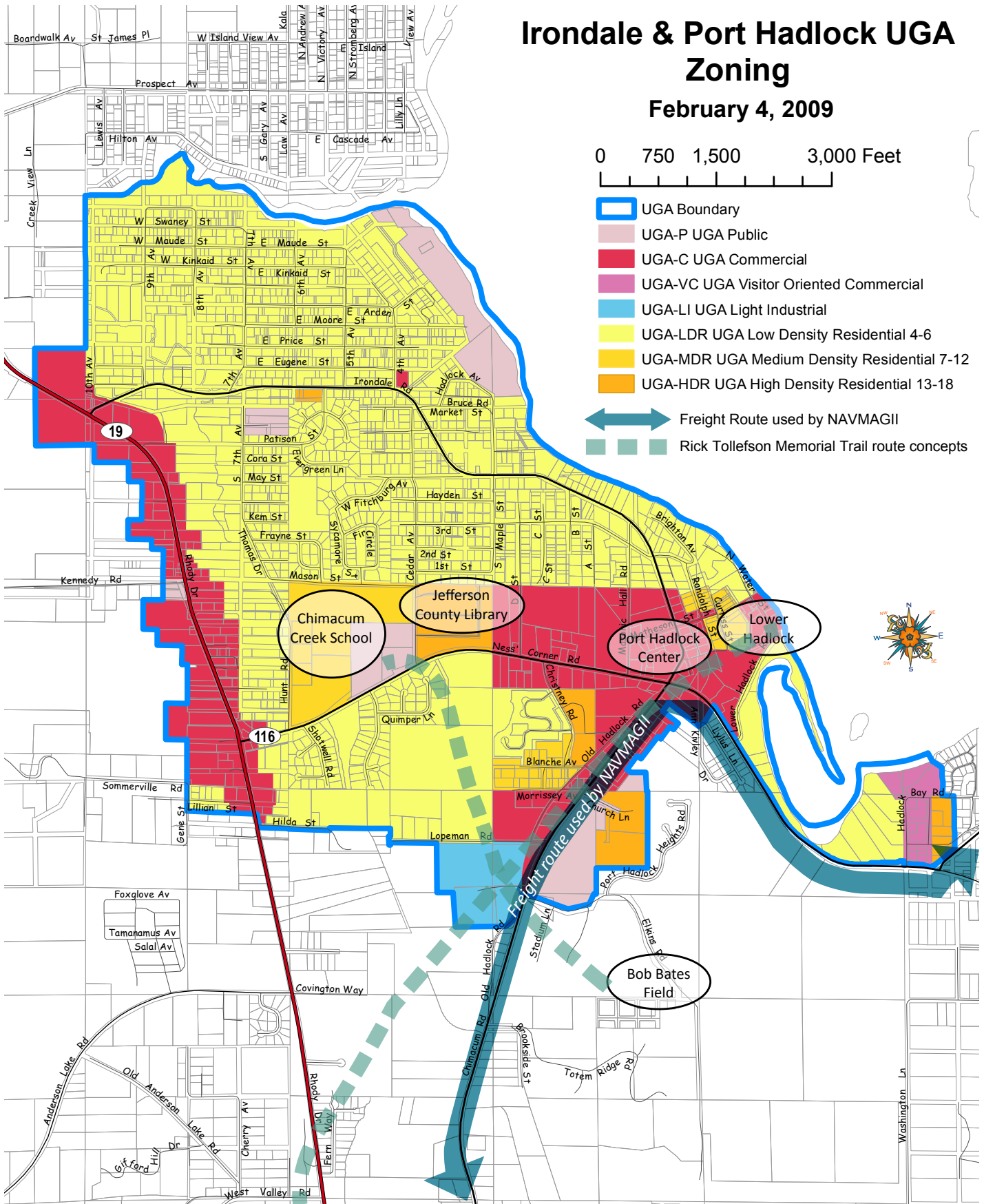
Also see page 86 in Section 4.1 for related communication and coordination strategies .

Irondale & Port Hadlock UGA Zoning

February 4, 2009

0 750 1,500 3,000 Feet

-  UGA Boundary
-  UGA-P UGA Public
-  UGA-C UGA Commercial
-  UGA-VC UGA Visitor Oriented Commercial
-  UGA-LI UGA Light Industrial
-  UGA-LDR UGA Low Density Residential 4-6
-  UGA-MDR UGA Medium Density Residential 7-12
-  UGA-HDR UGA High Density Residential 13-18
-  Freight Route used by NAVMAGII
-  Rick Tollefson Memorial Trail route concepts



e: Tri-AreaUGA Zoning.mxd
2009 Jefferson County GIS

Figure 4.2.14. Freight route used by NAVMAGII through the Port Hadlock-Irondale UGA (base map credit: Jefferson County)

Building Heights around NBK-Bremerton

Downtown Bremerton has transformed over the past 10 years from a relatively small Navy town to a dynamic urban center. It is designated as a Metropolitan Growth Center by PRSC's Vision 2040 and as such is anticipated to accommodate a significant part of Kitsap County's growth. This transformation includes increased pressure for multi-story redevelopment in the areas close to the NBK-Bremerton fence-line. In many areas of Bremerton this redevelopment and multi-story buildings are compatible with Navy operations. However, in areas immediately adjacent to the fence-line, such development could complicate security monitoring and create line of sight issues into sensitive areas of NBK-Bremerton.

Analysis

Figure 4.2.15 illustrates Downtown zoning adjacent to NBK-Bremerton. Highest potential height incompatibility areas are along the southwest perimeter and the northeast Downtown perimeter.

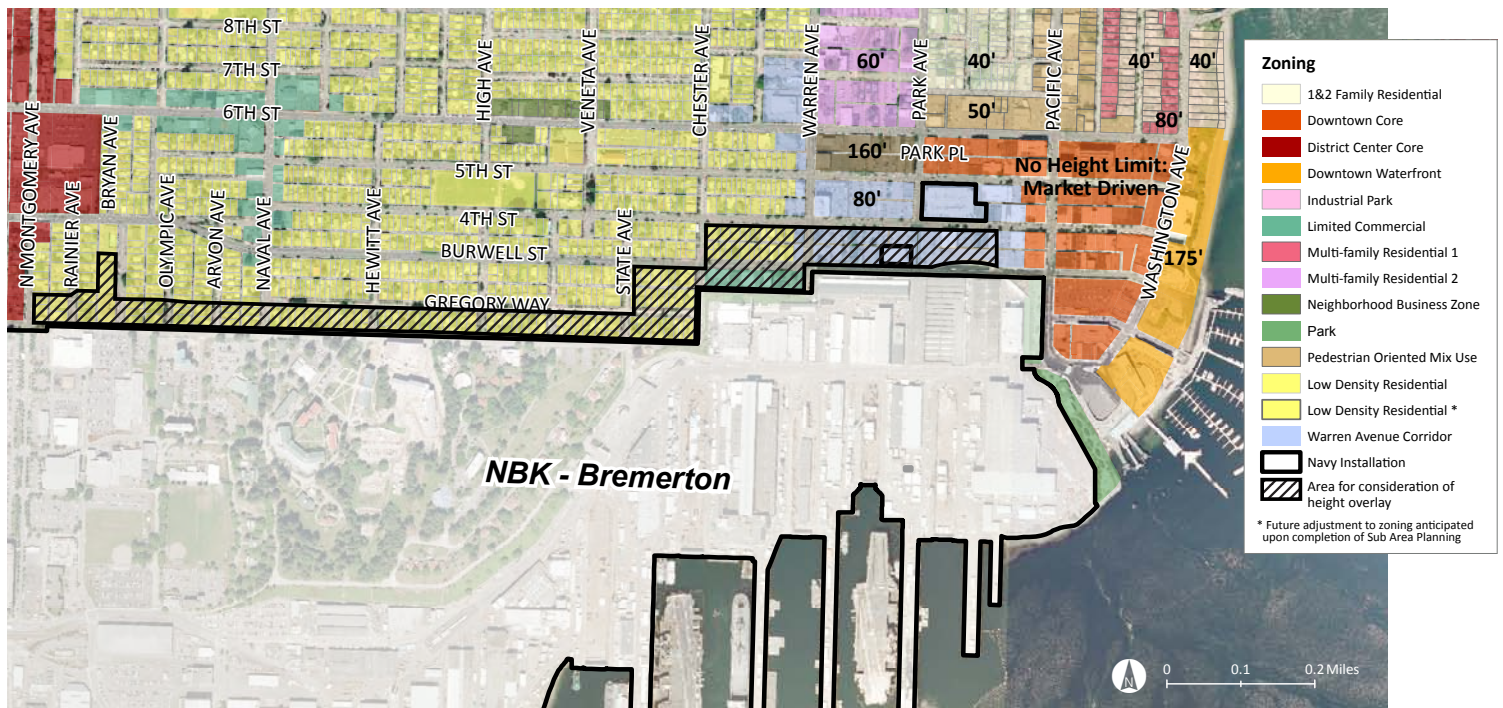


Figure 4.2.15. Conduct a detailed analysis examining current and possible future views into the Navy base from buildings built at current height limits in order to identify areas appropriate for a special reduced height overlay



Figure 4.2.16. Tall buildings close to the NBK-Bremerton fence line could complicate security and create line-of-site issues into sensitive areas of NBK-Bremerton

See related communication and coordination strategies in Section 4.1 on page 86.

Potential Strategies

1. Survey areas of concern and properties with the potential to pose line of sight issues. Include topographic, development capacity, and existing and potential building height data (see Implementation Task C9 in Chapter 5).
2. Coordinate with the Navy, who acknowledges Bremerton's higher densities in its downtown core, and consider reducing height limits in areas of concern based on findings from Strategy 1 above (see F5 in Chapter 5).
3. Continue to participate in City of Bremerton planning efforts and monitor proposed code changes and development projects (see F1-F3 in Chapter 5).

Infrastructure Coordination

The Navy often shares infrastructure elements with surrounding jurisdictions due to the context of the installations and the interconnected nature of water, sewer, electrical, and stormwater systems. Coordination between the Navy and applicable governmental agencies is important for several reasons, including basic public service provisions, cost-sharing, infrastructure maintenance, and emergency management.

Analysis

While infrastructure coordination is essential for all of the installations and surrounding jurisdictions, the issue is most important in Bremerton where city and shipyard uses and activities are concentrated in a relatively small area. There are a large number of easements that cross the NBK-Bremerton perimeter, with ownership often being difficult to determine. While this JLUS will not delve into the specific details of the easements and their locations, there is a clear need for sharing of information beyond an ad-hoc basis.

NBK-Bremerton

The City of Bremerton and the Navy have a complex relationship around management of water, sewer, and stormwater, as some base utilities are served by City systems and some City utilities are located within base boundaries. The City and Navy have long coordinated utility plans and improvements, with the most recent efforts being their respective water systems plans. The City cites the following current issues:

- Saltwater intrusion into pipes on Navy property,
- Navy plans for emergency fire flow (on-site water storage),
- Plans for water filtration system (capacity to handle storm surface runoff), and
- City access to infrastructure on Navy property (most notably under Montgomery Avenue).

NBK-Bangor and Keyport

No significant infrastructure coordination issues associated with NBK-Bangor or Keyport were reported.

NAVMAG Indian Island

The infrastructure system and context in and around NAVMAGII has its own unique challenges, including its island setting and relationship with Marrowstone Island. While there are no notable conflicts, the infrastructure's one-way system and lack of redundancy poses a risk of interruption to both islands and requires close coordination and good planning efforts between the Navy and the local public utilities district. Notable infrastructure components and issues:

- Water infrastructure – provided by a single main line that also supplies Marrowstone Island,
- Power infrastructure is above and below ground along Highway 116,
- Power infrastructure planning needs for both Indian and Marrowstone Island, and
- Other utilities – future plans for these also follow highway.
- Potential climate change impacts to infrastructure



Figure 4.2.17. S Montgomery Avenue is a major utility corridor.



Figure 4.2.18. NAVMAGII's island setting necessitate good coordination with surrounding communities on infrastructure and utilities.

Potential Strategies

1. Formalize ongoing coordination protocols between the Navy and its civilian partners and continue to evaluate the status of shared facilities and services in relation to Navy operations, facility capacity, funding, compliance, and monitoring; report findings and recommendations to governing bodies and Navy officials (see Implementation Task C6 in Chapter 5).
2. Explore opportunities for sharing existing databases and mapping files to facilitate strategic planning efforts and reduce gaps and redundancies regionally; including digitized Public Works Department utility lines and mutual access agreements (see C7 in Chapter 5).
3. Continue the comprehensive infrastructure assessment and repair prioritization (see C6 in Chapter 5).
4. Seek creative opportunities to fund utility upgrades (see C6 in Chapter 5). This could include:
 - A. Prioritizing a comprehensive list of utility improvements and advocating for inclusion in appropriate military construction (MILCON) projects.
 - B. Partnering (Navy, City, and the Public Utility District) to improve shared water and wastewater utilities. Explore opportunities for both agencies to procure federal or other grants for these projects.
 - C. Applying for the Department of Energy's Energy Savings Performance Contracts (ESPC). This funding mechanism allows federal agencies to obtain energy efficient technologies without committing capital funds. Contractors fund, install, operate, and maintain the energy efficient upgrade products and are paid back with a portion of the annual cost savings.
 - D. Packaging utilities improvements into a state of the art stormwater low impact development (LID) project to generate grant or partner funding.

See related communication and coordination strategies in Section 4.1 on page 86.

Structures on Navy Property

There are a number of locations where adjacent property owners have built structures on Navy-owned property. While this may have safety implications depending on the size, location, or nature of the structure, it's largely a property and communications issue.

Analysis

The issue occurs along the NBK-Bangor and Keyport perimeters and along the Navy railroad right-of-way. The Navy must regularly inspect these perimeters for security purposes:

1. Base perimeter locations that abut private property. Base fence-lines are typically built inside the property line, often leaving the impression to adjacent property owners that the land between their property and the perimeter fence is theirs. In some cases, improvements and structures have been mistakenly developed on Navy property in these areas. In many cases the Navy includes a setback from the property line for construction of fences to allow inspection and maintenance on both sides of the fence.
2. Along Navy Railroad rights-of-way. NBK has 77 miles of railway in Kitsap and Mason County and there are a number of sites along the railway where adjacent property owners have mistakenly built structures or other improvements within the right-of-way. Navy Real Estate and Counsel's office routinely work with these owners to resolve these issues where structures or impediments have been constructed on federal property. Many of these incidents have resulted from construction by land owners without conducting a proper survey.

Potential strategies

1. Continue to pursue actions that address encroachment (see Implementation Task C8 in Chapter 5):
 - A. Ensure local jurisdictions have GIS layer for survey data for federal property to review against building applications.
 - B. Install fence posts and "No Trespassing" signs in applicable areas.
 - C. Improve security of track and trains. If resources are available, install fencing along rail right-of-way in targeted areas.
 - D. Work with adjacent property owners to respect property/railroad boundaries.
2. Work with the real estate community to increase awareness about the location of right-of-way and property lines. Real estate disclosures are a tool that might be considered for properties adjacent to Navy right-of-way and property lines (see F6 in Chapter 5).

Onwater and Shoreline Activities

Section 4.3

Increasing boat and seaplane traffic in the waterways around Navy installations and training ranges could compromise essential Hood Canal and Dabob Bay underwater testing operations, conflict with Navy vessel movements, and complicate security and public relations. Water traffic issues in Hood Canal and Dabob Bay and surrounding NAVMAGII are summarized below.

Hood Canal and Dabob Bay

Analysis

The Navy has conducted underwater testing in the Puget Sound since the 1950s. Today, the Navy operates within the Hood Canal Military Operating Area and Dabob Bay Range Complex noted in Figure 4.3.1. These areas support submarine testing prior to deployment and numerous undersea vessel, weapon, and equipment research, development, testing, and evaluation (RDT&E) activities. Dabob Bay's quiet, deep, and cold water provides the ideal environment for acoustically-sensitive testing. This asset, if lost, would be virtually impossible to replace.

Some of the Navy's underwater testing depends on quiet waters. Noise generated by even one boat can invalidate results and waste resources – a significant issue for tests that can cost approximately \$250,000 each. The Navy currently schedules testing activities to avoid peak boating times (e.g., shrimping season); however, continued increases in boat traffic could drastically limit the overall utility of the ranges, upon which NBK's mission depends.

Increasing onwater traffic could compromise essential Hood Canal and Dabob Bay underwater testing operations, conflict with Navy vessel movements, and complicate security and public relations.



Figure 4.3.2. USS Ohio in Hood Canal (Photo credit: MCCM Jerry McClain)



Figure 4.3.3. Onwater activity near Brinnon (Photo credit: superyeadon, Flickr)



Figure 4.3.4. Quilcene marina and oyster hatchery tanks (Photo credit: Josh Forest, Flickr)

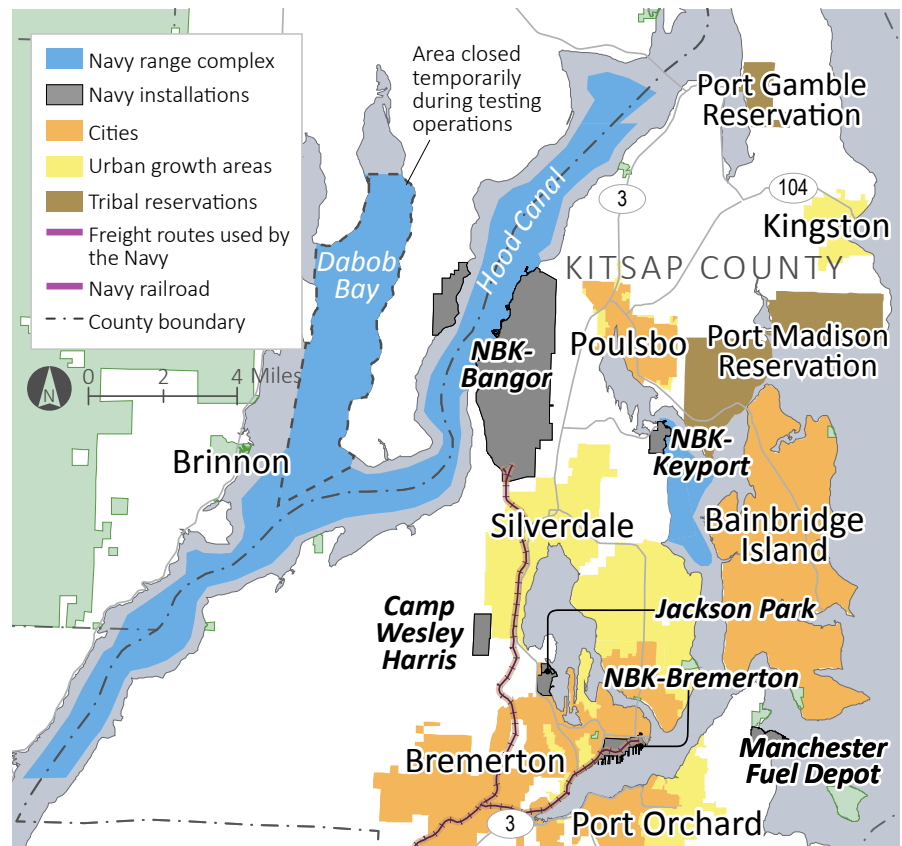


Figure 4.3.1. Navy Range Complexes

Motorized boat traffic on Hood Canal and Dabob Bay is driven by a number of factors, mostly relating to fishing seasons and the location of fish and shellfish in the area. This area hosts existing commercial aquaculture and wildstock geoduck fisheries. Boating, fishing, crabbing, and shellfish harvesting are popular; the region contains a number of public clam and oyster beaches and commercial and wildstock geoduck beds.

Population and economic growth in the area will likely increase boat traffic over time. However, the number of motorized boats on the waterways are limited by the area’s moorage and launching facilities.

Marinas

There are approximately 1,000 moorage slips located in five marinas on Hood Canal/Dabob Bay; these make up a relatively small number (under 5%) of total Puget Sound slips. For this study, marinas are defined as collections of 15 slips or more. Major marina expansions are unlikely to occur because of the area’s relatively remote location, limited infrastructure, strict environmental regulations, and land use restrictions. There is one permitted project at Seabeck Bay, in central Hood Canal on the Kitsap Peninsula, across from the Toandos Peninsula. Permits were issued to Olympic View Marina to replace the existing condemned facility with a 200+ slip marina in 2009. Plans have been downscoped due to development and financing issues, but a new breakwater was put in place in 2014.

Boat Ramps

Most motorized boats access the waterways using one of the area’s boat ramps or at a marina; non-motorized craft like kayaks have numerous soft shore launching options, which can utilize publicly accessible shoreline areas. Ramp use is generally limited by trailer parking available near the ramp. There are currently six major access points for motorized boating on Hood Canal/Dabob Bay. Figure 4.3.5 shows the region’s marinas, boat ramps, and major fishing/shellfish areas.

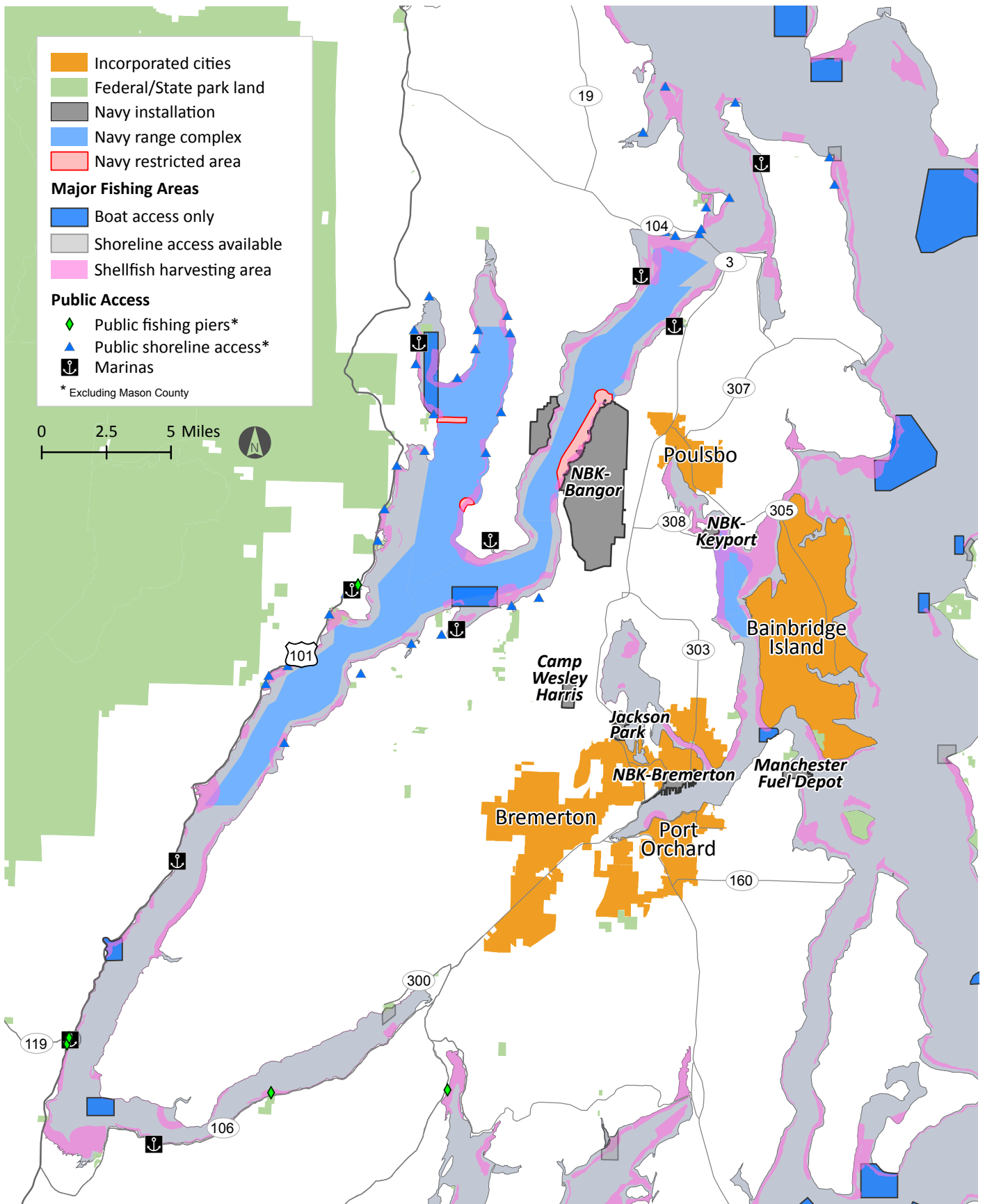


Figure 4.3.5. Public access to marine and shoreline activities in Hood Canal and Dabob Bay

A subtidal lands easement prohibits the construction of commercial or industrial piers in the area.

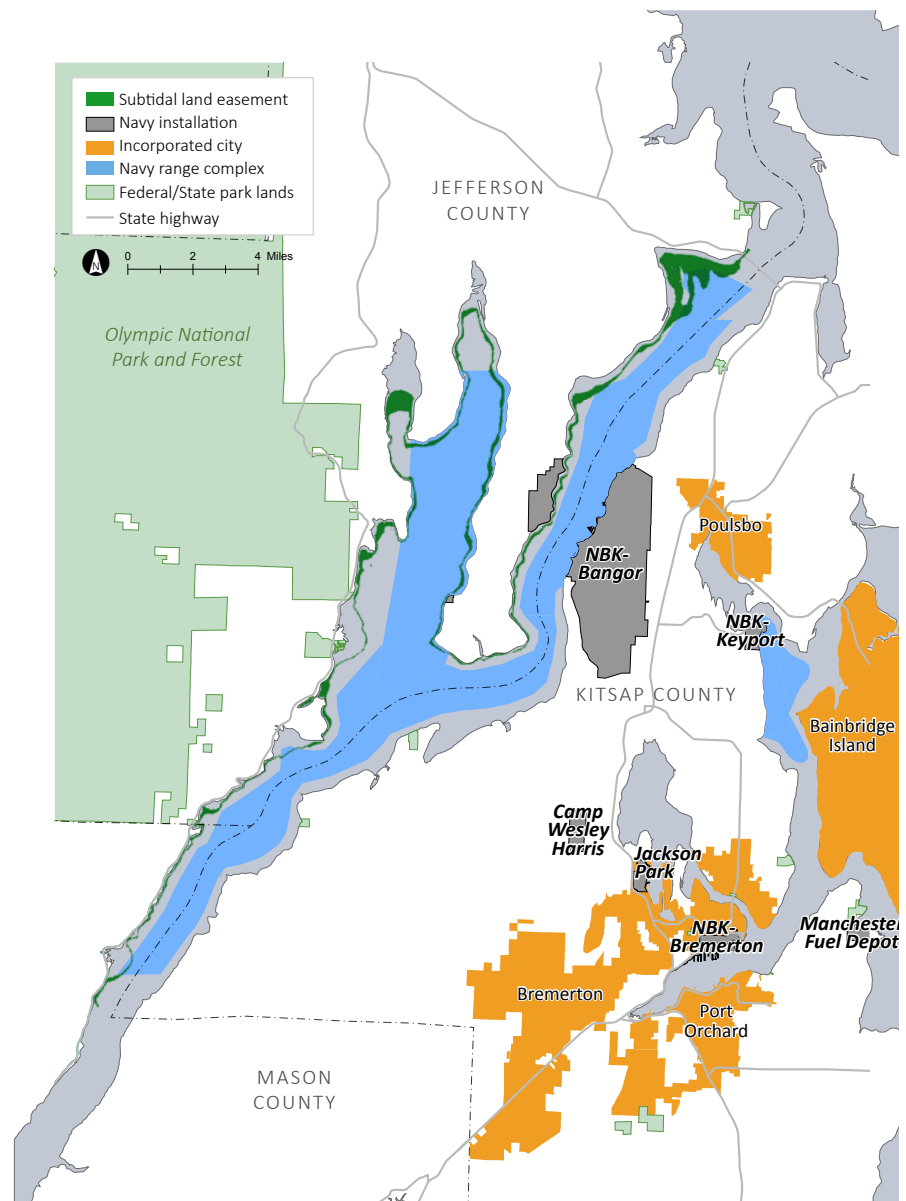


Figure 4.3.6. Subtidal lands easement area

Commercial/Industrial Activities

There is currently no significant water traffic generated from commercial or industrial activity in Hood Canal. However, the ‘Pit-to-Pier’ proposal, located just north of NBK-Bangor on the west side of Hood Canal, would load up to six gravel barges per day (up to 300 days annually), according to the project’s Environmental Impact Statement (EIS) – developed by Jefferson County in 2014). This project has been of considerable interest to the public due to its potential environmental and community impacts, as well as possible opportunities for job creation. Approval of the project would significantly increase commercial vessel traffic in Hood Canal. It could affect base security, testing operations, and potentially interfere with optimal operation of the Hood Canal Bridge.

As shown in Figure 4.3.6, the Navy acquired an easement of subtidal lands from the State to protect the environment and Navy operations in Hood Canal and Dabob Bay. This easement would prohibit the construction of commercial or industrial piers in the area.

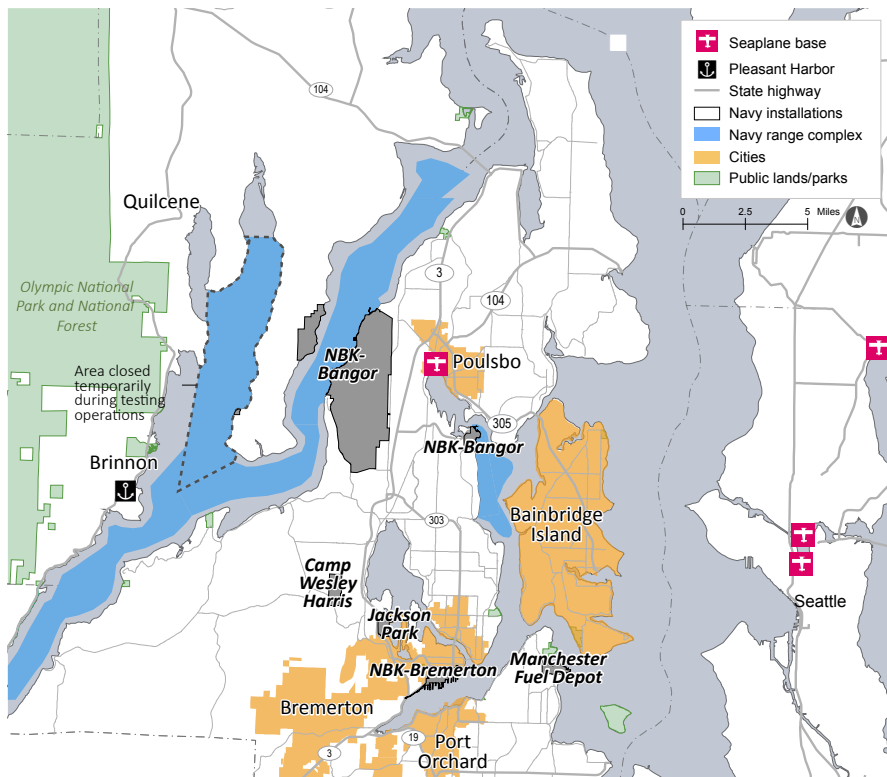


Figure 4.3.7. Area seaplane bases in vicinity of Navy underwater ranges

Seaplanes

Seaplanes are a security concern in the area, given the potential for small aircraft traffic to increase if existing resorts expand or new resorts are developed. Of particular concern is potential seaplane traffic to the Pleasant Harbor resort in Brinnon. As the Pleasant Harbor Visual Flight Route (VFR) is near the Navy’s underwater ranges, a careless or inexperienced pilot could unwittingly create a significant security concern. Seaplane landing areas are not regulated by the Federal Aviation Administration (FAA), so land use controls at marinas and docks and marina/seaplane operator education will be important to ensure seaplane activity does not compromise NBK-Bangor’s mission. See Figure 4.3.7.



Figure 4.3.8. Float planes at Roche Harbor, San Juan Island, WA (Photo credit: Jim Sorbie, Flickr)

Shoreline Land Use

Upland population growth would likely increase onwater traffic. Strategic growth management would concentrate growth to ensure economic development while protecting Naval and environmental assets.

Analysis

As shown in Figure 4.3.10, development around Hood Canal and Dabob Bay is limited by the amount of protected and designated resource lands; steep slopes and other critical areas; lack of utility and transportation infrastructure; and distance from population centers.

However, the following types of projects are of concern, as they could significantly increase the amount of in-water traffic in the area:

- New or expanded marinas and boat ramps and/or associated trailer parking areas,
- Aviation gas distribution facilities,
- New commercial piers or docks,
- Working forest and resource land conversion, and
- Planned Unit Development (PUD)/Planned Rural Residential Development/subdivisions/master planned communities.

Potential Strategies

A variety of strategies could be employed to reduce land use changes that could significantly increase Hood Canal and Dabob Bay water traffic.

1. Strengthen communication practices that would coordinate with the Navy as soon as jurisdictions are aware of any projects of concern. Monitor changes and proactively engage in local jurisdictions' development or periodic updates of their land use and Shoreline Master Programs (SMPs) to minimize impacts (see Implementation Tasks C3, F1, and F2 in Chapter 5).
2. Identify best mechanisms for the Navy to coordinate with growers and harvesters regarding Navy testing.
3. Consider establishing a military influence overlay, strengthening Comprehensive Plan policies, and/or adjusting zoning to (see F5 in Chapter 5):
 - A. Limit new and expanded boat ramps and marinas, trailer parking expansions, and seaplane use.
 - B. Limit development of large-scale master planned communities or resorts with in-resort or close proximity to boat ramps or launches.
 - C. Limit expansion of utilities and transportation infrastructure in select high priority areas.
4. Partner to identify and support projects that expand recreational water access outside military operating areas (see E3 in Chapter 5).

See related communication and coordination strategies in Section 4.1 on page 86.



Figure 4.3.9. Land surrounding Hood Canal and east of Olympic National Park may support population growth over time. (Photo credit: Walter Siegmund, Wikimedia Commons)

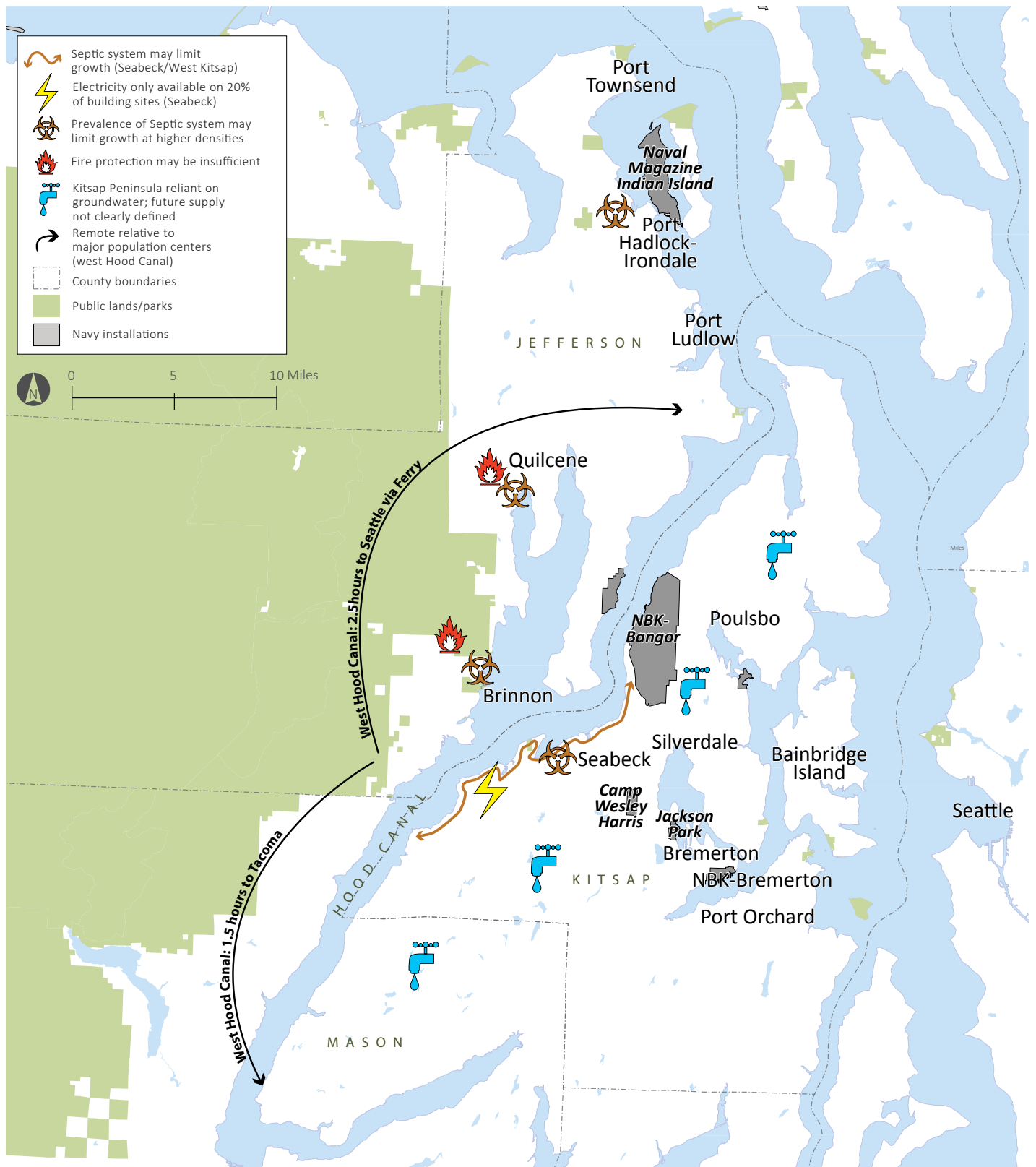


Figure 4.3.10. Development constraints around Hood Canal (map credit: Makers, Hood Canal Working Forest Conversion Study, 2014)

See “Working Forests Conservation” on page 149 and related strategies on page 150.

See information regarding the Navy’s REPI efforts on page 147 and additional conservation strategies on page 150.

Also see Section 4.1 for related communication and coordination strategies on page 86.

Also see strategies in Section 4.5 regarding education around working forests on page 150.

5. Build broad coalitions with conservation organizations, entities, and jurisdictions to support programs that would incentivize maintenance of working forests and other working lands, especially small private holdings at the highest risk of conversion (see B7 in Chapter 5), pristine environments, and open space. Consider the following strategies:

A. Land Use and Development. Preserve Commercial Forest land designations at 1 unit per 80 acres in Jefferson and Mason Counties. Preserve existing Forest Resource Land in Kitsap County (currently one percent of County land area.) Consider restricting development within Commercial Forestry zoned lands around Hood Canal (e.g. Whatcom County’s regulations). Partner to enhance community vitality in accordance with comprehensive plans within population concentration areas away from forest lands. Consider including Jefferson and Mason Counties in the Regional TDR Alliance (regional program including King, Kitsap, Snohomish, and Pierce Counties). Maintain agricultural and other working lands in this area by maintaining existing zoning.

B. Conservation. Continue to use the EP/REPI program and other conservation mechanisms to maintain working forests, other working lands, and pristine environments; support species management plans; and preserve shoreline habitat and tidelands to limit shoreline development. Promote the Community Forest Trust Program, which authorizes the Department of Natural Resources to provide financial assistance of up to 50% of project costs to local governments. Tribal governments and qualified non-profit entities then establish accessible community forests that provide economic benefits through timber resources. The Teanaway Community Forest is the first in the state to be established under this program. This program could also serve as the local match to a EP/REPI project.

C. State Legislation. Lobby local, state, and federal agencies to fund existing and future programs that incentivize working lands and open space protection. Encourage the legislature to amend the GMA to require planning for special purpose districts (school districts, utility districts, etc.) to be consistent with local comprehensive plans. Encourage the State legislature to enact a special rate or exclude property taxes on timberland. (Maryland recently passed legislation that may provide a good model – it targets small land owners by limiting qualifying acreage from three – 1,000 acres.) Support emerging efforts to establish a carbon trading market place. Work to simplify regulations to allow small landowners to sustainably manage their land.

D. Education. Increase landowner education and assistance generally and specifically about the potential benefits of conservation easements, and the Small Forest Landowners Office (SFLO), established through RCW 76.13. Educate the public about the value working forests provide to the local economy and environment.

Boater/seaplane pilot education

New boaters and seaplane pilots may require education regarding Navy security requirements, including:

- The 500-yard Vessel Protection Zone around high value Navy Vessels in port and in transit,
- Restricted Navy beaches, and
- Underwater testing ranges.

Currently, security requirements are communicated using a variety of methods. At marinas, there is signage, as well as brochures and other materials that are available to help inform boaters of relevant procedures. On the water, radio, flashing beacons, and signs notify boaters of testing and procedures. Restricted and military operating areas are also delineated on navigational charts.

Despite these measures, there is still the chance that negative encounters can occur especially with new or visiting boaters or seaplane pilots. Some boaters have cited the dim appearance of the warning lights as an issue around the ranges.

Potential Strategies

Suggested boater and seaplane pilot education strategies include the following:

1. Improve boater and seaplane pilot information and the distribution of this information. Update brochures and work with marina harbor masters and boat ramp owners to ensure this information is user-friendly and easily accessible to users at launch sites, marinas, and websites. Provide information at outdoor retailers and rental companies in the area and advocate for included safety/setback information in a mandatory safety brief to boat renter. Continue to coordinate with the USCG to ensure the best practices around navy property, vessels, and port security barriers are included in USCG boater safety information (see Implementation Task C5 in Chapter 5).
2. Study if increasing the intensity of warning lights around military training ranges is needed (see C5 in Chapter 5).
3. Share test range restrictions with area seaplane operators and marinas (see C5 in Chapter 5).

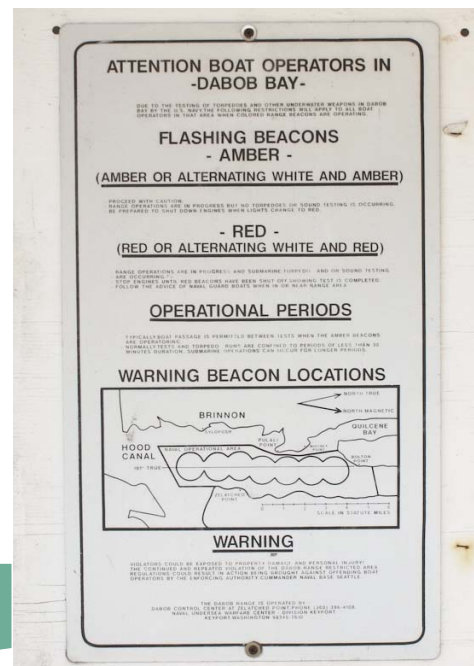


Figure 4.3.11. Sign explaining Dabob Bay warning beacons

NAVMAG Indian Island

Analysis

The area around Naval Magazine Indian Island is becoming increasingly popular with fishermen, shrimpers, and crabbers. Tribal fishing, new or expanded marinas, additional residential docks, and general area growth will contribute to increasing water traffic in Port Townsend Bay, Kilisut Harbor, and Admiralty Inlet. Like Hood Canal and Dabob Bay, parts of Indian Island have been certified as commercial geoduck beds.

With 18 miles of unfenced shoreline, NAVMAGII is difficult to secure and patrol. Some boaters or kayakers, especially those unfamiliar with the area, may be unaware of the installation's restricted access shoreline and security barriers around the pier at Indian Island.

Additionally, crabbing in the waterways surrounding Indian Island can cause unintended conflicts within these tight waterways. Large Navy vessels have limited room to maneuver around crab pots and vessels can unintentionally cut crab pot lines.

Potential Strategies

1. Increase signage, security, electronic surveillance, and waterfront patrol along the Naval Magazine Indian Island shoreline perimeter (see Implementation Task C5 in Chapter 5).
2. Identify best mechanisms for the Navy to coordinate with growers and harvesters of fish/shellfish regarding Navy operations, training, and testing.
3. Improve boater information regarding Navy security requirements and the distribution of this information. Update brochures and work with marina harbor masters and boat ramp owners to ensure this information is user-friendly and easily accessible to users at launch sites, marinas, and websites. Provide information at outdoor retailers and rental companies in the area and advocate for included safety/setback information in a mandatory safety brief to boat renter. Continue to coordinate with the USCG to ensure the best practices around Navy property, vessels, and port security barriers are included in USCG boater safety information (see Implementation Task C5 in Chapter 5).

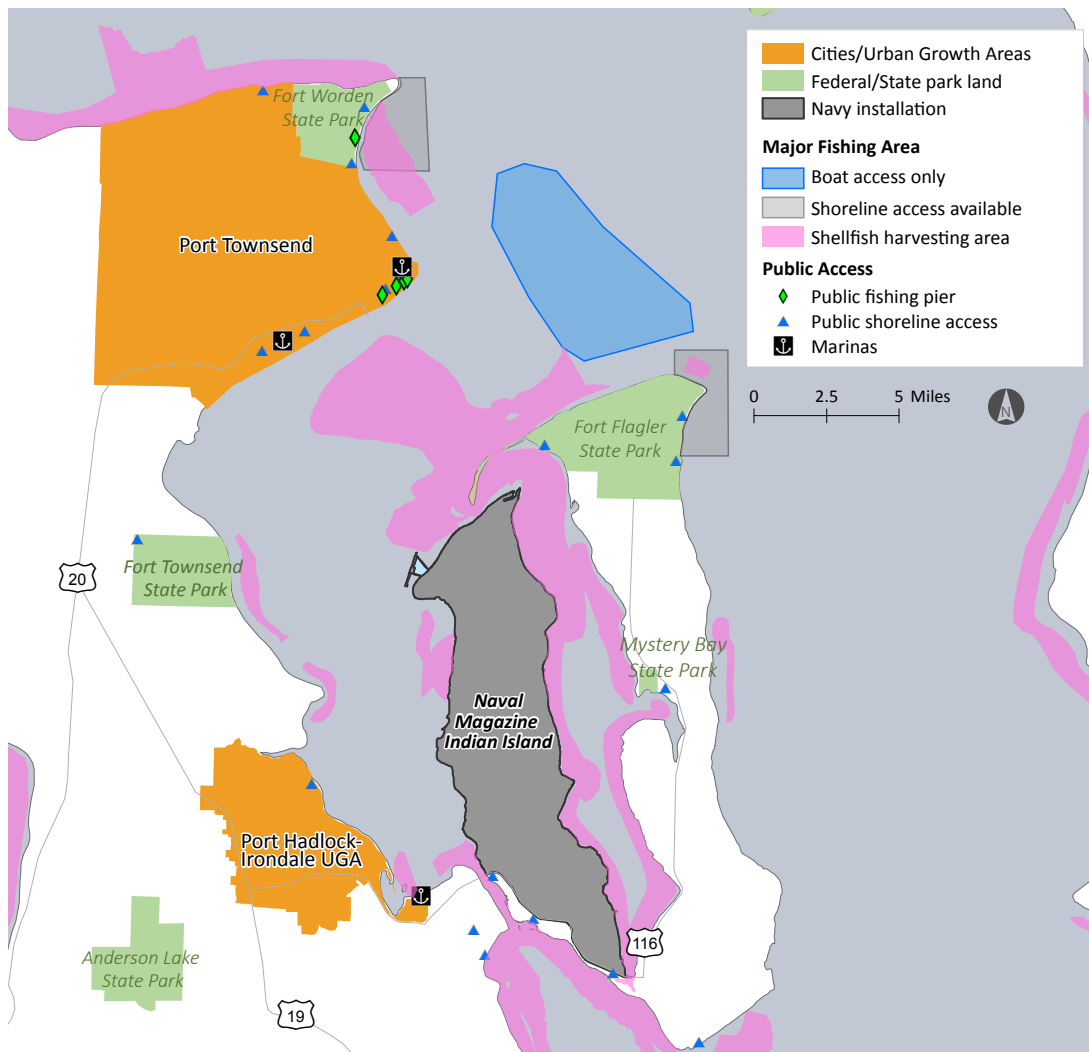


Figure 4.3.12. Marinas, boat ramps, and major fishing/shellfishing areas near Naval Magazine Indian Island

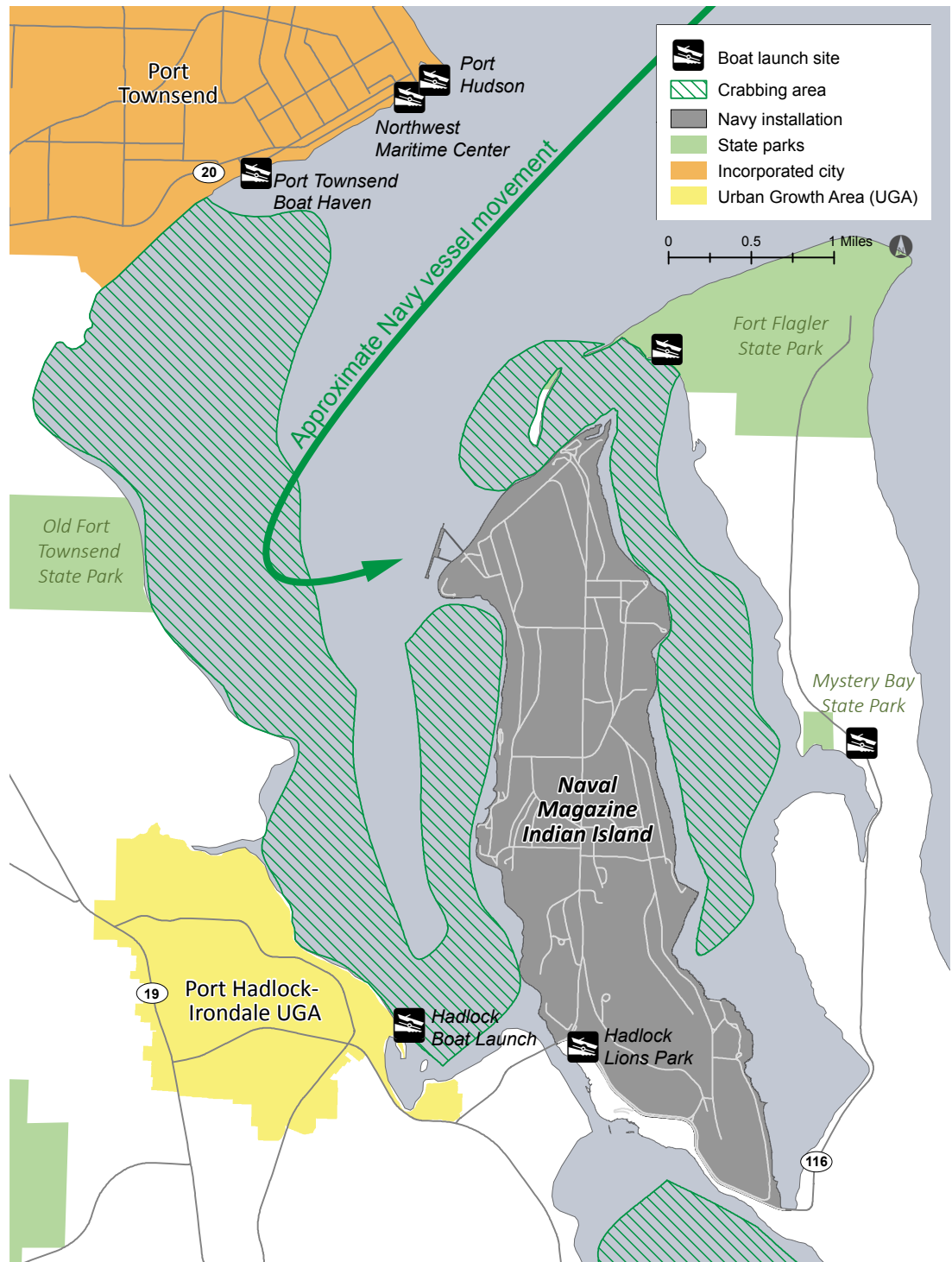


Figure 4.3.13. NAVMAGII crabbing areas and approximate Navy vessel movement in Port Townsend Bay

Transportation

Section 4.4

The following concerns were identified through a review of local transportation plans and stakeholder interviews. Each section addresses specific transportation-related concerns that should be considered in future transportation planning efforts.

Bremerton

NBK-Bremerton is nestled in the urban downtown core of Bremerton. The continued growth of NBK and the community will add traffic to the area and increase the need for coordination between NBK and the community to solve transportation issues.

Heavy traffic surges in Bremerton increases the demand on the transportation system. Further, the Navy limited parking in NBK-Bremerton's Controlled Industrial Area in the 1980s, and demand for parking has encouraged the development of surface parking lots throughout the City.

Analysis

Downtown Bremerton

Land uses within the City of Bremerton include a mix of urban and industrial uses with an active and vibrant community. The city seeks to redevelop the area to better accommodate bicycle and pedestrian activity balanced with automobile and transit uses. Bremerton is primarily served by undivided four lane arterial highways with 25 to 35 mph posted speed limits, see Figure 4.4.1. The primary roadways include SR 3, SR 304, and SR 310.

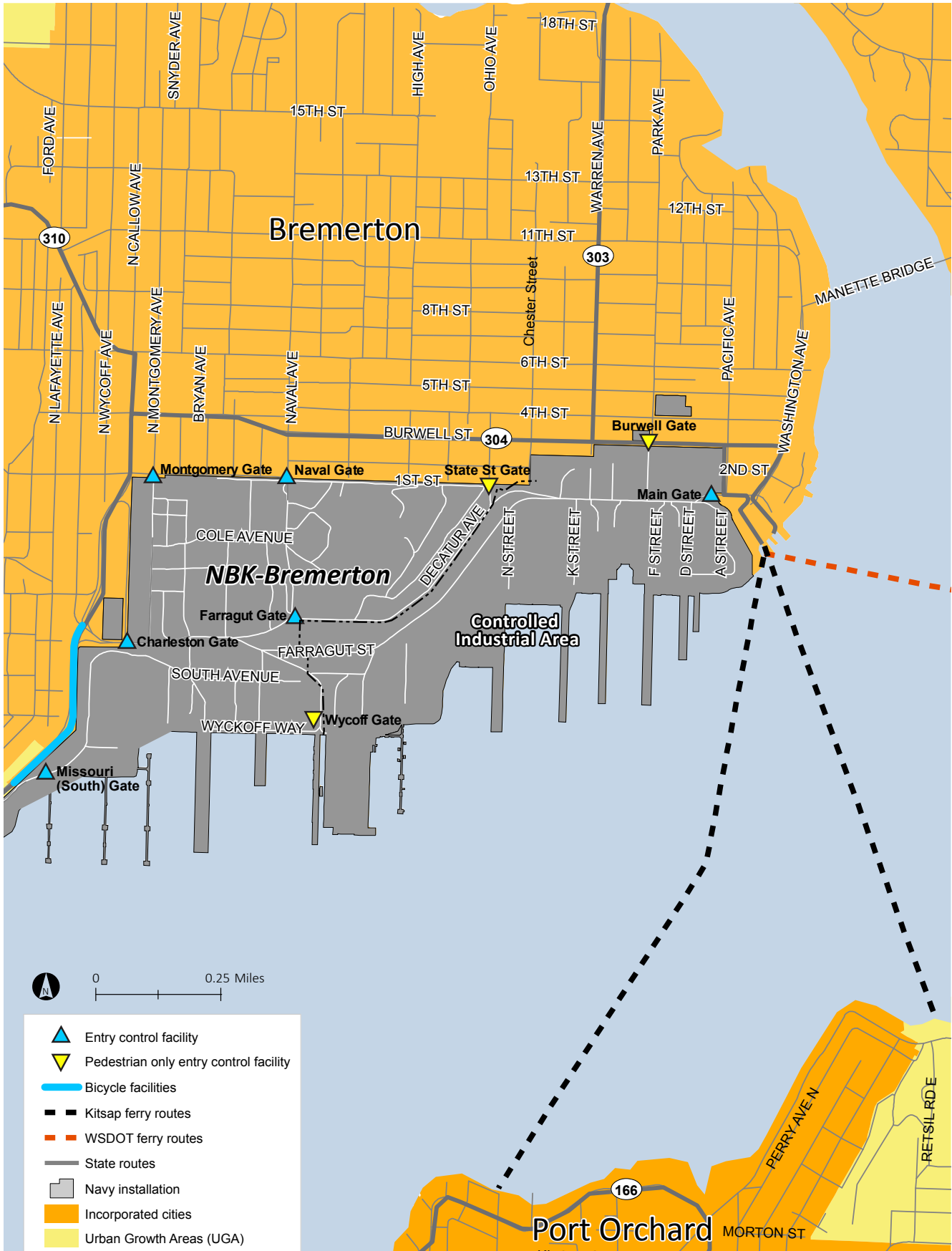


Figure 4.4.1. Downtown Bremerton transportation context

NBK is expected to see increased employment which will further stress the transportation system surrounding the base. There are a variety of transportation options currently being employed by NBK including coordination with Kitsap Transit and the WSDOT ferries to serve base traffic using transit incentives. In addition, the base participates in the Kitsap Transit Worker/Driver program which has been very successful, so much so that it is nearly reaching capacity. On average, in October 2014 all 31 worker/driver routes averaged 67% of seats were occupied, however this value takes into account both underutilized and well utilized routes. 12 of the 31 routes never reached 80% full during the month of October, while 10 of the routes reached the maximum number of seats available at least once.¹ Currently traffic studies are completed by the city and the base separately. Comprehensive planning between NBK and the City would help accommodate the needs of each to utilize the resources for improving and maintaining the transportation network in the most efficient manner possible. Some of the concerns identified by each organization primarily involve the following activities:

- Educate the public and enforce the rules regarding parking management,
- Stagger release of NBK employees,
- Encourage more employees who work in Bremerton, to live in Bremerton as well, and
- Incentivize and provide alternative transportation options to commuters.

A good amount of progress is already being made toward addressing these issues, as they are well-known concerns. Multiple studies have been conducted regarding public parking and alternative transportation for the city and NBK. Most prominently, the city reviewed parking management in the *Bremerton Downtown Subarea Plan* (2007) where a park-once strategy and short-term pay parking was explored and programmed for additional discussion and strategies were proposed in order to efficiently manage parking.

parking garages & lots

HARBORSIDE GARAGE *HDEM*
100 Washington Avenue
(Red and Green Levels)

WASHINGTON GARAGE *HDEM*
405 Washington Avenue

PARK PLAZA GARAGE *HDE*
Levels P1 & P2–300 Park Avenue
Levels P3 & P4–622 Burwell Avenue
(Access Level P4 from the alley off Pacific Avenue)

CITY LOT 95 *D*
4th Street & Park Avenue

CITY LOT 98 *D*
800 5th Street

ON-STREET PAID PARKING *D*
4th Street
5th Street
(Between Park Avenue & Warren Avenue)

PARKING RATES for City owned garages and lots are available at www.ci.bremerton.wa.us or scan the QR code to the right.

H - Hourly
D - Daily
E - Extended Days
M - Monthly

city owned garages & lots

Figure 4.4.2. Bremerton parking brochure (image credit: City of Bremerton, 2013)

1 Worker Driver Morning Peak Trips (Kitsap Transit, October 2014).

Table 4.4.1. City-owned parking areas

Description	Spaces
Harborside Garage	320
Washington Garage	283
Park Plaza Garage	252
City Lot 95	58
City Lot 98	17
On-Street Paid Parking	54

Intersection Level of Service Definitions¹

Signalized intersection level of service is defined in terms of a weighted average control delay for the entire intersection.

- A: ≤10 sec
- B: >10-20 sec
- C: >20-35 sec
- D: >35-55 sec
- E: >55-80 sec
- F: >80 sec

Unsignalized intersection level of service uses the weighted average control delay for all-way stop and roundabout control. For two-way stop the delay on the minor street approach is reported because a weighted average of all movements results in very low overall average delay which could mask deficiencies of minor movements.

- A: 0-10 sec
- B: >10-15 sec
- C: >15-25 sec
- D: >25-35 sec
- E: >35-50 sec
- F: >50 sec

¹ Highway Capacity Manual 2010, Transportation Research Board, 2010

In 2007, about half of the stalls were private and half of the stalls were publicly available. The City controlled approximately 20 percent of all stalls and the majority of the city’s on-street parking was free. Of the city-owned parking, the Harborside Garage (100 Washington Avenue) and the Washington Garage (405 Washington Avenue) held the majority of parking stalls.

Day-time parking occupancy rates averaged approximately 55 percent with the following breakdown by parking type:²

- On-street: 56%,
- Off-street: 41%, and
- Private off-street: 69%.

As of 2013, the City owns controls three parking garages, three publicly available surface lots, and paid on-street parking on 4th Street, 5th Street, Warren Avenue, and Chester Avenue, as shown on Figure 4.4.2. A summary of the parking supply is shown in Table 4.4.1.

Bremerton – Traffic Surges

In Bremerton heavy congestion exists during the weekday morning and afternoon peak hours along specific corridors leading to NBK-Bremerton, especially along SR 304. NBK-Bremerton adds a significant amount of traffic, with the greatest number of vehicles being released between 3:30 and 4:30pm. Surges also occur around ferry arrival/departure times throughout the day. At times outside of these surges, Bremerton streets are relatively clear. Previous studies show that the majority of morning and afternoon traffic utilize the Charleston and Naval Avenue gates. In the afternoon the level of service (LOS) at the intersection adjacent to the Missouri Gate was observed to be LOS E due to the heavy traffic congestion, while the gate itself was observed to operate at LOS A³. A description of the intersection level of service definitions is included to the left.

On the Navy base, the Missouri Gate and the Charleston Gate were identified as high priority locations for improvements regarding vehicle and pedestrian safety.³ These improvements could in turn improve the congestion along the corridor by increasing the capacity at the gate, resulting in increased vehicle flow into the site. Given the interdependent relationship between the Navy and the City of Bremerton, a coordinated approach to identifying the required transportation improvements should be prioritized during the development of the respective capital improvement plans.

² *Bremerton Downtown Subarea Plan* (City of Bremerton, 2007).

³ *FLTZC Naval Base Kitsap Pedestrian and Vehicle Safety Study* (Transpo Group, 2013).

Figure 4.4.3 summarizes the directional, hourly traffic volumes at the Naval, Charleston and Missouri Gates. The graph shows the peaks in traffic volume during the morning (inbound) and afternoon (outbound) commute time periods.

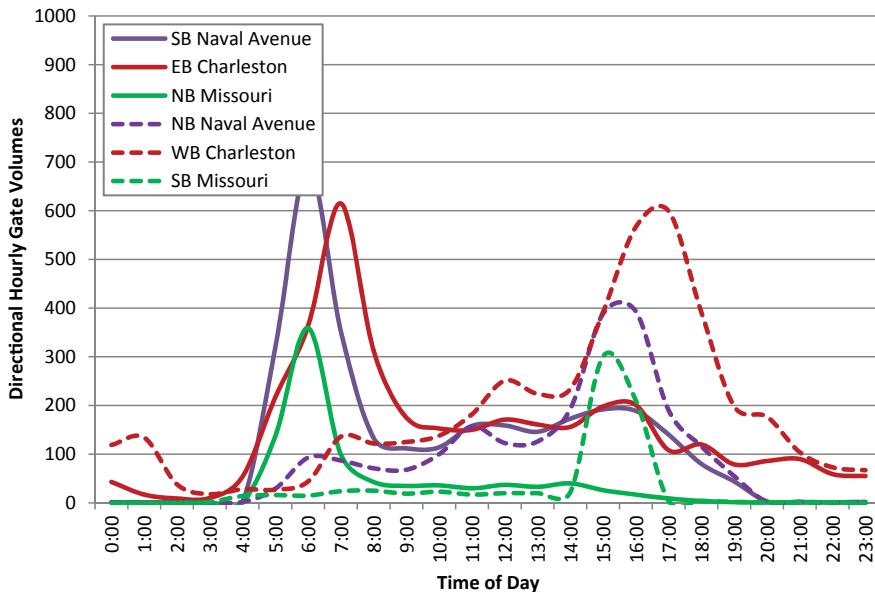


Figure 4.4.3. Inbound Outbound Traffic Activity at Entry Control Facilities (image credit: FLTZC NBK Pedestrian and Vehicle Safety Study; Transpo Group, 2013)



Figure 4.4.4. Heavy congestion in Bremerton

SR 3/SR 304 Interchange

The lane reduction at the merge of SR 3 and SR 304 can create a large amount of traffic congestion, especially during the afternoon peak hour.

The SR 3/SR 304 interchange connects two state routes; SR 3 is a regional highway that runs the length of Kitsap County and SR 304 which provides access to the City of Bremerton, the Washington State Ferries, the Bremerton Ferry Terminal, Bremerton Transit Center, and NBK-Bremerton. The existing four-lane facility, from the Puget Sound Industrial Corridor – Bremerton to the SR 3/SR 304 interchange, is the most congested location in Kitsap County and will be the most expensive to address as stated in the 2007-2026 Highway System Plan (WSDOT, 2007).

The SR 3 and SR 304 interchange experiences extreme traffic surges and congestion during the morning and afternoon peak-hour commute periods. Much of the cause for this congestion is the roadway channelization on southbound SR 3 that merges from two lanes into one-lane and forces traffic from SR 3 to merge with SR 304. Traffic along this route traveling southbound eventually travels via either SR 3 or SR 16 to continue south. WSDOT was directed by the Legislature to conduct a feasibility study for interchange improvements to the SR 3/SR 304 interchange. The four alternatives identified include:

1. Alternative 1: Hard shoulder running southbound SR 3:
 - A. Would open the southbound SR 3 shoulder to traffic on weekday from 3 p.m. to 6 p.m. near the Bremerton Wastewater Treatment Plant to the SR 3/SR 304 interchange, and
 - B. Add a high-occupancy lane to the SR 304 on-ramp ending 100 feet after the bridge.
2. Alternative 2: Restripe two lanes southbound SR 3:
 - A. Would restripe southbound SR 3 from one lane to two lanes from the



Figure 4.4.5. SR 3/SR 304 interchange

- Bremerton Wastewater Treatment Plan to SR 3/SR 304 interchange, and
- B. Add HOV lane to SR 304 on-ramp ending 100 feet after the bridge.
- 3. Alternative 3: Construct two lanes southbound SR 3:
 - A. Would replace and widen SR 304 on-ramp to accommodate two lanes on southbound SR 3 from the Bremerton Wastewater Treatment Plant and SR 3/SR 304 interchange,
 - B. Add a High Occupancy Vehicle (HOV) lane to SR 304 on-ramp ending 100 feet after the bridge,
 - C. Replace one fish passage culvert,
 - D. Require temporary railroad detour during construction, and
 - E. Would potentially affect one wetland.
- 4. Alternative 4: Add third lane from SR 304 on-ramp to Gorst:
 - A. Would add a third lane from SR 304 on-ramp to Gorst,
 - B. Would restripe southbound SR 3 from one lane to two lanes from the Bremerton Wastewater Treatment Plan to SR 3/SR 304 interchange,
 - C. Replace two fish passage culverts,
 - D. Require three temporary railroad detours during construction, and
 - E. Construction would affect eight wetlands and potentially affect one cultural resource, and
 - F. Requires right of way on 40 parcels.

The planning cost of the above alternatives varies from \$3.4 million to \$158 million. The project stakeholders, including NBK and other transportation agencies reviewed the alternatives and considered public input before choosing the alternatives to pursue. The stakeholders have recommended the following short-term and long-term solutions to improve mobility at this interchange. In the short-term, southbound SR 3 will be restriped to two lanes between the Bremerton Wastewater Treatment Plan and the SR 3/SR 304 merge. This strategy would also change the SR 304 dedicated on-ramp to an on-ramp where vehicles would merge onto mainline SR 3. The long-term strategy would build on the short-term strategy and in addition would add a third lane from the SR 304 on-ramp to Puget Sound Industrial Center – Bremerton to create three lanes.

Charleston Boulevard Corridor

Large traffic volumes along the Charleston Corridor degrade the intersection level of service along the roadway serving NBK-Bremerton.

A solution to the SR 3/SR 304 interchange would likely help improve the traffic operations along the Charleston Boulevard during the afternoon peak period when heavy traffic volumes travel southbound from the NBK-Bremerton. However, in the morning commute period the northbound traffic experiences heavy congestion at the NBK gates including the Charleston and Missouri Gates. The Charleston and Naval Avenue Gates experience the highest traffic volumes during the morning with over 700 inbound vehicles between 6 and 7 a.m. and in the afternoon peak with over 700 vehicles exiting at the Charleston Gate and nearly 500 exiting at the Naval Gate.⁴ The Missouri Gate accommodates all commercial vehicle access and inspections and is open during the daytime periods only.

In the morning the LOS is lowest just inside the Naval Gate and east of the Charleston Gate, and in the afternoon the lowest LOS is LOS E just outside the Missouri Gate on Charleston Boulevard and just inside the Charleston Gate

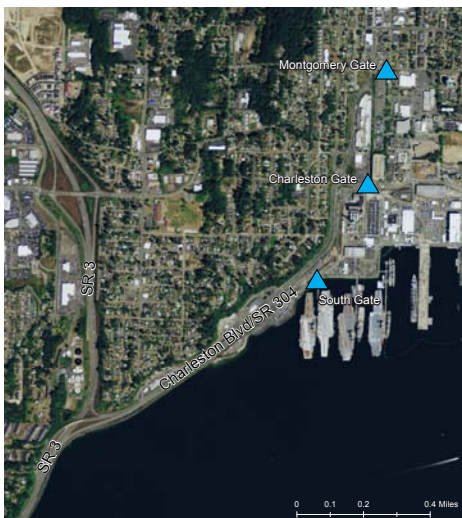


Figure 4.4.6. Charleston Boulevard Corridor

⁴ FLTZC Naval Base Kitsap Pedestrian and Vehicle Safety Study, (Transpo Group, 2013).

with LOS D. The highest priority improvements identified in the *FLTZC Naval Base Kitsap Pedestrian and Vehicle Safety Study* (Transpo Group, 2013) includes the Charleston/Farragut Gates (as part of the same project) and the Missouri Gate. These improvements would address pedestrian safety and operational issues identified in the study including fixed object and pedestrian collisions, narrow sidewalks, long vehicle queues, level of service failures, and the skewed intersection at Rodgers Avenue and Decatur Avenue. The improvements to the Missouri Gate would address a history of vehicle collisions and deficient roadway facilities. The intended result of these improvements would increase safety and mobility at NBK-Bremerton.

SR 3/SR 16 Interchange

The SR 3/SR 16 interchange is located south of the SR 3/SR 304 interchange. SR 3 currently experiences a large amount of traffic and in the future the area just south, the Puget Sound Industrial Center – Bremerton (PSIC – Bremerton), is expected to experience continued growth.

As the two lanes of northbound SR 16 enter PSIC – Bremerton, an additional lane was added to the roadway from Bay Street (former SR 166). As the highway traverses PSIC – Bremerton, the outside lane is dropped from the roadway just prior to the merge of SR 16 and SR 3. Northbound SR 3 then merges into the two lanes just before the existing vintage 1947 railroad bridge. Four lanes of traffic are merged into two lanes in less than 1,500 feet. SR 3 is the only viable route from South Kitsap and Mason County to the City of Bremerton and north Kitsap County. Any blocking incident in this area would effectively stop transportation in the region. Elimination of the lane drop and extending the merge point for the two roadways beyond the railroad bridge would significantly improve regional mobility and safety.

The connecting four-lane facility from SR 3/SR 16 Interchange to SR 3/SR 304 Interchange, including interchange deficiencies, is the most congested location in Kitsap County and will be the most expensive to address. The *Bremerton Economic Development Study* (WSDOT, 2012) identified the SR 3/SR 16 interchange as operating at LOS E or F based on the afternoon peak-hour travel speed along the roadway section, which was 22 mph (49% of the posted speed) south of SR 304. The roadway carries an average daily traffic of 73,000 vehicles.



Figure 4.4.7. SR 3/SR 16 interchange in Gorst

Potential Strategies

1. Consider prerequisite planning and public outreach prior to increased operations or base boundaries at NBK to understand and mitigate potential impacts. Use the Comprehensive Planning process to program capacity and parking strategies. This can include identifying parking and capacity issues, setting goals, and developing a process to address and resolve those issues through regulations or planned improvements (see Implementation Tasks E1 and E2 in Chapter 5).
2. Discuss transportation and parking plans through the Kitsap Regional Coordinating Council (KRCC), Transportation Technical Advisory Committee (TransTAC) and the Transportation Policy Committee. Bremerton, NBK, and Kitsap Transit might consider creating a joint transportation committee to address localized issues Inventory existing conditions and evaluate options for mitigating off-base transportation and parking demands. Integrate the results from improvements into future plans to utilize proven strategies. Ideas could include park and ride system enhancements, walkable housing options, staggered shifts, new gate locations, expanding the worker-driver program, and supporting Kitsap Transit in expanding bus service. Explore funding options including through the Defense Access Roads (DAR) program (see E2 in Chapter 5).
3. At the interchange of SR 3/SR 304 the recommended improvements should be implemented to improve connectivity. Secure funding through KRCC TransPOL and TransTAC committees to lobby the State, or consider other funding sources using coordination between nearby communities and the Navy (see E2 in Chapter 5).
4. The planned improvements for the SR 3/SR 304 interchange would help to address congestion in the region. In addition, the programmed improvements on SR 3/SR 16 should be implemented appropriate with coordination and prioritization through the KRCC programmed projects list, WSDOT, and the City of Bremerton Comprehensive Plan. In coordination these projects will help to improve the Charleston Boulevard Corridor. NBK improvements should be communicated through the KRCC TransTAC to coordinate efforts with the City of Bremerton and surrounding communities (see E2 in Chapter 5).
5. Additional transportation improvements for PSIC – Bremerton are programmed to improve the transportation network, including the SR 3 Defense Industrial Corridor project list. Coordination through the KRCC to fund and construct the identified improvements should continue in order to prioritize implementation as growth occurs (see E2 in Chapter 5).

Hood Canal and Portage Canal Bridges

The Hood Canal and Portage Canal Bridges are vital facilities to the operation of NBK and NAVMAGII. Without proper maintenance and care of these facilities the ability of NBK to carry out its' mission would be hindered. Furthermore, these facilities are of regional importance to the communities surrounding the installations and as such have a common interest in assuring long-term availability.

Analysis

One important value which is assessed to every bridge facility is the “Sufficiency Rating,” which is “a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The result of this method is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge”. The following sections describe the role of these bridges in the study area, and their current condition according to the NBI. This report also describes the concerns regarding future maintenance to ensure the function and viability of these facilities.

The bridge facilities in the study area are owned and maintained by the Washington State Department of Transportation and their condition is reported and maintained in the National Bridge Inventory (NBI). Regular bridge inspections are required and should not exceed a period of 24 months apart according to the Washington State Bridge Inspection Manual⁵. The inspection ratings are summarized and documented in the National Bridge Inventory; often a bridge will have multiple listings if part of the structure has been re-built or it has differing structural components. The following provides a more comprehensive analysis of each bridge noted.

Portage Canal Bridge

The Portage Canal Bridge was constructed in 1951 and is currently described as functionally obsolete. This means that the bridge is no longer functionally adequate based on its original design, meaning that it may lack the appropriate facilities for the condition of the roadway, including facilities where there are not enough lanes to accommodate the traffic flow or there is no space for emergency shoulders. The structure itself is sound, but lacks desirable design features. The roadway connects Indian Island and the NAVMAGII facility and Marrowstone Island to the Olympic Peninsula over the Portage Canal. The roadway is a continuation of State Route 116 and is classified as a rural major collector. The bridge is a two-lane roadway with no shoulders. This bridge provides the sole connection to Indian Island, serving both the Navy, residential properties, and recreational activity areas.

The Portage Canal Bridge has a sufficiency rating of 47 percent and average daily traffic of 2,000 vehicles. The structure has a navigation clearance of 17.4 meters vertical and 42.7 meters horizontal for the waterway below. The approach roadway width is 9.1 meters. The bridge railings do not currently meet acceptable standards; however the transitions, approach guardrail, and approach guardrail ends meet currently acceptable standards. Per the previous inspection report, the structure is open with no restrictions and the deck and superstructure are in satisfactory conditions, while the substructure is in good condition.



Figure 4.4.8. The Portage Canal Bridge connects the Olympic Peninsula and Indian Island (photo credit: NWicon).

⁵ Washington State Bridge Inspection Manual (WSDOT, 2012).



Figure 4.4.9. Traffic delays on Hood Canal Bridge (photo credit: PTMurphus, Flickr)

Hood Canal Bridge

The Hood Canal Bridge is included in the National Bridge Inventory for regular two-year inspections with four separate sections, as the bridge has two approach structures and two main structures with one type of structure in each County. The bridge carries SR 104 across the Hood Canal. The roadway is classified as a rural principal arterial and had an observed average daily traffic of approximately 16,000 vehicles in 2010. Three of the four sections have a sufficiency rating greater than 70 percent and were built in 2007 and 2009. However, one of the four sections has a sufficiency rating of 44 percent. This is likely because the substructure of this section was rated as having a poor condition, but it meets the “minimum tolerable limits to be left in place as is”.⁶

According to WSDOT, the bridge closes approximately 30 times in one month for approximately 20 minutes during each closure. This creates a traffic backup onto SR 104 and SR 3. The backups range in size, depending on the timing of the bridge closure. Bridge openings during the weekday peak hours can cause backups of up to two to three miles.⁷ This bridge is the primary link between the Kitsap Peninsula and eastern Jefferson County. Without this connection, the nearest detour would involve traveling approximately two to four hours by car to travel around the Hood Canal.

The SR 3 Route Development Plan (WSDOT, 2005) reviewed the SR 104/SR 3 intersection and suggested that improvements to maintain the required level of service (LOS), LOS C, would be ineffective without providing additional capacity on the bridge. Forecast 2030 conditions showed that the level of service on the bridge would be expected to decrease to unacceptable delays and LOS F, and that additional capacity on the bridge and grade separation at the intersection with SR 3 would be necessary to achieve an acceptable level of service.⁸ A description of intersection level of service thresholds is in the sidebar on page 118. In the near-term the study suggests improving the intersection by adding turning capacity, merge lanes, and creating a jughandle to create a four-leg intersection by removing the northbound left-turns and making them a thru movement with the fourth lane. These improvements would keep the LOS above LOS F until 2030 when the capacity of the bridge is anticipated to be exceeded. Bridge rehabilitation and gear box replacement is programmed in the WSDOT State Transportation Improvement Plan (STIP) to maintain the integrity of the superstructure. Capacity improvements are also programmed for the future to improve SR 3 and SR 104 to construct a truck climbing lane and a holding lane for the bridge.^{9, 10}

Non-motorized activities are accommodated on the Hood Canal Bridge with eight-foot wide shoulders and metal plates over the grated steel decking of the bridge which were installed in 2009. The enhanced shoulders improve the experience for pedestrians and bicyclists and facilitate non-motorized use of the bridge. Future development in the area includes the Thorndyke Resource project to construct a sand and gravel mining operation with associated equipment and facilities. Access to this facility would be provided via Rock-To-Go Road (T-3100), a paved forest service road and Wahl Lake Road (T-1000), which intersects SR 104 at mile post 8.52. This project would increase barge traffic and would be expected to add up

⁶ *National Bridge Inventory* (Federal Highway Administration, 2013).

⁷ *Thorndyke Resource Draft Environmental Impact Statement* (Jefferson County Department of Community Development, 2014).

⁸ *SR 3 Route Development Plan* (WSDOT, 2005).

⁹ *State Transportation Improvement Plan 2015-2018* (WSDOT, 2014).

¹⁰ *Kitsap County Major Corridor & Multi-Modal Improvements through 2040* (Kitsap Regional Coordinating Council, 2010).

to a maximum of 50 vehicle trips during the weekday afternoon peak hour. As a worst-case scenario, were the shift change to occur at 4:00 p.m., it is stated that this traffic would be comparable to intersection volumes when the old Shine Pit was in operation and would be well within the intersection capacity of SR 104/Rock-To-Go Road.¹¹

The additional barge activity would pass under the eastern span of the Hood Canal Bridge. Only ships would require a bridge opening at mid-span. The report states that the applicant would only conduct bridge openings during off-peak vehicle traffic times. U.S. flagged ships will call at the pier and are not expected to be available for approximately eight to twelve years. Once ships are available the applicant would expect on average, less than one ship per month up to six ships per month by year 25.¹² A safety study has been requested by Jefferson County and WSDOT to evaluate the potential for additional collisions with the bridge related to the increased barge and shipping activities.

Potential Strategies

1. Formalize coordination and communication between the Washington State Department of Transportation, Jefferson County Public Works Department, the Public Utilities District, and Naval Magazine Indian Island regarding state improvements and maintenance efforts affecting transportation facilities near the base. Primary topics would include the Portage Canal Bridge, roadways of particular importance for freight, and consideration for recreational opportunities in the area. (see Implementation Task D3 in Chapter 5).
2. Update and expand public notice of short-term events affecting transportation, quality of life, and public convenience. For transportation this would primarily be concerned with communicating the Hood Canal Bridge openings to allow residents and commuters more flexibility in planning their travel across the bridge. This could include a plan to regularly review and update the existing signage and communication strategies (see A2f in Chapter 5).

¹¹ *Thorndyke Resource Draft Environmental Impact Statement* (Jefferson County Department of Community Development, 2014).

Freight Route used by NAVMAG Indian Island

Naval Magazine Indian Island utilizes the SR 3, SR 104, SR 19, SR 116, and Chimacum Road freight route designated by WSDOT and PRTP. Traffic operations along this route can impact the ability to move freight to/from NAVMAGII.

Analysis

NAVMAG Indian Island serves as the primary location for responsive ordnance logistics and storage supporting the Pacific. Large trucks are required to transport Navy equipment and ordnance to and from NAVMAGII to serve the base. These large trucks travel to/from Indian Island via the Portage Canal Bridge, SR 116, and follow Chimacum Road south to connect to State Route 19. While a secondary route is available, that would not utilize Chimacum Road, this would require the trucks to travel through the central part of the Port Hadlock community. For operational and safety reasons, the use of Chimacum Road is preferred by Jefferson County, the community, and the Navy.

The primary purpose of the current freight route as defined is to separate the freight route from sensitive community uses. There is concern over the condition and operations of this route to maintain service to NAVMAGII and also keep from negatively impacting the Chimacum and Port Hadlock communities. While the current freight route avoids the denser development and the Port Hadlock community center, it is located along corridors that are anticipated to experience additional development in the future and as a result see increases in traffic. As development occurs along Chimacum Road, the roadway and intersection levels of service, traffic safety, and planned future improvements were identified for monitoring and review to maintain the ability to operate the freight route.

Also see “Freight Route used by NAVMAG Indian Island” on page 96 in Section 4.2.

Potential Strategies

1. Formalize coordination and communication between the Washington State Department of Transportation, Jefferson County Public Works Department, the Public Utilities District, and the Navy regarding roadway improvements and maintenance efforts affecting transportation facilities near the base. Primary topics would include the Portage Canal Bridge, roadways of particular importance for freight, and consideration for recreational opportunities in the area (see Implementation Task D3 in Chapter 5).
2. Jurisdictions should coordinate with the Navy when planning singular or recurring events.

Natural and Cultural Resources

Section 4.5

Environment Regulations

Balancing environmental protection with the ability to develop some areas for economic development and Navy mission fulfillment is a shared interest for the Navy and jurisdictions. Both would like to see a healthy environment while limiting arduous regulations. As areas around the installations develop, Navy property can become some of the last remaining pieces of rich, natural environment in the region. Federal and state environmental protection agencies then may place pressure on those areas to perform the ecological functions that the entire region formerly achieved. For example, NOAA Fisheries surveys Indian Island's waters because of its pristine natural habitat. In turn, the Navy must bolster its security measures during those surveys.

Analysis

This analysis summarizes differences in entities' approaches to environmental protection. For an overview of these regulations, see the Chapter 3's "State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA)" on page 54, "Shoreline Management Act (SMA)" on page 56, "Endangered Species Habitat Protection" on page 56, and "Water Quality and Stormwater Runoff" on page 58. Washington State requires local jurisdictions to protect the environment in many ways. The Naval *Environmental Readiness Program Manual*, which guides environmental practices Navy-wide, states that it identifies and is consistent with applicable federal, state, and local environmental laws, statutes, and regulations (Department of the Navy, Office of the Chief of Naval Operations,

All entities are interested in balancing environmental protection with economic development opportunities.

Washington D.C., OPNAV M-5090.1, 10 Jan 2014). The local jurisdictions and Navy may develop additional programs, policies, and regulations on top of those baselines.

The following section focuses on Kitsap County, Jefferson County, and the City of Bremerton as the local jurisdictions most relevant to this study.

Shoreline Regulations

As noted in Chapter 3, State law requires cities and counties to manage their shorelines with a goal of no net loss of ecological functions.

Jurisdictions

The jurisdictions' shoreline designations are mapped below. Natural (most restrictive) and high intensity (least restrictive) environment designations are highlighted. In the JLUS study area, 39 percent of Jefferson County's shoreline is designated natural and 22 percent of Kitsap County's. Bremerton's closest comparable designation, Urban Conservancy, is applied to 22 percent of its shoreline.

Navy

Of NAVMAGII's 226 acres of tidelands under its Integrated Natural Resources Management Plan (INRMP), 11 are preserved as bird sanctuary and others for additional habitat types.

Shoreline Regulations Comparison

Hood Canal is a generally well-preserved shoreline, with intense uses allowed only in small areas at Pleasant Harbor, Quilcene, and Bangor. The western portion of Bangor (on the Jefferson County side of Hood Canal) is surrounded by naturally designated areas, so to fit in its context, shoreline ecological functionality preservation is important. Bangor's eastern portion is adjacent to shoreline residential and proximate to large swaths of conservancy (usually for resource lands), so slightly more flexibility is allowed. Low intensity designations are appropriate around Bangor to protect the noise sensitive testing in Hood Canal (see Dabob Bay Range Complex and Hood Canal Easements on page 145).

Sinclair Inlet and Dyes Inlet, on the other hand, have primarily urban and residential designations. Urban designations surround NBK-Bremerton, suggesting that Bremerton's industrial activities are appropriate within its context.

NBK-Keyport is at the transition from Liberty Bay's mostly residential designations to the natural designations further south. This suggests some flexibility in intensity of uses with sensitivity to the natural areas to the south.

NAVMAGII is located between Port Townsend and Port Hadlock-Irondale's urban and residential, Port Townsend Bay's natural, and Marrowstone Island's natural, conservancy, and residential designations. Indian Island's natural shorelines are largely intact, so maintaining their ecological functions, while allowing some flexibility for more intense uses seems appropriate for its context. Likewise, Marrowstone Island should maintain its natural designations and limit its high intensity area to maintain its fit in context.



Figure 4.5.1. Navy shorelines: 1) NBK-Bremerton, 2) NBK-Bangor, 3) NBK-Keyport, and 4) NAVMAGII (photo credits: WA Ecology)

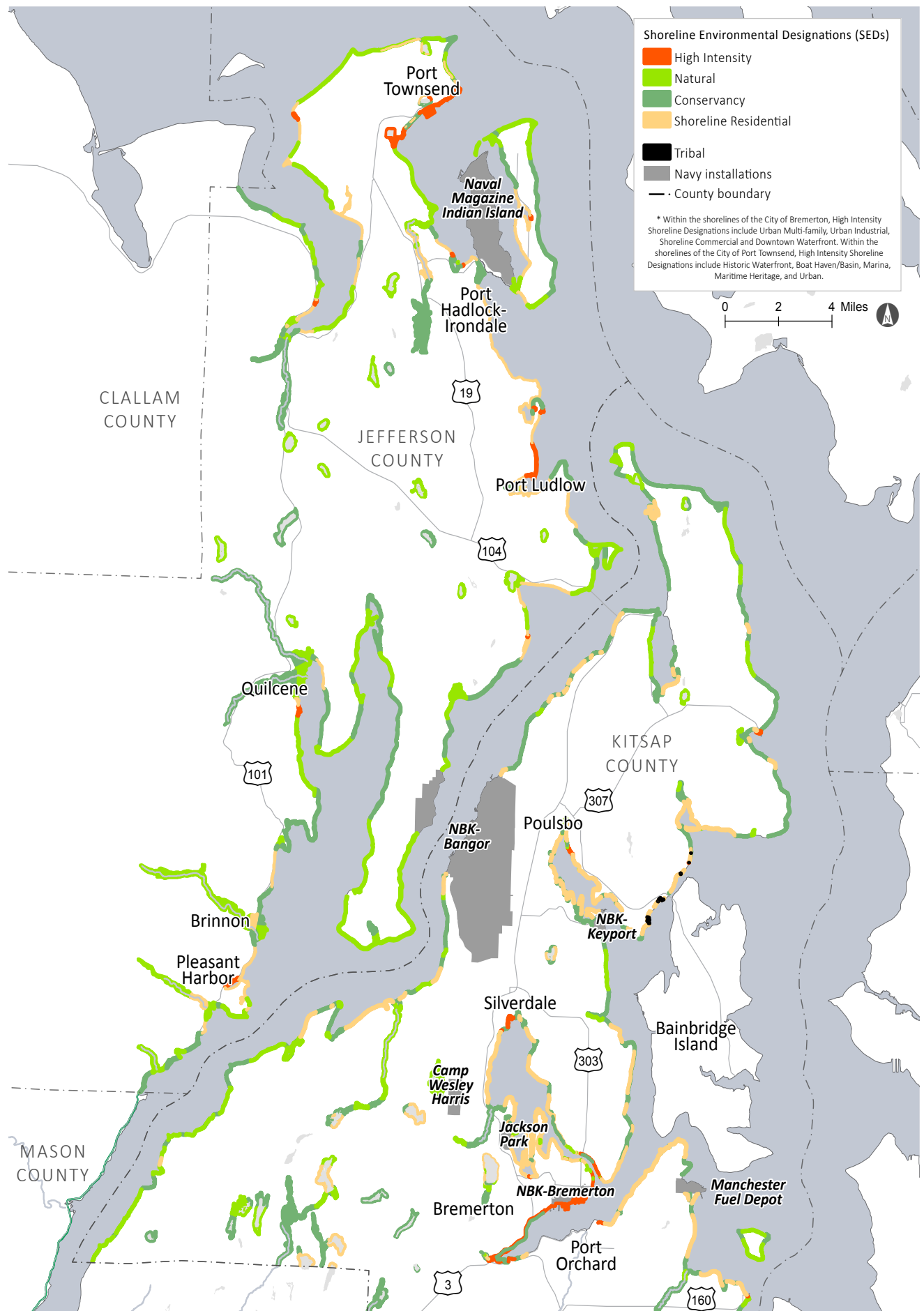


Figure 4.5.2. Shoreline Master Program (SMP) environment designations for Kitsap County, Jefferson County, and the Cities of Bremerton, Poulsbo, and Port Townsend.

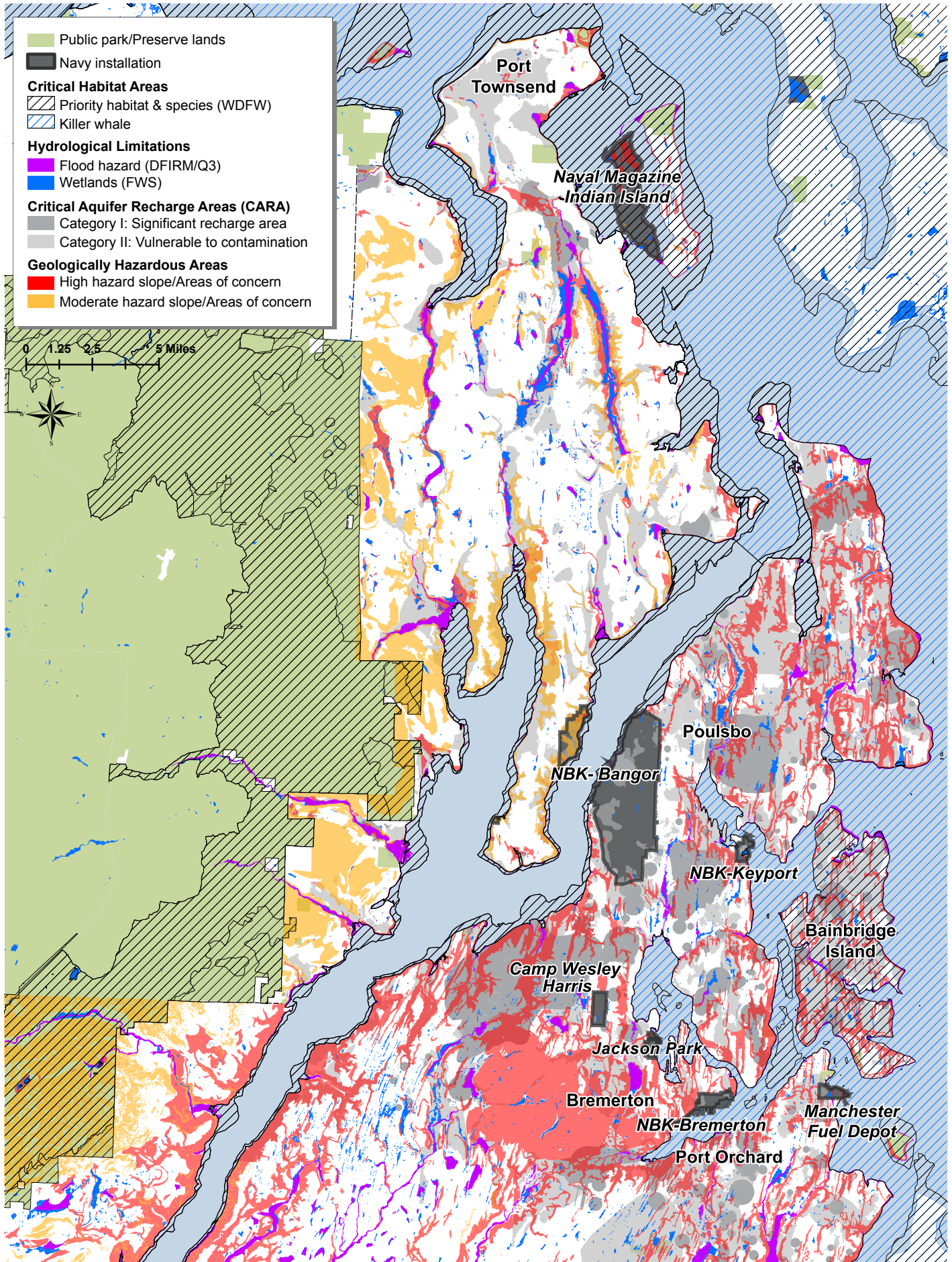


Figure 4.5.3. Designated critical areas

Critical Areas

As mentioned in Chapter 3, State law requires cities and counties to designate and protect critical areas with a goal of no net loss of ecological functions:

“ Although counties and cities may protect critical areas in different ways or may allow some localized impacts to critical areas, or even the potential loss of some critical areas, development regulations must preserve the existing functions and values of critical areas. If development regulations allow harm to critical areas, they must require compensatory mitigation of the harm. Development regulations may not allow a net loss of the functions and values of the ecosystem that includes the impacted or lost critical areas (WAC 365-196-830(4)).

This section notes nuances between the entities’ critical areas regulations.

Wetlands

All entities use the National Wetland Inventory (NWI) maps and the State Department of Ecology’s Wetland Rating System as a starting point. They all prohibit buildings and impervious surfaces in the wetland and buffer area, except for certain uses that enhance the wetland or have no impact, such as a trail or viewing area. However, the required buffer widths differ amongst the jurisdictions. For example, for Category I wetlands (e.g., habitat for threatened or endangered species, high quality, rare, or locally significant) with a proposed high impact use, Jefferson County’s required base buffer is 300 feet, Kitsap County’s is 250 feet, and Bremerton’s is 200 feet. In addition, all jurisdictions allow for an increase or decrease in buffer widths, so it’s particularly difficult to compare these regulations. Notably, Kitsap County offers tax relief for wetland compliance through their Open Space Tax Program, conservation easements, and donations to land trusts. Jefferson County also allows applicants to submit site-specific critical area stewardship plans (CASP) as long as the CASP provides equal or greater protection than the prescriptive buffers.

Although jurisdictions’ codes prohibit development in wetlands, exceptions are allowed. Exceptions are granted more commonly in Kitsap County and Bremerton where urbanized areas have more land constraints and property owners willing to pay the high costs of developing in critical areas. This is less common in Jefferson County, where land is more rural and residential. When development is permitted in critical areas, it must follow the EPA’s mitigation sequence:

1. Avoid adverse impacts,
2. Minimize adverse impacts if impacts are unavoidable, and
3. Compensate for unavoidable adverse impacts which remain.

Fish and Wildlife Habitat Conservation Areas

Similar to the wetlands buffers above, development proposals undergo a SEPA or critical areas review when critical habitat is identified on the property. Again, the jurisdictions differ in their baseline habitat conservation area buffers. For example, for Type F streams (moderate to high fish, wildlife, or human use that are not designated “shorelines of the state”), Kitsap County requires a 200-foot buffer, while Bremerton and Jefferson County require 150 feet.

Geologically Hazardous Areas

Required buffer widths differ amongst the jurisdictions for geologically hazardous areas, as well. They all require native vegetation at least 25 feet from the top and toe of the slope. Kitsap County’s building and impervious surfaces buffer is dependent on the height of the slope for high geologic hazard areas and a minimum of 40 feet for moderate hazard areas; Bremerton’s is 50 feet and 25 feet; and Jefferson County’s is 30 feet (plus a 5 foot setback) for all.

All jurisdictions comply with State-mandated critical areas regulations to protect wetland, fish and wildlife habitat, geological hazard, critical aquifer recharge, and flood hazard areas. They generally use federal and State critical areas maps and have nuanced approaches to buffering areas from development.

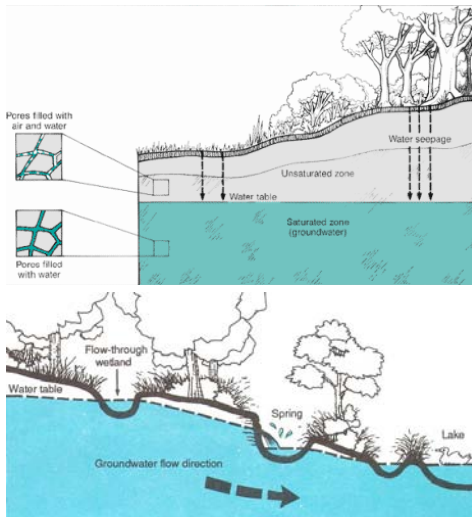


Figure 4.5.4. Groundwater and surface water (e.g., wetlands, springs, creeks, rivers, lakes). State regulations require urban areas to manage their discharges to groundwater in addition to the federal requirements for managing discharges to surface waters.



Figure 4.5.5. Example of green stormwater infrastructure emulating natural drainage, where carefully chosen plants and soils treat stormwater runoff and allow infiltration to reduce water pollution.

Critical Aquifer Recharge Areas

All jurisdictions prohibit certain uses (e.g., landfills, waste treatment, chemical manufacturing, etc.) from locating in critical aquifer recharge areas, and other uses are subject to protection and mitigation measures based on a hydrological report and site-specific conditions.

Flood Hazard Areas

All jurisdictions and the Navy follow FEMA and National Flood Insurance Program (NFIP) regulations to protect human and environmental safety in frequently flooded areas.

Critical Areas Comparison

All jurisdictions comply with State-mandated critical areas regulations, including the requirement to regularly review and update their policies and regulations to include the best available science. Although differences exist, especially regarding buffer widths, they are at least starting from the same baseline. The nuances described above may be due to local conditions or may identify areas where a jurisdiction goes above and beyond State requirements. Though the Navy is not subject to State regulations, the Navy complies with the criteria of the State critical areas regulations through the Coastal Zone Management Act's Consistency Determination process and National Environmental Policy Act (NEPA) (see additional federal regulations information in Chapter 3).

Water Quality and Stormwater Runoff

The following describes each entity's methods for protecting water quality from stormwater runoff.

Kitsap County

To meet NPDES Phase II requirements, Kitsap County is updating their stormwater code (Title 12) to require Low Impact Development (i.e., onsite natural infiltration) where possible (<http://www.kitsapgov.com/sswm/npdes.htm>) and developing a stormwater manual that meets the minimum technical requirements in the 2012 Ecology Stormwater Management Manual for Western Washington (SWMMWW). Kitsap County has proactively implemented LID practices by retrofitting many of their properties, such as the Kitsap County fairgrounds, some parks, and a YMCA project in Silverdale. They also run an ambitious residential rain garden program.

Jefferson County

As a rural county, Jefferson County is not an NPDES Phase I or II stormwater management jurisdiction. However, Jefferson County development code incorporates the Department of Ecology's 2012 Stormwater Management Manual for Western Washington (SMMWW) to regulate stormwater management and clearing and grading. Onsite infiltration is required wherever feasible. Any new, redevelopment, or construction project clearing more than one acre may require a Department of Ecology Construction Stormwater General Permit.

Bremerton

To meet NPDES Phase II requirements, Bremerton has adopted the 2012 Ecology SWMMWW, Kitsap County Stormwater Management Manual, Low Impact Development (LID) Guidance Manual for Kitsap County, Low Impact Development Technical Guidance Manual for Puget Sound (LID Manual) by Washington State University and Puget Sound Partnership, and Engineering Design and Construction Standards (Bremerton Code, 15.04.020 Adoption of Manuals). Their code currently encourages LID best management practices and will begin requiring it in 2017 for new and redevelopment (15.04.100).

Safe Drinking Water Act - Protecting America's Public Health



Figure 4.5.6. Potential water pollution sources. "Point source" (single, identifiable source) pollution is well-managed through federal and state regulations.

Navy

Federal agencies are not subject to the State NPDES permit program but are required to meet the statutory obligations of state permits. They are required to obtain an NPDES permit from the federal EPA for discharges of regulated municipal stormwater (i.e., discharges from stormwater systems within urban areas) and also must prepare stormwater pollution prevention plans (SWPPPs) in compliance with EPA-issued industrial and construction stormwater permits that regulate certain industrial discharges and erosion and sediment control during construction. The Navy has appropriately submitted applications for the federal NPDES municipal stormwater discharge permits for all the installations in this JLUS, and for discharges from the Bremerton shipyard. (Due to the shipyard's uniquely industrial nature, its discharges are subject to a site-specific NPDES permit issued by EPA Region 10.) EPA Region 10 is currently working to issue the appropriate municipal stormwater permit(s) for federal entities in Western Washington¹; such permit(s) will impose a comparable level of stormwater management on the Navy facilities as is currently in place for other Washington State NPDES-regulated jurisdictions. In the meantime, the Navy complies with applicable federal regulations that require them to address pollutants in municipal stormwater discharges into waters of the United States (surface waters) and to groundwater.



Figure 4.5.7. Puget Sound Partnership collects water samples in Hood Canal (photo credit: Puget Sound Partnership)

1 In late 2014, EPA issued a final NPDES permit for discharges from Joint Base Lewis McChord (JBLM) Municipal Separate Storm Sewer System (MS4), and has subsequently begun work on similar NPDES permit(s) for the other federally-operated and regulated MS4s in Washington State.

Water Quality and Stormwater Runoff Comparison

Kitsap County and Bremerton, as State NPDES-permitted jurisdictions, share the same baseline regulations. Washington State's NPDES's regulations go beyond federal regulations, and are some of the best in the nation, by requiring long-term green stormwater infrastructure and hydrological performance at high measures. Jefferson County, with its incorporation of Ecology's Stormwater Management Manual for Western Washington into its code and requirement of onsite infiltration, is voluntarily bringing itself up to a comparable level of stormwater regulations.

The Navy has applied for federal NPDES municipal stormwater permits, which, when issued, will provide equivalent stormwater management protections as currently required by the State's NPDES municipal stormwater permit. In the interim, the Navy is not currently required to follow specific stormwater management requirements for new and redevelopment that are as stringent as the jurisdictions, particularly in regards to long-term strategies for LID and green stormwater infrastructure. They voluntarily follow Ecology's Stormwater Management Manual; however, once EPA Region 10 issues the municipal stormwater permit(s) for the Navy installations (expected in late 2015), they will be following new development and redevelopment stormwater management requirements comparable to Kitsap County and Bremerton.

Shared Stormwater Responsibilities

As a related issue, the local governments and Navy's stormwater management areas occasionally overlap. For example, a culvert beneath a Navy railroad and Kitsap County road was found to be discharging turbid water downhill into a salmon spawning stream. For places like railroad crossings where ownership and site operation is intermingled, determining operation and maintenance responsibility for stormwater issues can be complicated. The federal NPDES permit issuance process is expected to help outline and clarify shared responsibility for these types of issues.

Environmental Protection Regulations Summary

Jurisdictions and the Navy uphold a host of environmental regulations. Washington State law requires jurisdictions to address shorelines, critical areas, water quality, and stormwater runoff in fairly sophisticated ways, raising the bar to a high baseline. Federal regulations require the Navy to meet a fairly high baseline, as well, and federal policies guide the Navy to follow the State's level of regulations.

In one instance, a noticeable difference between local and Navy regulations arose. In the case of groundwater quality from stormwater runoff, the federal regulations are less stringent than the jurisdictions', but the Navy voluntarily complies with much of the State's guidance manual. In addition, once EPA Region 10 issues NPDES permits for the Navy installations, they will be following the same level of regulations as NPDES-permitted cities and counties.

For shoreline and critical areas habitat quality and ecological functions, each entity has such nuanced regulations that the comparison is extremely difficult. Given the amount and quality of sensitive environmental areas in the study area, a close look at regional environmental goals and priorities is warranted.

Potential Strategies

1. Plan jointly to direct development where it has the least impacts on the environment while allowing flexibility for economic growth and mission fulfillment.
 - A. Develop watershed-wide plans among all entities within a watershed to reflect regional goals and priorities (see Implementation Task E5 in Chapter 5).
 - B. Synchronize the jurisdictions' GMA-mandated planning with the Navy's Integrated Natural Resource Management Plans (INRMPs) (see E1 in Chapter 5).
 - C. Encourage involvement between jurisdictions and the Navy when mapping critical areas and determining buffers. Continue sharing drafts and allowing review of critical areas ordinances (see E5 in Chapter 5).
 - D. Continue jointly defining shoreline designations. Ensure that the Navy continues to have a seat on any advisory bodies during SMP updates. Pay careful attention to designations that abut Navy property so that the Navy continues to fit within its context and vice versa (see B4 in Chapter 5).
 - E. Meet regularly to identify priorities and ensure a "fair share" of environmental protection (see C2 in Chapter 5).
2. Support EPA Region 10 in issuing NPDES permits for Navy installations (Navy). (Note, the Navy is already accomplishing this through the permitting process, so this recommendation is not in Chapter 5.)
3. Jointly prioritize environmental enhancement sites to consider for Readiness and Environmental Protection Initiative (REPI) projects, land trust purchases, potential off-site mitigation, or other opportunity (see B2, B3, and B5 in Chapter 5).
4. Clarify the proper routes for communication over environmental issues. Most issues can be solved internally amongst the jurisdictions and the Navy and do not require state or federal agency intervention (see C2 in Chapter 5).
5. Create a "good neighbor policy" for environmental issues such that, if any entity proposes development or an operation within a certain distance of a jurisdiction-Navy boundary, it consults the neighbor to ensure the project meets the environmental goals of both parties (see A2, C2, and C1 in Chapter 5).

Many of these strategies are a continuation of existing practices. See the MOU strategy addressing this concept on page 86.

Also see "Communication and Coordination" on page 83.

Navy Environmental Impacts

This issue is two-fold, addressing: 1) Navy practices that adversely impact the environment and 2) perceptions about Navy environmental practices. In some cases, past practices affected the environment and may still have impacts. For example, the federal Environmental Protection Agency (EPA) is asking the Navy to mitigate impacts from a garbage dump near Gorst used from 1969 to 1970 (Christopher Dunagan, “EPA wants Navy to help fix former dump,” *Kitsap Sun*, October 15, 2014).

Analysis

Past Practices

Past practices, under less stringent former regulations, resulted in some environmental degradation. Like many industrial sites in the region, the Navy has a number of federally-listed Superfund sites (i.e., polluted sites prioritized for remediation). The Navy is following remediation plans. Also see the Navy Region Northwest Practices section below for more information on the Navy’s current and recent environmental practices.

Gorst Dump

If the dump collapses, it could damage Highway 3 and send contaminated waste into Gorst Creek. The EPA’s proposed solution is for the Navy to reroute the stream to avoid the dump and stabilize the landfill. The Navy is actively engaged with EPA Region 10 in reaching a collaborative solution that reflects the Navy’s responsibilities to protect the environment. A specific remedy is yet to be selected.

Perceptions about Navy Environmental Impacts

Some JLUS online survey participants commented that the Navy has degraded the environment (see survey results in Appendix A). As in the case above, under less stringent past regulations, some impacts may have occurred. At the same time, other survey comments commended the Navy on its current environmental practices.

Navy Region Northwest Practices

The *Environmental Readiness Program Manual (ERPM)* (OPNAV M-5090.1) and each installation’s Integrated Natural Resources Management Plan (INRMP) guide the Navy’s environmental practices. To ensure environmental compliance, the ERPM requires all installations to undergo a yearly internal environmental management systems (EMS) audit, an external compliance audit every three years, and an external EMS audit to declare conformance to ISO 14001 (criteria for effective EMS) or equivalent.

The Navy has taken great measures to remedy past environmental impacts and enhance the area’s ecological functions. To enhance environmental quality, Navy Region Northwest (NRNW):

- Invested \$46 million in energy projects in its installations from 2005 to 2010 and now realizes a \$7M savings annually and reduced energy consumption by 16% (examples of updating technology include lighting retrofits, replacing heating/ventilation systems). NRNW was presented with the “Presidential

Award for Leadership in Federal Energy Management” to recognize this work.

- Is a partner (2009 and continuing into 2010) in EPA Region 10’s Federal Green Challenge regarding energy and water.
- Installed Ethanol 85 (E-85) and Biodiesel 20 (B-20) fuel stations at all northwest bases.
- Recycled 13,327 tons of material in 2008.
- Ensures that all new construction complies with the US Green Building Councils Leadership Energy and Environmental Design (LEED) building standard.
- Advances partnerships with federal, state, and local agencies to maximize effectiveness in addressing environmental issues. Partners include:
 - Puget Sound Federal Caucus – Support and coordination of vision and projects for a healthy Puget Sound,
 - The Puget Sound Restoration Fund – Support to native Puget Sound oyster seeding,
 - Hood Canal Dissolved Oxygen Program,
 - Coastal America Implementation Teams in Alaska (AK RIT) and Northwest (NW RIT),
 - Adopt-A-Beach programs, and
 - US Coast Guard, US EPA Region 10, and WA Department of Ecology – Spill preparedness and response.

NBK Environmental Actions

In recent years, NBK has been a leader in energy and water consumption reduction (FY2014 Chief of Naval Operations Environmental Awards Nomination Environmental Quality-Industrial Installation Naval Base Kitsap; NBK Cuts Energy, Shines Bright; Naval Base Kitsap Kicks Off Energy Action Month):

- NBK was awarded the 2014 Chief of Naval Operations Environmental Quality, Industrial Installation Award for their:
 - Environmentally sound underground storage tank program;
 - Oil and hazardous materials spill prevention study and process changes;
 - Air quality and greenhouse gas management;
 - Hazardous materials reuse and reduction, wastewater discharge management, and overall waste reduction;
 - Replacement of fish-blocking culverts study and the pilot project construction of one tunnel restoring fish passage;
 - Major Cattail Lake restoration;
 - Robust environmental review, analysis, government-to-government consultation, permitting, and follow-on compliance monitoring, including for several ongoing large-scale construction projects where monitoring reports showed ESA-listed species were protected.
- Naval Base Kitsap (NBK) was awarded the annual Secretary of the Navy (SECNAV) Energy and Water Management Award in the Navy Large Shore category for 2013. The award recognizes Navy ships, installations and people for outstanding performance in environmental stewardship.
- NBK recently upgraded its chill water plant and installed direct digital controls at the Trident Training Facility (TTF). Thanks to these upgrades and the efforts of those stationed and living on base, NBK reduced its energy consumption by two percent from FY13. NBK has reduced energy usage by 25.1 percent and water consumption by 48 percent.



Figure 4.5.8. As mitigation for NBK-Bangor facilities construction, the Navy restored tidal conditions and riparian and upland habitats to Cattail Lake, which had been artificially isolated from tidal influences for over 60 years. Before restoration shown above (photo credit: David Grant) and after below (photo credit: Navy).



Figure 4.5.9. U.S. Navy personnel and members of the Jefferson and Kitsap County Beachwatchers club volunteer to pick up trash along Indian Island beaches in honor of Earth Day 2013. (photo credit: Navy, Liane Nakahara)

- NBK celebrates Energy Action Month, a DON-wide mission to highlight energy initiatives that reduce energy consumption and water usage ashore. As part of the month-long awareness campaign, NBK and other installations will have visits from BRITE (the DON energy mascot) and information tables posted around the different bases to help educate sailors in what they can do to help.
- NBK was honored with a Secretary of the Navy (SECNAV) Energy and Water Management award for FY2008 for outstanding commitment to reducing energy and water consumption. NBK's widespread and expanding effort involves top-level command, aggressive awareness campaigns, innovative conservation measures, and consistent reduction in consumption. Top honors went to Keyport in the industrial category and PSNS & IMF for their notable energy program and execution.

NAVMAGII Environmental Actions

NAVMAGII has accomplished or supported a range of environmental activities, such as:

- Implementing NAVMAGII's Integrated Natural Resources Management Plan (INRMP). The INRMP ensures that natural resource conservation and military operations are integrated to meet all regulatory requirements and protect fish and wildlife species and their habitat areas.
- Remediating polluted sites. NAVMAGII was removed from the U.S. EPA's National Priorities List (i.e., Superfund List) in June 2005. This was the first Navy base on the West Coast to be removed from this list.
- Complying with National Environmental Policy Act (NEPA) requirements by reviewing NAVMAGII's activities, construction, and operations.
- Partnering with WDFW and Washington State University's Department of Veterinary Science to collect samples and conduct studies on the resident black-tailed deer herd.
- Hosting WDFW to monitor the Island's eight active bald eagle nest territories. Indian Island is used as a base line for eagle habitat and reproduction studies.
- Working with the Washington Department of Agriculture for management, control, and eradication of the invasive and non-native *Spartina* grass.
- Partnering with North Olympic Salmon Coalition to map forage fish spawning areas.
- Jointly training for spill responses with the U.S. Coast Guard, Port Townsend Paper Mill, Jefferson County Sheriff's Department, Washington Department of Ecology, and Washington Department of Fish and Wildlife.
- Coordinating marine water quality sampling with the Washington Department of Health in Port Townsend Bay and Killisut Harbor. These waters are inhabited by four ESA-listed species.

Potential Strategies

1. Continue to build community trust and promote environmental successes (Navy).
 - A. Publicize positive environmental practices through outreach, website, and tours (see Implementation Task A2 in Chapter 5).
 - B. Update electeds on environmental projects (see A1 in Chapter 5).
2. Continue to implement Integrated Natural Resource Management Plans (INRMPs) (Navy). (Note, this is already required by federal regulations, so has not been included in Chapter 5.)
3. Mitigate current and future projects that impact the environment through:
 - A. The Readiness and Environmental Protection Integration (REPI) program (see B3, and B5 in Chapter 5).
 - B. The Hood Canal Coordinating Council's in-lieu fee mitigation program (see B3 and B5 in Chapter 5).
 - C. Restoration projects identified in SMPs (see B4 and B5 in Chapter 5).

See Section 4.1 “Communication and Coordination” for public outreach strategies.

See additional information on REPI on page 147 and related strategies page 150.

Open Space and Resource Lands

In addition to the environmental regulations, preservation of open space and resource lands, in particular working forests, is an excellent way to protect the environment (and the Navy's mission, as discussed in “Onwater and Shoreline Activities” on page 103). Many natural resource lands provide ecological functions but are not generally protected from development. As pressure to build more residential and commercial uses increases, these lands are under threat of conversion.

Analysis

The jurisdictions preserve natural habitat through the critical areas and buffers, by designating areas as open space in their comprehensive plans and applying appropriate zoning, and through a variety of other conservation measures, such as the Department of Defense's Office of the Secretary of Defense (OSD) Readiness and Environmental Protection Initiative (REPI) program, the Salmon Recovery Funding Board (SRFB), Puget Sound Acquisition and Restoration (PSAR), and local land trusts who actively pursue conservation opportunities. The following describes local efforts to preserve open space and natural resource lands.

Open space preservation protects the environment and the Navy's functions, especially in Hood Canal.

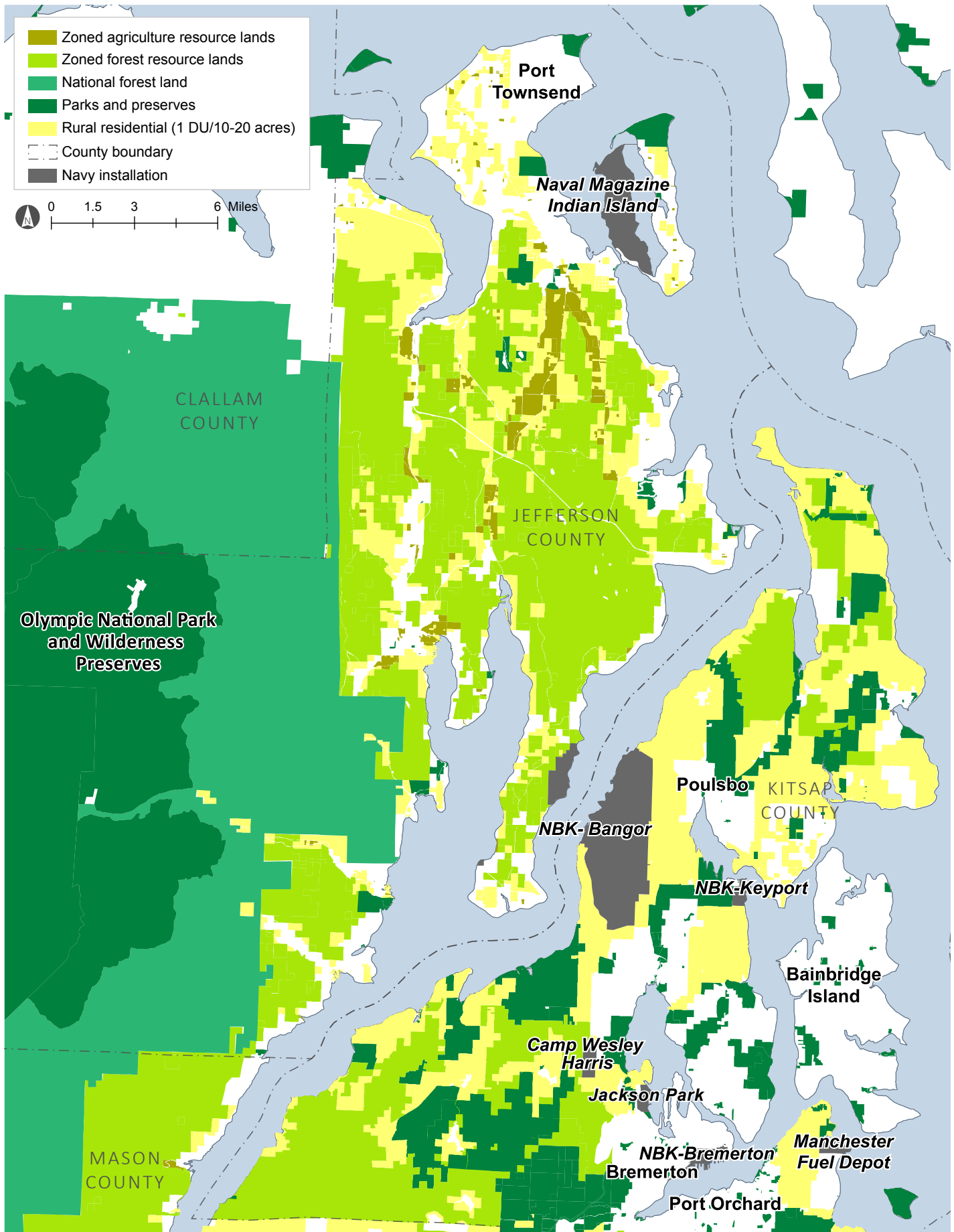


Figure 4.5.10. Preserved open space and natural areas

Jurisdictions' Regulations and Programs

Kitsap County

Kitsap County encourages open space preservation through its:

- Critical areas and buffers regulations,
- Comprehensive Plan land use designations and associated zones, primarily through the Parks (P) zone and also through Forest Resource Lands (FRL), Mineral Resource (MR), Rural Wooded (RW), and Rural Protection (RP) zones, and mildly through the Rural Residential (RR) zone,
- Transfer of Development Rights (TDR) program (no acres had been transferred through the program as of March 2011 (American Farmland Trust, An Evaluation of County Farmland Protection Programs in the Puget Sound Basin: Appendix B: Kitsap County Scorecard), but the County is improving the program to be more effective in the near future),
- Conservation easements with local Indian Tribes, the Kitsap County Open Space Program, and organizations such as Great Peninsula Conservancy, Kitsap Land Trust, Bainbridge Island Land Trust, Hood Canal Land Trust, Indianola Land Trust, and the Nature Conservancy,
- Current Use Assessment program that offers tax incentives to property owners for providing open space. Lands which contain the following resources are eligible to be assessed as open space to receive tax reductions on the current use value. Tax reductions range from 50 to 90 percent based on the number and priority of resources on the property, and
- Conservation Futures Fund (Kitsap County Code 4.70 and RCW 84.34.210), a property tax (6.25 cents/thousand dollars assessed valuation) for land acquisitions. The Kitsap Conservation Futures Fund has preserved open space (e.g., the Point No Point wetlands and the Hansville Greenway in the 1990s) and is currently being used to repay bonds which purchased 1,200 acres of forestland in 2003. Payoff is expected in 2018.

KITSAP COUNTY

Washington

Current Open Space and Park Inventory

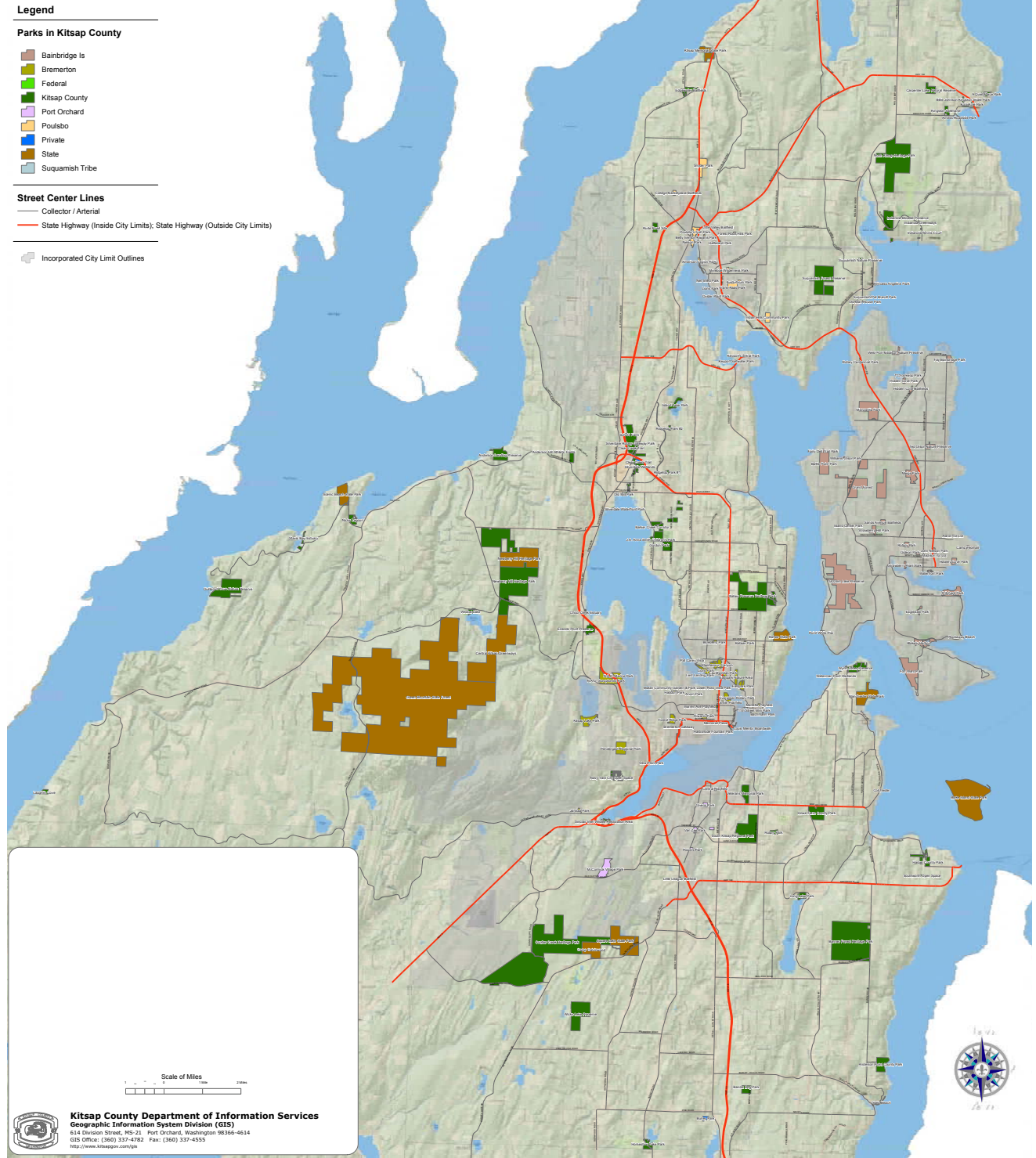


Figure 4.5.11. Kitsap County open space and park inventory map (map credit: Kitsap County Parks, Recreation and Open Space Plan 2012)

Resource List	Recognized Sources
High Priority Resources	
1. Fish-Rearing Habitat Ponds and Primary Stream Buffers	WDOF Catalog
2. Wetlands, Ponds and Streams	USFWS Inventory, WDOF Catalog
3. "Natural" Shoreline Environments	KC Shoreline Mgt. Master Program
4. Special Animals and Plants	WA Natural Heritage Plan
5. Significant Wildlife Habitats	WDW
6. Archaeological and Historical Sites	WA Ofc. Arch. & Hist.
7. Urban Open Space	KC Comp. Plan Maps
8. Designated Open Space	KC Comp. Plan Maps
9. Watersheds	KC Health Dept., WSDSHS
10. Farm and agricultural conservation land	Pursuant to RCW 84.34.020
11. Conservation easement	As recorded with the county auditor
12. Land or interest acquired for open space or conservation futures	Pursuant to RCW 84.34.210-220
Medium Priority Resources	
1. "Conservancy" Shoreline Environments	KC Shoreline Mgt. Master Program
2. Secondary Stream Buffers	High Priority List items 1 & 2
3. Geologic and Shoreline Features	Natural Heritage Program
4. Public Lands Buffer	KC Comp. Park & Rec. Plan
Low Priority Resources	
1. Steep Slopes	KC Slope Stability Study
2. Private Recreation Areas	By Definition
3. "Rural" Shoreline	KC Shoreline Mgt. Master Program
4. Preservation of visual quality	Pursuant to RCW 84.34.020

(Kitsap County Municipal Code 18.12.020)

Figure 4.5.10 shows Kitsap County's current preserved open space.

Bremerton

Bremerton preserves open space through its Watershed (WS) and City Utility Lands (CUL) zones, critical areas and buffers, and “natural areas” identified in the Parks Plan. Over half of Bremerton is forested land, largely in the CUL and WS zones beyond the boundaries of the Figure 4.5.12 map.

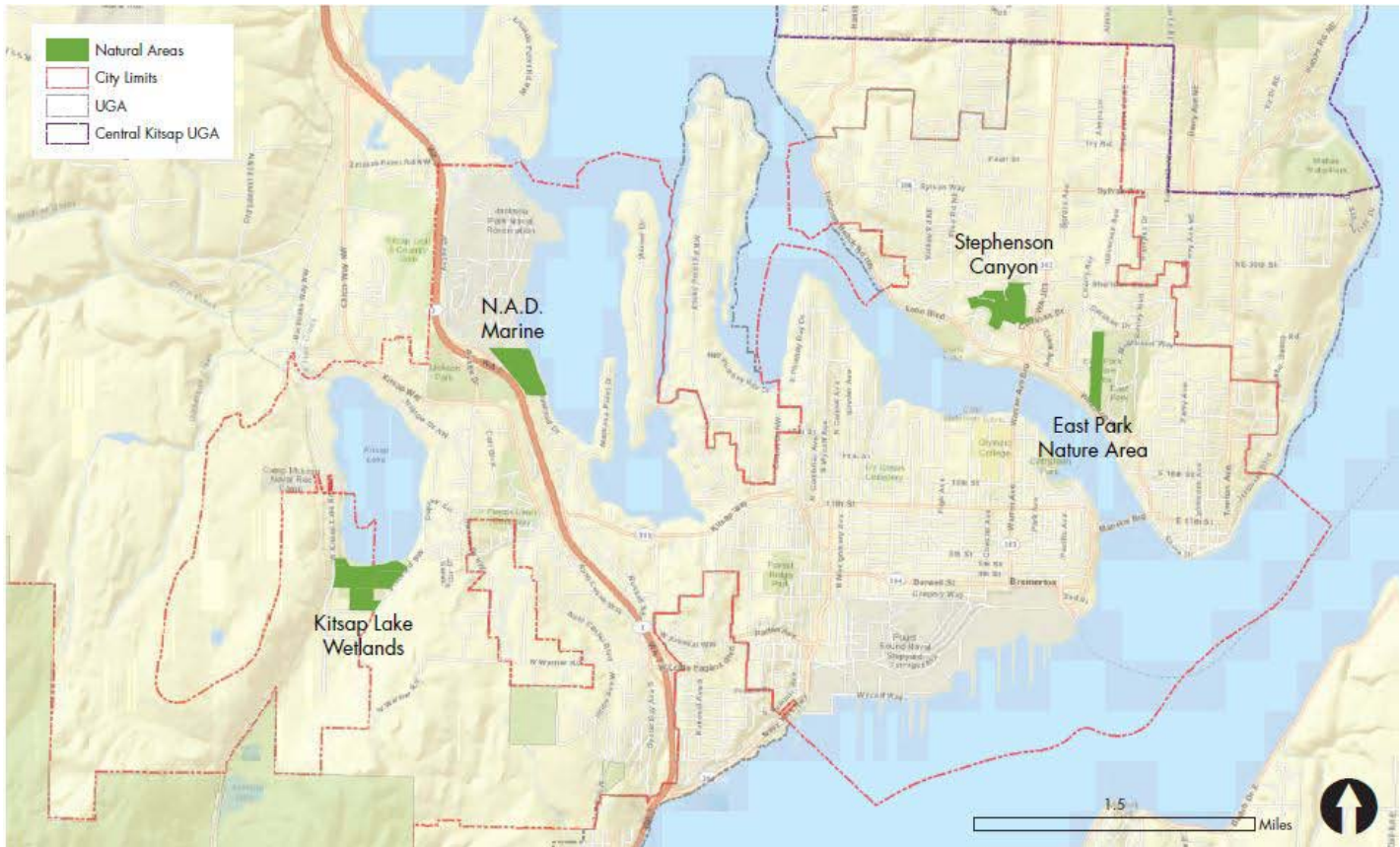


Figure 4.5.12. Bremerton natural areas (map credit: Bremerton Parks, Recreation and Open Space Plan, 2013)

Jefferson County

Jefferson County’s Comprehensive Plan identifies a number of strategies for preserving open space, such as:

- Open space tax incentives,
- Cluster development,
- Transfer and purchase of development rights,
- Varying amounts of lot coverage,
- Conservation easements,
- Landowner compacts,
- Trail systems, and
- Streamlining the application process for current use assessment.

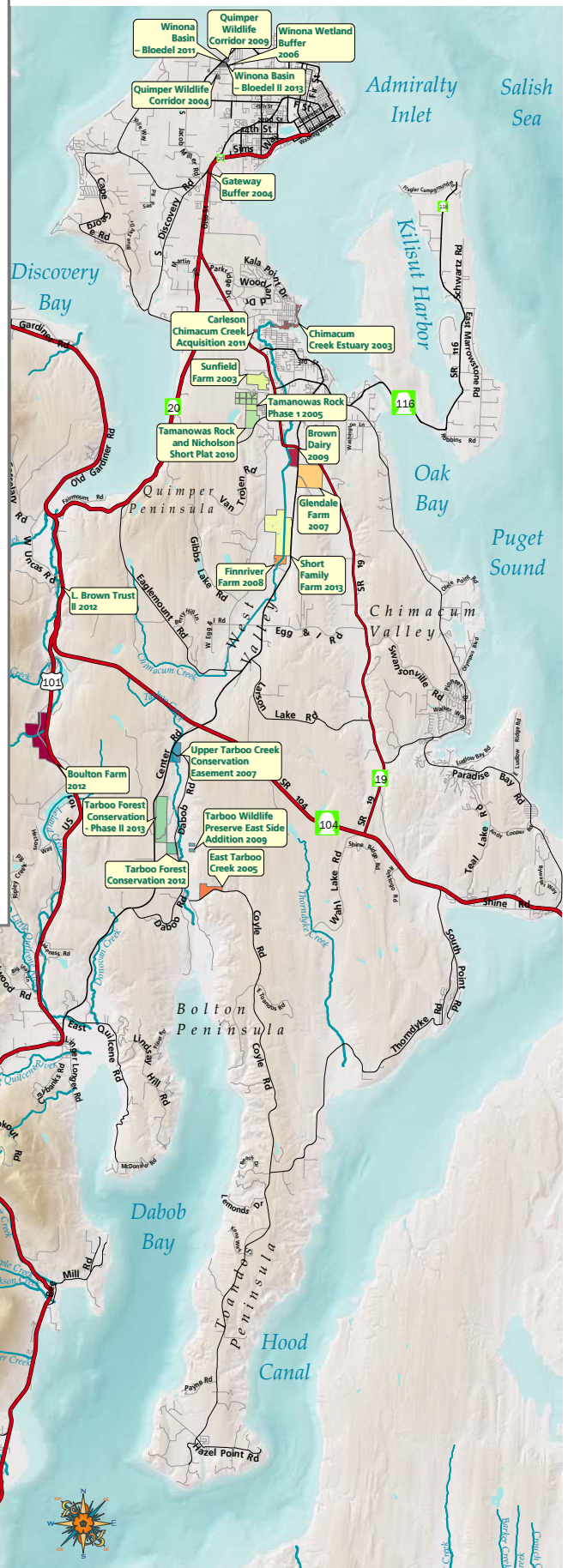
Jefferson County preserves open space primarily through the Public Parks, Preserves and Recreation (PPR) zone, and in many ways through the Rural Residential 1 Unit/10 Acres (RR 1:10) and 1 Unit/20 Acres (RR 1:20) zones, Forest Resource Lands (FOR), Agriculture Resource Lands (AG), and Forest Transition Overlay (FTO) zones. The Forest Transition Overlay (FTO) district properties must provide a permanent protective buffer along boundaries with designated forest resource lands. In addition, Master Planned Resorts and Planned Rural Residential

Conservation Futures Eastern Jefferson County, Washington

Project

- Boulton Farm 2012
- Brown Dairy 2009
- Carleson Chimacum Creek Acquisition 2011
- Chimacum Creek Estuary 2003
- Duckabush Floodplain 2013
- East Tarboo Creek 2005
- Finnriver Farm 2008
- Gateway Buffer 2004
- Glendale Farm 2007
- L. Brown Trust II 2012
- Quimper Wildlife Corridor 2004
- Quimper Wildlife Corridor 2009
- Short Family Farm 2013
- Sunfield Farm 2003
- Tamanowas Rock Phase 1 2005
- Tamanowas Rock and Nicholson Short Plat 2010
- Tarboo Forest Conservation - Phase II 2013
- Tarboo Forest Conservation 2012
- Tarboo Wildlife Preserve East Side Addition 2009
- Upper Tarboo Creek Conservation Easement 2007
- Winona Basin - Bloedel 2011
- Winona Basin - Bloedel II 2013
- Winona Wetland Buffer 2006

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 Prepared By: Doug Noltemeier, GISP
 Date: January 3, 2014
 © 2014 Jefferson County GIS
 Disclaimer: Jefferson County does not attest to the accuracy of the data contained herein and makes no warranty with respect to its correctness or validity. Data contained in this map is limited by the method and accuracy of its collection.



Developments must preserve open space in perpetuity and may receive density bonuses for open space preservation. For example, Jefferson County's Open Space Reserve (MPR-OSR) zone preserves open space in the Port Ludlow Master Planned Resort.

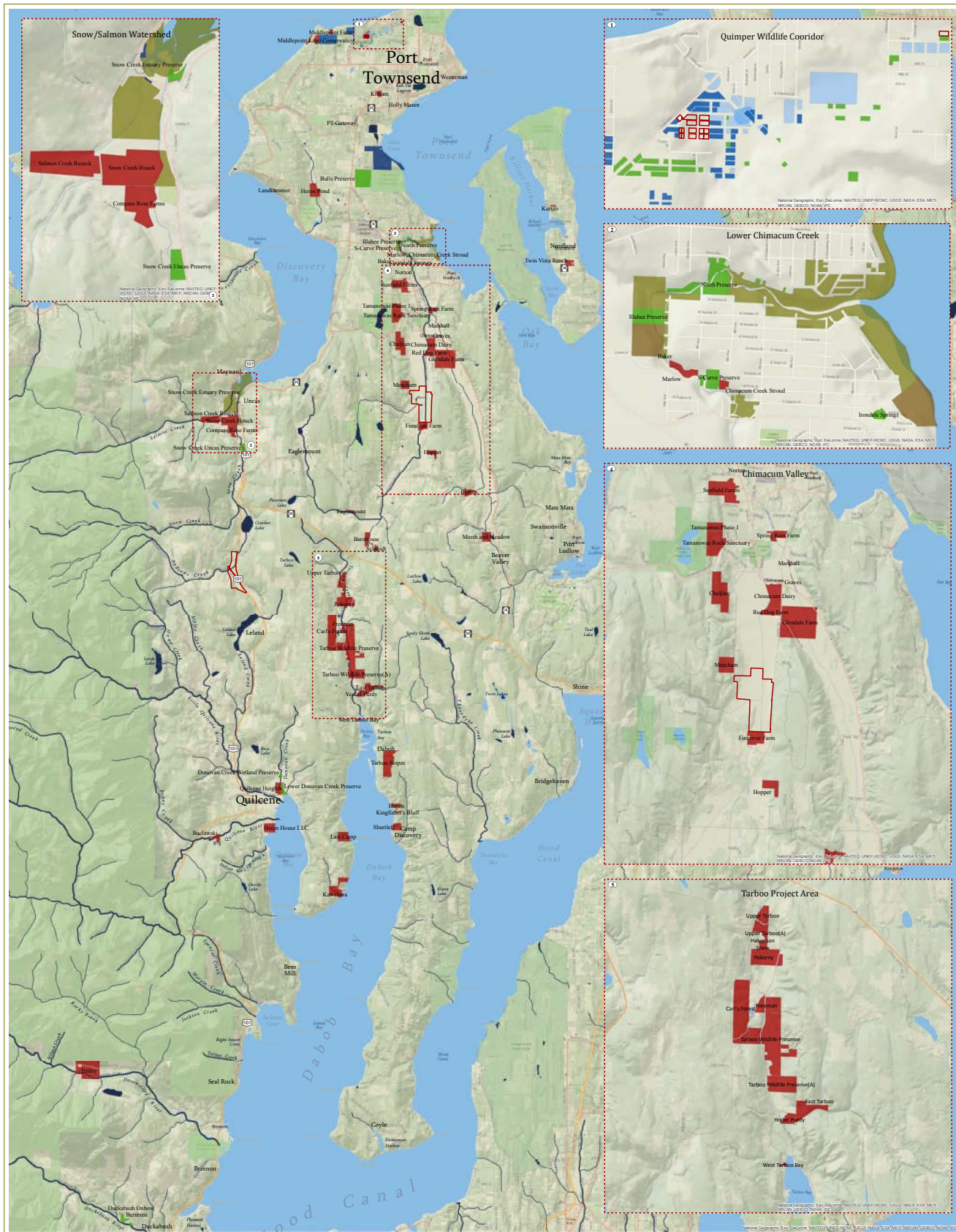
Conservation Futures

The Jefferson County Conservation Futures Ordinance (2002) created a fund to acquire and preserve an open space system in the county. Projects preserved through the program are mapped in Figure 4.5.13.

Jefferson County Land Trust

Jefferson County Land Trust (JLT) actively promotes and manages conservation easements (i.e., legal agreements between a landowner and an agency that permanently protects land while the

Figure 4.5.13. Conservation Futures projects (map credit: Jefferson County Conservation Futures Program Manual, 2014 Funding Cycle)



**Jefferson Land Trust
Land Protection Accomplishments
1989-2013**

	Projects in Progress		Conservation Easements		City Protected		Parks
	JLT Preserves		Additional protected property		County		WDFW

For informational purposes only. All data represented are from varying sources and approximate.

Map created in December, 2013

0 1 2 4 Miles



Figure 4.5.14. Properties protected from development through JLT and other mechanisms (map credit: Jefferson County Land Trust)

landowner continues to own it). Conserved lands are mapped in Figure 4.5.14, and the JLT projects are highlighted.

Navy

The Navy utilizes the federal Readiness and Environmental Protection Initiative (REPI) program to preserve open space near Navy installations. The REPI program helps protect military test and training grounds from negative impacts of encroachment through voluntary agreements between military service branches, private conservation groups, and state and local governments. These win-win partnerships acquire easements or other land interests from willing sellers to

See "Shoreline Land Use" on page 108 for additional information on Navy interests.

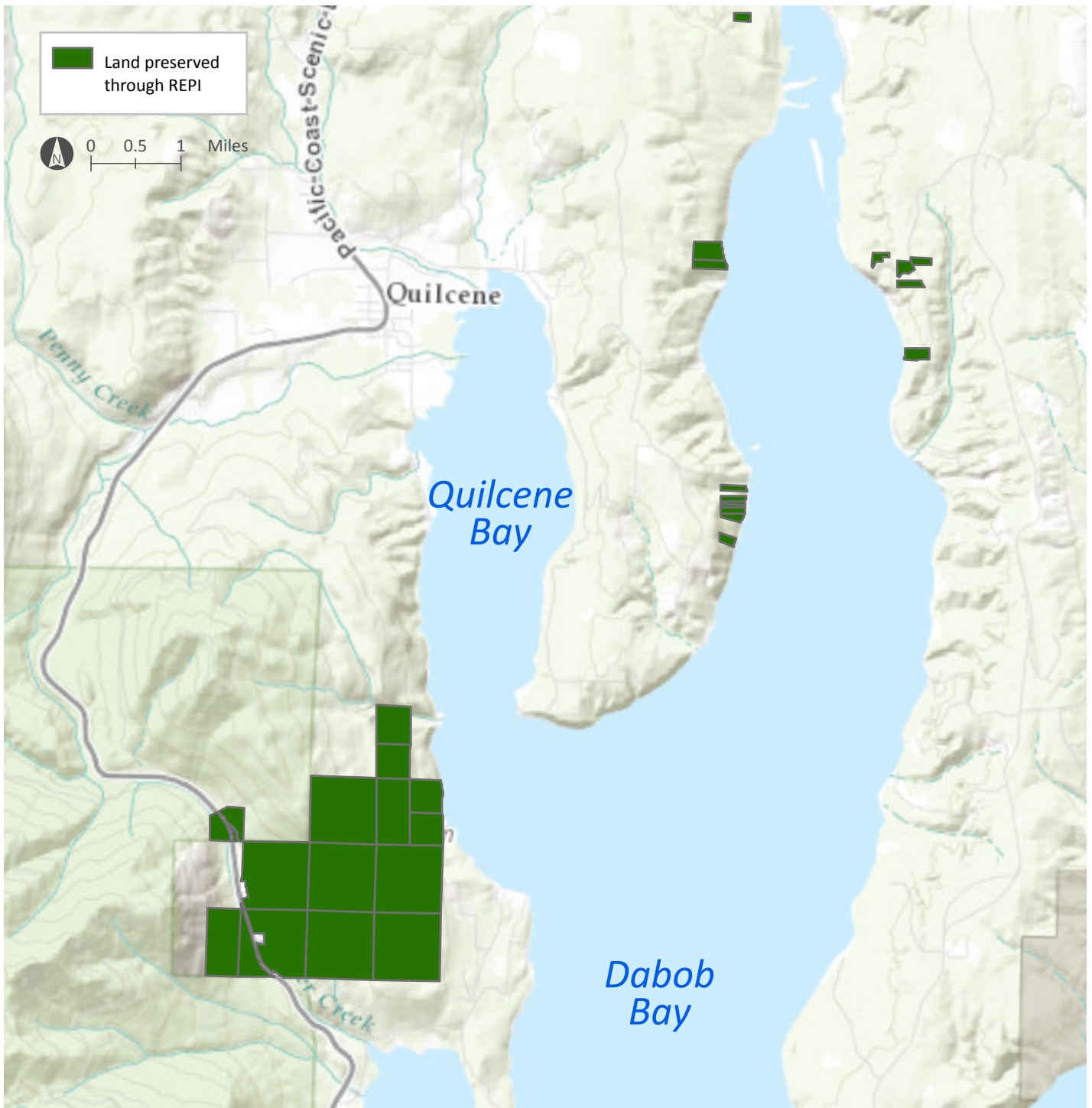


Figure 4.5.15. Completed REPI projects

preserve high-value habitat and compatible land uses near military installations and ranges. The DoD's Office of the Secretary of Defense (OSD) provides REPI's funding support and guidance for military service efforts to protect missions and installations (www.repi.mil/AboutREPI.aspx). The Navy has been using the REPI program to preserve habitat near the Dabob Bay Range Complex.



Figure 4.5.16. Dabob Bay is a unique and pristine ecological environment and, with little boat traffic, supports acoustically sensitive Navy tests (photo credit: DNR).

Dabob Bay Range Complex and Hood Canal Easements

As one of the least developed and most ecologically important estuaries in the Puget Sound, Hood Canal is vital for productive and diverse salmonids, native Olympia oyster beds, and other keystone fish and mammal species. In addition, the pristine and undeveloped deep water nature of Dabob Bay and Hood Canal allows the Navy to perform sensitive acoustical testing. Since 2012, the Navy has been partnering with the Washington Department of Natural Resources (DNR), The Nature Conservancy, and The Trust for Public Land to preserve areas of Hood Canal and protect the Navy's research, development, test and evaluation (RDT&E) mission and military operating areas (MOAs). They have conducted 16 transactions to preserve 122 acres within the Dabob Bay Natural Area boundaries and three transactions to protect an additional 5,027 acres of working forest throughout Hood Canal. The easements include undeveloped shoreline beaches, feeder bluffs, timberland, farmland, and subtidal lands. These easements provide a host of benefits to 1) the community by supporting habitat for notable species, regional plans, economic benefits, and Tribal resources; and 2) the Navy by buffering noise-sensitive areas and reducing electromagnetic interference.

In mid-2014, the Navy obtained a subtidal lands conservation easement from DNR that extends from the Hood Canal Bridge south to the Jefferson County-Mason County border in the Eldon area. The easement is intended to protect the existing acoustic qualities by precluding new nearshore commercial or industrial development and is "non-possessory," meaning that the Navy cannot develop or operate in the area. It is currently under litigation.

Comparison

Jefferson County and the Navy are leading the way in preserving open space, largely due to Jefferson Land Trust efforts, the REPI program, and the Jefferson Conservation Futures program. Kitsap County uses the current use assessment tax incentive, but it is unclear how often property owners are taking advantage of the program. Kitsap County's Conservation Futures funding will likely provide additional opportunities in the near future. Bremerton, as a primarily urban area, has less land of concern, and is already preserving over half their land in the CUL and WS zones.

Working Forests Conservation

Working forests are of particular significance to open space preservation because they currently serve important ecological functions (e.g., water filtration, carbon sequestration, and wildlife habitat), but they are not specifically protected through critical areas ordinances or other measures. Although the timber industry has declined since its early 20th century heyday, it still plays an important role in Jefferson and Kitsap County economies and social fabric, and the Pacific Northwest offers some of the best habitat for timber in the world.

The following challenges threaten the future of working forests (from interview with DNR October 7, 2014 and the Hood Canal Working Forest Conversion Study, 2014):

- As the region's population grows, economic pressure to develop residences on current forestland grows. Forest land can expect a return of \$3,000 to \$7,000 per acre at harvest (every 40 to 50 years), while the value of rural land for residential and commercial uses can exceed \$50,000 per acre.
- Washington State forestland zoning does not prohibit residential development (unlike Oregon). Likewise, many existing forestlands are in Rural Residential zones and, as such, are not protected from redevelopment.
- The average age of a family forest landowner was between 57 and 67 years old in 2002, suggesting many working forests will be passing onto future generations in the coming years. Family interest in maintaining lands as working forests will play a significant role in future conversion.
- Working forests' small parcel sizes and scattered locations increase conservation difficulties. An economy of scale (approximately 50,000 contiguous acres) is needed to support timber infrastructure and simplify management.
- The State Department of Natural Resources (DNR) manages a variety of programs to encourage forestlands conservation, including the Community Forest Trust and the Federal Forest Legacy Program. However, they have already acquired the "low-hanging fruit" properties; remaining properties pose a greater challenge.
- Regulatory red tape is leading landowners and their heirs to pursue conversion, and programs designed to offset regulatory costs are usually underfunded.
- With harvests taking place every 40 to 50 years depending on species and other factors, owners must take a long term perspective on their investment. However, it is difficult to predict how new regulations will impact their operations and profitability.
- The ecosystem services (environmental and social services) provided by working forests are not fully understood or valued by the general public. For example, people may not understand the importance of forestlands to aquifer regeneration and threatened and endangered species habitat.

Potential Strategies

Also see REPI strategies in “Shoreline Land Use” on page 108-110.

1. Continue conservation through REPI, and, in collaboration with state and county agencies and conservation organizations, map shared priority areas for conservation through REPI and other protection programs (see Implementation Tasks B3 and B5 in Chapter 5).
2. Identify available funding and build partnerships for development rights, easements, land, or leaseholds to protect prioritized lands and military missions; e.g., through REPI, the Community Forest Program (USFS), Community Forest Trust (DNR), Conservation Futures, and the USDA’s easement programs, such as the Farm and Ranch Lands Protection, Wetlands Reserve, Grassland Reserve, Sentinel Landscapes Programs, local transfer of development rights (TDR) programs, and land trusts (see B2 in Chapter 5).
3. Consolidate an account of local environmental and conservation agencies and organizations’ work to elevate the region’s profile for competitive grant funding (see B2 in Chapter 5).
4. Coordinate or share grant administration among multiple environmental organizations to reduce inefficiencies and increase staff capacity (see B2 in Chapter 5).
5. Work with State agencies and Counties to simplify working forest regulations if feasible (see B6 in Chapter 5).
6. Zone existing working forests as commercial forests as feasible (Jurisdictions) (see B6 in Chapter 5).
7. Assist small working forest land owners and support programs that share information about forestry management and ways to reduce inefficiencies in the regulatory process (see B7 in Chapter 5):
 - A. Support Kitsap and Jefferson Counties Rural Forestry and WSU Extension in their forestry management education efforts.
 - B. Establish resource-based forest and agriculture commissions like King County’s Rural Forest Commission for advocacy efforts.
 - C. Utilize the Kitsap and Jefferson County Conservation Districts for spreading information.
 - D. Continue linking salmon health with forest practices to increase public awareness and appreciation of working forests (e.g., the State’s Family Forest Fish Passage Program).
8. Adopt policies and regulations that encourage high rise wood structures and other ways to use wood products locally. Encourage the timber industry infrastructure to remain in Washington through permitting practices and incentives (see B7 in Chapter 5).
9. Support efforts to develop carbon and ecosystem services markets (see B8 in Chapter 5).

Climate Change

Climate change has long been identified as a potential concern for operational and installation sustainability, as well as for the ecological, economic, and human health of the participating jurisdictions. In the Pacific Northwest, three key issues of concern are:

- “Impacts of warming on snow accumulation and melt and their effects on regional hydrology and related systems;
- Coastal consequences of sea level rise combined with other drivers of change, including river flooding, coastal storms and changes in the coastal ocean, and
- The cumulative effects of climate change on fire, insects, and tree diseases in forest ecosystems” (Dalton et al, *Climate Change in the Northwest: Implications for Our Landscapes, Waters, and Communities*, 2013, p. xx).

For the Navy, “climate change is affecting, and will continue to affect, U.S. military installations worldwide” (*U.S. Navy Climate Change Roadmap*, p.5). For the participating jurisdictions, agriculture, human health, and Tribes’ cultural, social, and spiritual traditions that rely on the environmental conditions on and beyond reserved Tribal lands are regionally important climate-sensitive sectors (Dalton et al).

Climate change is affecting Navy installations and the jurisdictions and is an integral aspect of all the environmental issues outlined in the previous sections.

Analysis

Regional Climate Change Studies and Plans

The Pacific Northwest has been a leader in climate impacts science and planning. A sampling of recent and ongoing studies and plans include:

- *Climate Change in the Northwest: Implications for Our Landscapes, Waters, and Communities* (2013) edited by Meghan M. Dalton, Philip W. Mote, and Amy K. Snover, which lays out the specific local challenges posed by climate change,
- *Planning for Climate Change on the North Olympic Peninsula*, an ongoing effort by the North Olympic Peninsula Resource Conservation and Development, Department of Commerce, Sea Grant Washington, and Adaptation International, with the product *Climate Preparedness Plan and Outreach Materials* expected in August 2015, which would include adaptation strategies and a plan for tracking and monitoring implementation,
- *City of Port Townsend and Jefferson County 2011 Climate Action Plan*, which sets objectives and actions for reducing government emissions to levels 80 percent lower than 1990 levels by the year 2050, ideas for community-wide reductions, and tentative policies for rural resource management and urban form and transportation for carbon-efficient communities, and monitoring systems and adaptive management,
- *The 2014/2015 Action Agenda for Puget Sound* (2014) by Puget Sound Partnership, which identifies near-term actions related to climate change,
- *Kitsap County’s Energy Efficiency and Conservation Plan* (October 2011), which sets strategies for reducing energy use 30 percent by 2020 as compared to 2009 and generate 10 percent of energy from renewable sources by 2020,
- *Climate Change Impacts and Adaptation in Washington State: Technical Summaries for Decision Makers* (2013) and many other publications by the Climate Impacts Group, University of Washington College of the Environment (<http://cses.washington.edu/db/pubs/allpubs.shtml>)

- *Preparing for a Changing Climate: Washington State’s Integrated Climate Response Strategy* (2012) produced by Washington’s Department of Ecology, which identifies seven high-priority, overarching response strategies to adapt to climate change, and
- *Impacts of Climate Change on Washington’s Economy: A Preliminary Assessment of Risks and Opportunities* (2006) produced by the Washington Economic Steering Committee and the Climate Leadership Initiative Institute for a Sustainable Environment, University of Oregon, for Washington’s Departments of Community, Trade, and Economic Development and Ecology.

Military Climate Change Plans

The Navy is also proactively addressing climate change with its *U.S. Navy Climate Change Roadmap* (April 2010) by Task Force Climate Change and Oceanographer of the Navy. This plan identifies actions to assess, predict, and adapt to climate change. Likewise, the Department of Defense’s *Strategic Sustainability Performance Plan* (FY 2012) and its appendix *DoD FY 2012 Climate Change Adaptation Roadmap* emphasize the impact of climate change on operations, training, and critical infrastructure, its potential to cause wars and security issues, the importance of planning and adapting to climate change, and some immediate steps. The *National Security and the Accelerating Risks of Climate Change* report, produced by the CNA Military Advisory Board (May 2014), is another useful resource outlining the profound impacts of climate change on security and ways to reduce risks. In addition, a University of Washington thesis by Riley W. Smith, *The Good, the Bad, and the Robust: Climate Change Adaptation Choices for the Port of Rotterdam, Port of San Diego, and Naval Base Kitsap – Bremerton* (2015), recommends flexible adaptation actions for NBK-Bremerton.

FEMA and Climate Change

At the national level, the Federal Emergency Management Agency (FEMA) provides extensive resources for responding to and planning for climate change and sea level rise. Starting in March 2016, State Hazard Mitigation Plan risk assessments must evaluate the probability of future hazard events, including the “effects of long-term changes in weather patterns and climate on identified hazards.” (“State Mitigation Plan Review Guide,” March 2015, effective March 2016, p. 15; see also 44 CFR sec. 201.4(c)(2)(i)).

Particularly notable for this region, FEMA’s Flood Insurance Rate Maps (FIRMs) depict flood zones that often coincide with shorelines and waterways that are not only important for wetlands, fish, and agriculture, but are also expected to be effected by sea level rise. Sufficient setbacks from the floodway and special flood-proofing construction would minimize impacts to infrastructure from sea level rise. Jurisdictions not already participating in FEMA’s voluntary Community Rating System program might consider it to prevent inappropriate development and lower insurance costs.

Implementing Adaptation Strategies in the Region

Despite leadership in the climate change science arena and state-level climate change response strategies (e.g., Carbon Pollution Accountability Act), adaptation is not yet wide-spread. It is important for climate change to be addressed across jurisdictions, military bases, and utility providers. As Smith notes:

“If a military installation as a whole is prepared for climate change, but the organizations supporting the installation, such as utilities (water, sewer, electricity), city (streets), state (highways), etc., are not prepared, the military’s operations may still experience substantial operational impact (Cutter et

al 2014¹; CNA 2014²). As a consequence, every effort should be made to coordinate climate change adaptation strategies at a regional level (NFESC 2009³; 57) (p. 26).

In the JLUS study area, some efforts are underway to address climate change at this regional level, and these should be encouraged and expanded. For example, Port Townsend and Jefferson County are implementing their Climate Action Plan, some energy efficiency programs are underway in Kitsap County and Bremerton (e.g., the RePower Kitsap County program offering homeowners assistance), and environmental organizations are identifying adaptation projects. The Navy also has accomplished tremendous work on energy efficiency and environmental enhancement (see “Navy Environmental Impacts” on page 136). On a broader scale, the Hood Canal Coordinating Council is prioritizing climate change adaptation strategies in their work. They plan to incorporate adaptation approaches into their *Integrated Watershed Plan* and encourage incorporation in various local plans. These projects will require support and funding.

Potential Strategies

1. Continue implementing the *DoD Climate Change Adaptation Roadmap* and the *U.S. Navy Climate Change Adaptation Roadmap* (Navy) (see Implementation Task B1 in Chapter 5).
2. Monitor climate change data and government initiatives for information about potential impacts on military operations and facilities and appropriate and feasible responses (Navy) (see B1 in Chapter 5).
3. Continue collaborating with and supporting the Hood Canal Coordinating Council’s climate change adaptation efforts (see B1 in Chapter 5).
4. Monitor and share information and recommendations applicable to the region that would inform a comprehensive and consistent response to climate change and sea level rise (see B1 in Chapter 5).
5. Consider participating in FEMA’s Community Rating System to protect development from sea level rise-related flooding and receive discounted insurance premiums (Jurisdictions) (see B1 in Chapter 5).

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- 1 Cutter, S. L., W. Solecki, N. Bragado, J. Carmin, M. Fragkias, M. Ruth, and T. J. Wilbanks. 2014. Ch. 11: Urban Systems, Infrastructure, and Vulnerability. *Climate Change Impacts in the United States*, 282-296. In: *The Third National Climate Assessment*. J.M. Melillo, Terese Richmond, and G.W. Yohe, Eds. U.S. Global Change Research Program. doi:10.7930/J0F769GR
 - 2 CNA Military Advisory Board. 2014. National Security and the Accelerating Risks of Climate Change. http://www.cna.org/sites/default/files/MAB_2014.pdf
 - 3 Naval Facilities Engineering Service Center. 2009. Assessing Climate Change-Related Impacts on U.S. Navy Installations Initial Decision Report Summary Report. Special Project SP- 2189-ENV. Port Hueneme, C.A.: Naval Facilities Engineering Service Center

Tribal Archaeological Sites

In this region, traditional cultural properties are likely found along most shorelines. Private development throughout the study area and Navy development or operations could impact cultural resources. Federal regulations (the National Historic Preservation Act's Section 106) create a firm process for preventing disruption to archaeological sites. The Navy has an archaeologist on staff, and all Navy projects are reviewed by the State Historic Preservation Officer (SHPO). However, a development proposal that is not federally-funded and not on Navy (or other federal) property may not necessarily trigger a cultural resources review or preserve cultural resources. Each jurisdiction approaches cultural resources differently. Tribes involved in the JLUS study are interested in seeing a more nuanced approach to resource assessment and notification to Tribes.

See "Tribal Governments" on page 26 for more information on the integrally related Treaty-reserved natural resources.

Analysis

Jurisdictions

All jurisdictions follow a variety of Washington State laws that protect historic and archaeological sites (e.g., Executive Order 05-05, Archaeological Resources Protection Act of 1979, Native American Graves Protection and Repatriation Act, etc.). In addition, if the project involves federal money, permits, and/or licenses, federal laws apply (National Historic Preservation Act, 36CFR Part 61, Executive Order 115893 Protection and Enhancement of the Cultural Environment, etc.) (DAHP: Preservation Laws). Any project requiring SEPA review triggers Department of Archaeological and Historical Preservation (DAHP) and Tribe notice. Each jurisdiction's SMP incorporates cultural, historic, and archaeological preservation goals and regulations.

During the JLUS process, Jefferson County and Suquamish Tribe representatives met to discuss opportunities for cultural resource protection, including ways to enhance inadvertent discoveries procedures and expand notification to Tribes of ground-disturbing activities in sensitive areas. Jefferson County will review their processes.

Differences exist in how a cultural assessment is triggered. Jefferson County has the most stringent process. Jefferson County planners consult a DAHP-provided map during every development proposal review (Jefferson County Code 18.40.120—Referral and Review of Development Permit Applications and Memorandum of Understanding with DAHP). If the proposal overlaps any cultural resources areas of concern, they forward the proposal to DAHP and the Tribes for their review and comment. Comments are incorporated into the permit as conditions of approval, and a special report may be required for approval.

Kitsap County and Bremerton consult the DAHP map or send proposals to Tribes when the proposal is near the shoreline or critical area or has a specific activity. For example, City of Bremerton Site Plan Reviews (the conceptual design) for new commercial, industrial, or large residential buildings near shorelines or streams are sent to the Suquamish Tribe for review. However, this only applies to applications that fall into the Notice of Application category, which include Type II, III, and IV permits (BMC 20.02.100(c)(1)(iii)).

Navy

Like the jurisdictions, the Navy complies with SHPO guidance regarding historic and archeological resource sites. The Navy consults affected federally recognized Tribes for all construction projects and military training operations that could potentially interfere with cultural resources.¹ In addition, NBK and NAVMAGII's Integrated Cultural Resources Management Plans (ICRMPs) define the process for managing archaeological and historic resources on the installations. This is particularly important for Indian Island with its eleven identified archaeological sites. In addition, the Navy has taken or does take the following measures to protect cultural resources:

- **Elwood Point at Jackson Park.** A Suquamish village site is located at Jackson Park, and many Suquamish descend from that village. The Navy condemned Elwood Point in 1929 to expand the nearby Naval Ammunition Depot, forcing inhabitants to relocate elsewhere. Many years later, the Navy publicly acknowledged the importance of the site and formally dedicated it to recreation-only uses. Development proposals are no longer considered for the site.
- **Human remains.** In 1999, NAVMAGII repatriated seven sets of human remains and associated funerary objects in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA) to the Jamestown and Port Gamble S'Klallam Tribes. These human remains were inadvertently discovered during construction of the ammunition wharf in 1978, and were reburied at an undisclosed location on Indian Island mutually agreed to by the Navy and Tribes.
- **Timber practices.** If sites or artifacts are discovered during timber stand improvement or harvest activities, NAVMAGII protects them from the activity and immediately notifies the proper authority. Archaeological sites are protected from logging activity by restricting access to these areas.

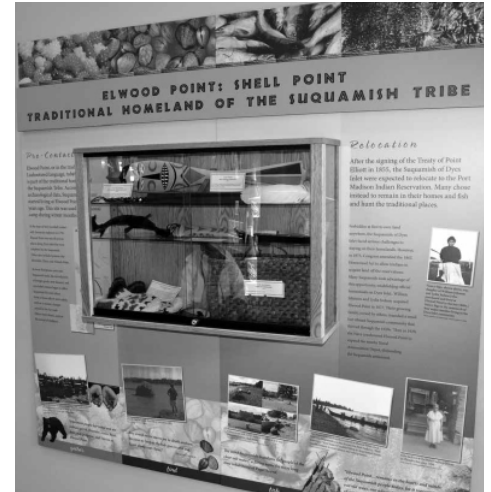


Figure 4.5.17. Interpretive display in Jackson Park Community Center (photo credit: Suquamish News, January 2013)

Potential Strategies

1. Improve coordination with appropriate Tribes (as they have more nuanced information than DAHP) by developing Memorandums of Understanding (MOUs) to address land development notification and permitting processes and best practices to better protect archaeological sites (Counties, Cities, and Navy) (see Implementation Task C4 in Chapter 5).
2. Coordinate when updating Comprehensive Plan policies for better sensitivity to the importance of Tribal cultural and historic resources (Jurisdictions) (see C4 in Chapter 5).

¹ The Navy also consults affected Tribes when construction or operations could interfere with Treaty Harvest Rights. Treaty Harvest Rights are not addressed in this JLUS because they are currently addressed through government-to-government consultation.



Figure 4.5.18. Point No Point Treaty Council biologist plants clam seed on Indian Island (photo credit: Point No Point Treaty Council)

Strategy and Recommendations

Chapter

5

Introduction

This chapter sets forth recommendations for maintaining and enhancing long-term land use compatibility between NBK and NAVMAGII and the civilian populations that live and work near them. These recommendations build on the analysis and strategies set forth in Chapter 4 of the Joint Land Use Study.

The Policy and Technical Committees developed these recommendations, based on stakeholder and community input, during the course of the Joint Land Use Study. The decision to implement them, it should be noted, is entirely up to the local stakeholders, the installations, and the local governments and Tribes that participated in the study.

The following section recommends a process through which the recommendations in Chapter 5 would be considered by the community following the conclusion of the Joint Land Use Study. There are two discrete phases needed to fully effectuate the recommendations in this report: implementation and adoption.

The Next Phases: JLUS Implementation and Tools Adoption

It is useful to recall that the Joint Land Use Study process is, in fact, similar to other planning processes our local communities undertake regularly. There are three general phases:

1. Phase I: The planning process, during which needs are assessed and recommendations to address those needs are identified;
2. Phase II: Developing implementation tools; and
3. Phase III: Adopting and implementing those tools.

The Joint Land Use Study, or Phase I, which has culminated in this report, would be regarded as the “planning” process; this is somewhat similar to the ongoing comprehensive planning efforts our local governments undertake regularly.

Phase II, “JLUS Implementation,” if the community elects to pursue it, would include the development of the tools to implement the recommendations in the JLUS. A “JLUS Implementation Committee,” similar to the JLUS Policy Committee, would perform the Implementation Tasks described below, including preparation of implementing documents, ordinances, agreements, comprehensive plan policies, and the like. JLUS Implementation is commonly funded with a matching grant from the Office of Economic Adjustment. That funding, however, is contingent upon availability and, it should be noted, is not a prerequisite to effective implementation.

Finally, during Phase III, “Tools Adoption,” the implementation tools developed in Phase II would be presented to implementing agencies (e.g., local governments, Tribes, and the installations) for adoption and application. This would be commensurate with the implementation of a zoning ordinance or interlocal agreement after they have been adopted or executed. A standing “military planning” committee would oversee this ongoing phase, perhaps pursuant to a Memorandum of Understanding. The recommended Military Planning and Coordination Committee and Memorandum of Understanding are detailed below, in Tasks C1 and C2 respectively.

What’s Already Working

The communities and the Navy bases have a long history of implementing tools and protocols that have created an environment that currently includes very little in the way of major encroachment threats.

To the extent potential land use incompatibilities have been identified, local planners, officials, and stakeholders have worked in partnership with NBK and NAVMAGII officials to take action to diminish those threats.

The Policy Committee felt it important to document current successful efforts against incompatibilities, in order to give context to the recommendations for improvement and for maintaining the status quo, where the status quo is working.

Therefore, preceding the discussions in this chapter of each of the six Procedural Contexts for implementation, is a section titled “Ongoing Efforts,” which details “what’s already working” today.

The following chart illustrates the three phases.

Table 5.1. JLUS implementation phases

	Phase I	Phase II	Phase III
	JLUS	JLUS Implementation	Tools Adoption
Phase Objective	Needs Assessment Tools Identification	Tools Development	Tools Adopted, Effective, Amended as Needed
Oversight	Policy Committee Technical Committee	JLUS Implementation Committee Technical Committee	Military Planning and Coordination Committee (MPCC)
Funding Eligibility	OEA-eligible	OEA-eligible	Local Funding, as needed
Memorandum of Understanding (MOU)	MOU Recommended	MOU Drafted	MOU Adopted and Effective

JLUS Implementation Committee

For the purposes of JLUS Implementation, a JLUS Implementation Committee will oversee Phase II and the Implementation Tasks set forth in Chapter 5 as well as the JLUS Strategies and Implementation Matrix. JLUS Implementation Committees typically are assembled and conducted in a manner similar to the JLUS Policy Committee during the JLUS itself. It would meet periodically and have staff and a committee available to provide technical support. The length and cost of Phase II will depend, in part, on how many and which of the Implementation Tasks the community wishes to pursue in the near term. The prioritization scheme used in the JLUS Strategies and Recommendations Matrix is provided to assist in planning for and guiding Phase II.

It is, therefore, recommended that as the community begins Phase II of the JLUS process, it form a “JLUS Implementation Committee” to undertake the Implementation Tasks set forth in this chapter and in the JLUS Strategies and Recommendations Matrix. This Committee would consist of members of the jurisdictions involved in the JLUS itself, other impacted levels of government, Tribal governments, and affected stakeholder groups.

Chapter Organization

The recommendations are organized according to the “procedural context” in which they would be implemented. For example, those implemented through the local comprehensive planning process have been grouped into section E, “Local Government Comprehensive Planning.” Matters implemented through strategic coordination among staff and designated officials have been grouped into section C, “Strategic Coordination Among Stakeholders.” The six Procedural Contexts, therefore, are as follows:

- A. Community Outreach by the Navy
- B. Conservation Programs for Protecting Land Use Compatibility
- C. Strategic Coordination among Stakeholders
- D. Regional Land Use Planning
- E. Local Government Comprehensive Planning
- F. Land Use and Development

A Note about the Form of Recommendations

The reader will note that similar Implementation Tasks appear in more than one Procedural Context. This is simply due to the fact that some tasks will be implemented through more than one procedure.

For example, the categories of “Local Government Comprehensive Planning” and “Strategic Coordination among Stakeholders” each contain coordination by and with the Navy respecting lands within the Military Planning and Coordination Areas; including, for example, the expansion of an urban growth area.

Procedurally, coordination with the Navy prior to the expansion of an urban growth area would implicate the local comprehensive planning process (and plan), and also would necessitate strategic coordination. Of course, a UGA expansion may only use one process. For this reason, some Implementation Tasks appear in more than one Procedural Context.

Recommendations for avoiding land use incompatibilities have been grouped within these six Procedural Contexts.

Scope of Potential Land Use Incompatibilities

The sources of *potential* land use incompatibilities within the Military Planning and Coordination Areas (MPCA), which were identified during the study, included:

1. Some types of land development,
2. Some types of water-based uses,
3. Sea-level rise,
4. Transportation, and
5. Private air operations above NAVMAGII.

The MPCAs are shown on Figure 5.1. While the geographic scope of the MPCA is large, the locations of potential land use incompatibilities are much more limited and are specific to the certain types of uses. Figure 5.2 shows the areas and types of uses that may warrant review by the Navy and JLUS Jurisdictions. It is roughly within these areas that the JLUS Implementation Committee, discussed above, will make recommendations as to the tools outlined in this chapter. It also should be noted that none of the recommendations made by the JLUS Policy Committee would add regulations to civilian water-based activities; instead, they will focus on land-based uses that can create conflicts with military operations.

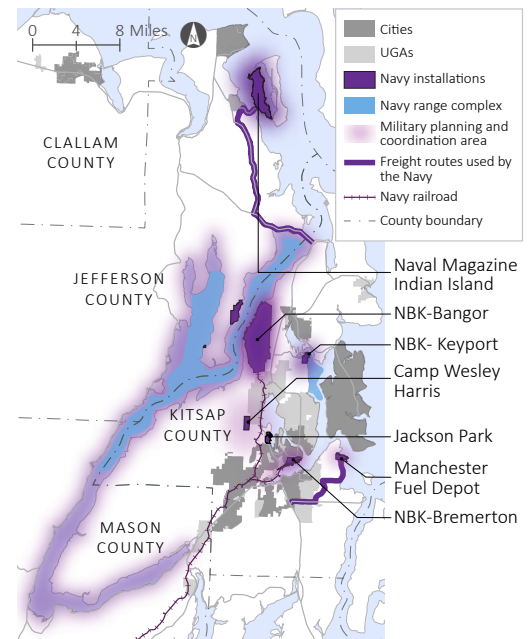
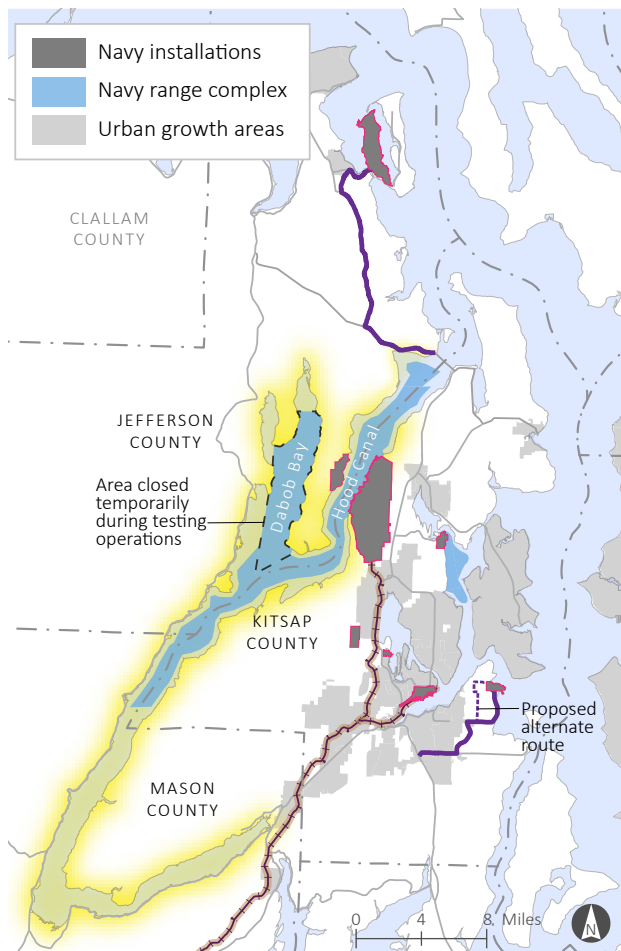


Figure 5.1. Military Planning and Coordination Areas (MPCAs)

Compatibility Review Areas



Symbol	Location	Uses to Review (to be defined and further developed in later phases)
	Adjacent to installations	<ul style="list-style-type: none"> All uses
	Along freight routes used by Navy	<ul style="list-style-type: none"> Schools, daycares, hospitals, etc.
	Dabob Bay and Hood Canal	<ul style="list-style-type: none"> New/expanded marinas and boat ramps Aviation gas distribution facilities New commercial/industrial piers or docks Large master planned communities / resorts Working forest and resource land conversion
	Along the Navy railroad	<ul style="list-style-type: none"> Uses within the railroad right-of-way Significant increases in development intensity
	Compatibility height study area adjacent to NBK-Bremerton	<ul style="list-style-type: none"> Building heights over four stories (location and height overlay to be refined by compatibility study)

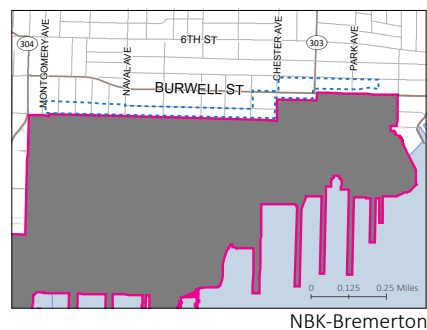


Figure 5.2. Compatibility Review Areas

Chapter 5 sets out the recommendations of the JLUS Policy Committee for addressing these sources of potential incompatibilities in these areas in a way that protects the mission of the Navy as well as the quality of life of the civilian community near the bases. The Policy Committee’s recommendations are set out as “Implementation Tasks,” which are prioritized according to public and Policy Committee input.

JLUS Strategies and Recommendations Matrix

Following a detailed discussion of the specific Implementation Tasks, the JLUS Strategies and Recommendations Matrix located at the end of this Chapter (starting on page 190) is intended to guide JLUS implementation and to help the community to prioritize that implementation effort.

Therefore, for each Implementation Task listed, the agencies or parties affected by or responsible for implementing the development of each tool are indicated. Once JLUS implementation begins, the JLUS Implementation Committee may engage stakeholders in addition to those currently listed. Also, the estimated costs, timeframes for implementation, and funding sources for each task are provided.

The range of estimated costs for each Implementation Task is shown as follows:

- \$ = less than \$5,000
- \$\$ = between \$5,000 and \$25,000
- \$\$\$ = greater than \$25,000

The anticipated timeframes for implementation are shown:

- S = Short-term, within the first 3 years following completion of the Joint Land Use Study
- M = Medium-term, between 4 years and 10 years following completion of the Joint Land Use Study
- L = Long-term, between 11 years and 20 years following completion of the Joint Land Use Study

The Policy Committee recognized that each of the tasks listed in the JLUS Strategies and Recommendations Matrix is important; therefore, the overall priority given to a particular tool is relative to the urgency of the issue to be addressed, overall costs, and, in particular, whether immediate safety and quality of life concerns are implicated. The Policy Committee prioritized the tools as either “medium” or “high” priority.

These priority indicators are also included in the narrative discussion below for reference. In both the Matrix and the narrative, the highest priority strategies and recommendations are presented first. The highest priority Implementation Tasks within each Procedural Context are:

High Priority QJUS Strategies and Recommendations

Community Outreach by the Navy

- Updates to Elected Officials and Other Stakeholders
- Increase Community Awareness of the Navy Mission

Conservation Programs for Protecting Land Use Compatibility

- Climate Change/Sea Level Rise
- Lease and Purchase of Development Rights/Potential
- Readiness and Environmental Protection Integration (REPI)

Strategic Coordination among Stakeholders

- Military Planning and Coordination Committee and Community Workshops
- Memorandum of Understanding
- Growth-Inducing Infrastructure
- Tribal Cultural Resources

Regional Land Use Planning

- Freight Routes Used by the Navy
- Washington Military Alliance

Local Government Comprehensive Planning

- Update Local Government Comprehensive Plans
- Transportation and Parking Plan
- Recreational Boating

Land Use and Development

- Statutory Notice Area: Comprehensive Plan and Development Regulations
- Notice for Development Permits and Rezonings
- Collaborate to Identify Potential Projects of Concern
- Freight Routes Used by the Navy
- Coordination and Land Use Overlay Zones

A. Community Outreach by the Navy

Communities that host military installations benefit from frequent outreach and communication from officials at the installation on matters that impact their lives, businesses, and quality of life. Indeed, that level of communication by NBK and NAVMAGII has been very good over the years.

While communication may not initially appear to be related to encroachment and land use compatibility, generally speaking, it promotes cooperation when matters directly impacting compatibility arise. This allows a more expedient and fair response from all parties, thereby reducing the potential for encroachment that would threaten base mission or the communities' quality of life.

Community Outreach: Ongoing Efforts

The JLUS process confirmed that, in fact, there already is very good communication between the Navy and the communities and jurisdictions. All parties have worked together to address land use matters as they have come up, resulting in changes in protocol and practice moving forward. Technical and Policy Committee members reported that Navy officials remain available and are willing to appear as frequently as situations reasonably warrant and as requested by civilian officials.

Following are several of the ongoing community outreach efforts that are in place today:

- The Navy gives a “State of the Station” address each year to jurisdictions and community organizations, as requested, to keep jurisdictions and the community informed of current conditions and any expected changes at the installations.
- The Navy has worked with the community and responded to land use or planning changes on-base that impact the local civilian community off-base.
- The Navy historically has notified the community and coordinated with local and Tribal officials when significant changes to base operations have been anticipated.

Community Outreach: What Could Be Done?

During the Joint Land Use Study, the Policy Committee identified several actions that would help maintain good outreach in the future. These are discussed below.

1. Updates to Elected Officials and Other Stakeholders (High Priority)

The Navy provides an update to the community through its annual “State of the Station” address and the Technical Committee reported that Navy officials always are ready to appear before elected officials when their input is needed. However, other communities have found that appearing in person before stakeholder groups, in addition to elected officials, goes a very long way towards maintaining good civilian-military rapport. Additionally, and of significant importance in this context, this helps to mitigate the risk of misinformation and myths taking shape and being perpetuated. There may be interest groups and organizations that would benefit from direct communication with the Navy and the jurisdictions on matters affecting property owners or which property owners anticipate will affect them. (see also Task A2e, below, regarding outreach to real estate professionals specifically.)

In addition to its annual State of the Station address and in-person updates to local elected officials, the Technical Committee recommended that base representative provide written information to local elected officials about ongoing operations and planning efforts, as well as any probable changes that are likely to impact their constituents. Written communications may augment in-person presentations, or may be provided in lieu of meeting in person, if issues appropriately allow.

Written materials could address all impact types, including environmental issues, transportation and land use, and mission or operational changes on-base. These could be presented during in-person meetings with local officials and interest groups and be downloaded from web-based media forums as well.

2. Increase Community Awareness of the Navy Mission (High Priority)

In addition to making representatives available to give in-person updates, it is recommended that the Navy develop a community awareness campaign to increase public understanding of the important positive impacts of the Navy’s presence, particularly as they relate to economic, demographic, and environmental issues that are very important in this region. This would augment community-military relations and serve the important purpose of increasing the accuracy of public information in the community.

Increasing proactive communication and providing resources to dispel misconceptions or “myths” about the nature of the Navy’s operations may increase community trust even further over time. Therefore, it is recommended that the Navy increase its public outreach efforts. This communication could be made to business and government groups as well as public and citizens’ groups, and directly to the public through the media or the installations’ websites. Seven specific areas have been identified.

- a. This campaign may include an **annual training session with local government planners**, allowing the Navy to brief their civilian colleagues on current topics of interest such as planned mission changes, encroachment concerns, and communication protocols that might be maintained by the military and civilian professionals for the benefit of the public.

b. Commanding officers at NBK and NAVMAG II provide an annual briefing—a **“State of the Station”** address—to elected officials, coordinating councils, and other interested business and community organizations. It is recommended that they publicize this annual briefing to the community broadly so that all interested people may attend the event. This may include summarizing information for publishing through the media and on the installation’s website, as well as through various business or community groups. The installation can find examples of broadly publicized “State of the Station” addresses by looking to NAS Whidbey Island, which published a press release about an upcoming address on the Navy’s website, or to the Economic Alliance of Snohomish County, which helped publicize a 20th anniversary address on its website for Naval Station Everett.

c. **User-friendly and easily accessible communications** are, of course, the emerging manner in which much of the public gathers its information. In fact, during the study, the Technical Committee noted that the **use of social media outlets** and forums is no longer an alternative, but increasingly is critical to any entity competing for the attention of its partners and communities. Several related military entities, including the Puget Sound Naval Shipyard, use Facebook as a means for distributing educational materials and awareness of Navy activities. During the implementation process, the bases may discuss with the JLUS Implementation Committee whether the use of social media should be increased if appropriate within existing military protocols.

d. In addition to the five-year workshops that the Military Planning and Coordination Committee would hold directly with the community, the JLUS Technical Committee recommended that the **Navy also hold community workshops at least once every five years**. Additional meetings may be held by the Navy as requested by the Military Planning and Coordination Committee (see Task C1), in order to present the Navy’s land planning efforts as they affect off-base lands, and to receive and review community input and concerns. Of course, these workshops may be held jointly, if the Military Planning and Coordination Committee (MPCC) and Navy feel that would be helpful. In any event, it was believed that direct outreach by the Navy should occur at least once every five years.

It was emphasized that these workshops might stimulate more frequent two-way communication, in addition to giving the Navy an opportunity to not only provide information that may benefit the public, but also to hear feedback about current topics of interest in the community. Strategic planning actions for the subsequent five years could be identified based on input from these workshops; the need, if any, to reconvene to pursue those actions would be evaluated at this time.

e. NBK and NAVMAGII, in partnership with the local jurisdictions, might **work with the local real estate community** to make potential purchasers, lessees, and developers aware of the Navy’s presence in the community and how that presence may impact their anticipated land uses and vice versa. While mandatory real estate disclosure statements, which are discussed in Task F6, below, provide legal notice of potential impacts, simply creating an overall awareness of potential conflicts through informal outreach will benefit everyone in the community. Furthermore, it is anticipated that, to the extent that real estate professionals and landowners are aware of sources of potential conflict, expectations would be more likely to remain realistic and the impacts on the markets would be minimized in the long-term.

f. The Navy might **coordinate with WSDOT** to ensure that the manner in which information regarding Hood Canal Bridge openings is being disseminated is as thorough and efficient as possible, in order to allow travelers to anticipate bridge openings.

g. As on-base military operations change, off-base impacts on civilian lands can change as well. To the extent that those changes can be foreseen (they can't always be), it is recommended that NBK and NAVMAGII continue to coordinate with affected counties, municipalities, Tribes, business and environmental organizations, and other local agencies, such as school districts. These **"good neighbor" policies** reduce miscommunication, increase understanding, and inform landowner expectations about the Navy's mission and, therefore, the reasonable extent of land uses allowable on their properties.

The kinds of on-base changes for which notice to and input from the civilian community would be helpful will ultimately be a question answered by the community and the bases during Phase II, JLUS Implementation, and would be among the topics covered in a Memorandum of Understanding.

In an effort to minimize their external impacts, the bases should continue to communicate proposed "non-operational" land use changes to the local governments and other affected groups, such as school districts, before they happen. These land use or planning changes might include Navy Exchange or Commissary closings, shift changes, gate operation changes, or changes in gate locations. Communicating proposed changes before they affect key stakeholders—and, importantly, allowing members of the public to weigh in on the proposed changes that could affect them—will perpetuate goodwill in the community. The bases also should help minimize the impacts of changes that do occur as much as possible by helping to solve parking, urban design, and transportation issues that arise as a result.

Other on-base changes that will continue to necessitate coordination with the community will be those that relate to increases in Navy operations. The JLUS Implementation Committee, during Phase II, would work with the community and the Navy to clarify the types of operational increases that warrant coordination. However, the following definition might be a helpful starting point:

Definition of "increased military impacts:" *Off-base impacts, which are greater than those typically experienced by the community, and which may result from training operations and activities at NBK or NAVMAGII over and above those that existed as of the effective date of the MOU. "Increased Military Impacts" may result from, among other things, significant increases or changes in personnel or training operations; new on-base housing units; expansions to on-base daycares or addition of on-base schools or classrooms; additional gates or gate relocations; expansions to on-base amenities and retail operations; permanent or temporary changes in on-base vessels, squadrons, and military; or other events held on-base.*

Finally, it was noted by the JLUS Technical Committee that, for purposes of public outreach or notice, mailed postcards have been a very effective means of creating public awareness of key land use issues. While traditionally viewed as a more expensive means of outreach, web-based, user-friendly programs are making the design and production of postcards and other mailers easier and less expensive to accomplish than in the past and have a much higher return on participation.

The five Tribes participating in the Joint Land Use Study are the Jamestown S'Klallam, Lower Elwha Klallam, Port Gamble S'Klallam, Skokomish, and Suquamish.

B. Conservation Programs for Protecting Land Use Compatibility

One aspect of encroachment potential identified during the study was the development of land uses in areas that would be incompatible with Navy operations. For example, as discussed in Section 4.2, the development of large concentrations of people or sensitive uses along freight routes used by the Navy could present a safety threat (see Figure 4.2.10, 4.2.11, and 4.2.14). Similarly, high-intensity planned unit or planned rural residential development was identified as a threat to the Hood Canal Military Operational Area and Dabob Bay Range Complex (see Figure 4.3.1).

A number of responses to this potential source of encroachment are identified in this chapter, including those in sections E and F related to local government comprehensive planning and land use and development regulations. This section discusses another aspect of this issue as well: coordinated land conservation programming that preserves lands in a state that is compatible with military operations. It should be noted that compatibility does not require an inability to use the land in most cases. Rather, it simply requires a deliberate effort to identify land uses that are compatible with military operations. In cases where land use is heavily restricted, compatibility can be achieved with the purchase of lands or development rights, where funding is available. These tools are discussed below.

Conservation Programs: Ongoing Efforts

Land conservation and Navy partnerships have a long history in the area. For example, the Navy has participated heavily in the Readiness and Environmental Protection Integration (REPI) program and continues to use these funds to partner with state and local agencies to protect sensitive lands that promote compatibility.

In addition to conservation for military planning purposes, the participating local governments also maintain conservation efforts through critical areas and buffers programs, comprehensive planning, and development regulations. These are detailed in Chapter 4.5.

Conservation Programs: What Could Be Done?

1. Climate Change/Sea Level Rise (High Priority)

The Navy and jurisdictions have identified climate change as a concern: the Navy for the sustainability of its operations, and the jurisdictions for their ecological, economic, and human health. In 2009, the Navy established a task force to address the threats associated with climate change, which include increased temperatures, drought events, and increased storm frequency and severity. The *Department of Defense Climate Change Adaptation Roadmap* and the *U.S. Navy Climate Change Adaptation Roadmap* outline strategies for better understanding climate change and protecting installations (and communities) from its threats. At the local level,

because these climate-induced effects have the potential to impact NBK and NAVMAGII's facilities and infrastructure, this study recommends that the bases monitor climate change data and government initiatives for information about potential impacts on military operations and facilities, as well as appropriate and feasible responses.

The Federal Emergency Management Agency (FEMA) provides extensive resources for responding to and planning for climate change and sea level rise. Starting in March 2016, State Hazard Mitigation Plan risk assessments must evaluate the probability of future hazard events, including the "effects of long-term changes in weather patterns and climate on identified hazards." ("State Mitigation Plan Review Guide," March 2015, effective March 2016, p.15; see also 44 CFR sec. 201.4(c)(2) (i)). FEMA also designates floodplains on their Flood Insurance Rate Maps (FIRMs). Sufficient setbacks from the floodway and special flood-proofing construction would minimize impacts to infrastructure from sea level rise. Jurisdictions not already participating in FEMA's voluntary Community Rating System program might consider it to prevent inappropriate development and lower insurance costs.

Additionally, the Navy, the local jurisdictions, and the Tribes will work together to monitor and share information and recommendations applicable to the region that would inform a comprehensive and consistent response to climate change and sea level rise. Local organizations are leading the way in identifying local climate change-related risks, and as communities and military installations around the country are taking an increasingly proactive stance to these threats, it is anticipated that relevant case studies and scientific data will be more readily available. Coordination with and support of local organizations, such as the Hood Canal Coordinating Council, on adaptation strategies and implementation will be crucial to developing resilience to climate change.

2. Lease and Purchase of Development Rights, Easements, and Land (High Priority)

Preservation of open space and resource lands, especially working forests (see Tasks B6 and B7 below), protects the environment and the Navy's mission, particularly in Hood Canal. To protect land from development, developing and supporting existing partnerships to acquire and manage land is important. In addition, acquisition is a top priority to preserve critical lands and create opportunities for future restoration and enhancement projects (see Task B5). As a lesser measure, lease of development rights can provide short-term protection. Land or development rights purchase, when feasible, should be prioritized over leaseholds, as purchase typically costs little more than a lease, leasing is only a temporary solution, and management with a lease is expensive and inefficient. The military funding program for this is discussed below in Task B3.

Jurisdictions and the Navy should continue coordinating with locally active conservation agencies such as the Jefferson Land Trust, Great Peninsula Conservancy, and Trust for Public Land; consider supporting them in consolidating an account of their work to elevate the region's profile when competing for grant funding; and support efforts to coordinate or share grant administration among multiple environmental organizations to reduce inefficiencies and increase staff capacity.

The Navy and property owners in the region may take advantage of several federal and local programs that fund the voluntary conveyance of development rights from property owners who anticipate maintaining development activities on their property that are consistent with Navy impacts. The programs are designed

Trust Land Transfer leases just leave problems for future generations to solve. It's better to conserve critical open space and park lands forever than to lease them for 50 years. It's a wise investment; you will pay almost as much for a lease as in fee.

- Doug McClelland, DNR Assistant Regional Manager – Conservation, Recreation and Transactions

to protect specialized types of land, such as those with active farms, forests, or wetlands, which are at risk of being converted to more intense uses that would be inconsistent with Navy impacts.

The federal programs include the Community Forest Program (USFS), Community Forest Trust (DNR), and the USDA's easement programs, such as the Farm and Ranch Lands Protection, Wetlands Reserve, Grassland Reserve, and Sentinel Landscapes Programs. If any lands that qualify for these programs are within an area that also could serve as a buffer to the bases, the Navy, in conjunction with the more rural JLUS Jurisdictions, may wish to approach the property owners about participating in the applicable program. These programs, which offer incentives for participation, are entirely voluntary and do not authorize the unilateral taking of property or property rights without landowner consent.

Property owners interested in the USDA programs may contact:

Dave Kreft, ACEP Coordinator
USDA—Natural Resources Conservation Service
316 W. Boone Ave., Suite 450 Spokane, WA 99201-2348
(509) 323-2991
dave.kreft@wa.usda.gov

In addition to the federal programs, local programs include Kitsap County and Jefferson County's Transfer of Development Rights (TDR) and Conservation Futures programs.

3. Readiness and Environmental Protection Integration (REPI) and other Military Funding (High Priority)

Conservation organizations and other entities, in collaboration with the Navy, will continue to preserve open space near the bases and ranges through the federal Readiness and Environmental Protection Integration (REPI) program, as well as any other federal, state, and military land preservation programs for which they are eligible locally and for which funding is available. In the past, the Trust for Public Lands, The Nature Conservancy, and the State of Washington Department of Natural Resources (DNR) have been REPI partners in the region. REPI has been particularly effective in preserving open space around Hood Canal.

The REPI program allows conservation organizations, state and local governments, and the military to work together to acquire easements or other land interests from willing sellers on properties that then will be used for habitat conservation purposes, to maintain resource and working lands, and as a buffer from incompatible land uses around the bases.

A good first step towards continued participation would involve NBK and the affected jurisdictions working together to map shared priority areas for future conservation through REPI. Indeed, during the study, NBK representatives reemphasized their need to and interest in hearing from the local jurisdictions and organizations as to what lands are a priority for them. Forestland conservation (also see Task B6 below) is an especially effective strategy because it conserves large landscapes using relatively low investments. This study recommends that NBK continue its history of participation in the REPI program, which it used to preserve habitat near the Hood Canal Military Operational Area and Dabob Bay Range Complex.

Partnerships to Conserve Forestland

An especially effective long-term conservation strategy is for the Navy to partner with DNR or other land management agency to jointly purchase forestland. The Navy might purchase the development rights while the cooperating land management agency, organization, municipality, or other conservation programs purchase the land.

4. Shoreline Master Programs (Medium Priority)

The state's Shoreline Management Act requires local governments to manage shorelines to protect natural resources, provide public access to the water, and plan for water-dependent uses. To carry out this mandate, jurisdictions use Shoreline Master Programs to classify shoreline areas with various "environment designations;" these designations serve as zones for different shoreline uses and allow the local governments to ensure that the uses in each area balance geographic, economic, and environmental needs. This study recommends that the Navy participate in future Shoreline Master Program updates of the local communities. It also recommends that all groups share their restoration priorities with each other so that all of the jurisdictions can be aware of those priorities and can take them into account as necessary.

5. Joint Environmental Planning for Conservation, Recovery, and Restoration (Medium Priority)

As discussed for REPI projects, jointly identifying and prioritizing environmental sites to consider for potential restoration and recovery helps to provide flexibility and options for meeting shared environmental goals. For projects that impact the Hood Canal environment, one example of a specific tool available is the Hood Canal Coordinating Council's wetland and shoreline in-lieu fee mitigation and conservation program.

6. Resource and Working Lands (Medium Priority)

Resource and working lands are important for several reasons: they provide protection from encroachment; they serve key ecological functions such as water filtration, carbon sequestration, and wildlife habitat provision; they contribute to the region's economy; provide opportunities for recreation; and ensure lands are available for future generations to enjoy. However, they are not currently protected through local ordinances.

In order to protect resource and working lands, this study recommends that the local jurisdictions designate working lands for protection to lessen the chance that they are converted to land uses that would be incompatible with military operations. That said, designation must be coupled with conservation easements, transfer of development rights, fee simple acquisition, or other financially-based incentive (see Task B2 above) to effectively conserve land.

This study also recommends that the local jurisdictions lobby agencies at all levels of the government to incentivize protection of these lands. Tax programs or the establishment of a carbon-trading marketplace could help meet this objective, as could the simplification of regulations for working forests. Currently, the burden and expense of complying with regulations may incentivize landowners to pursue more intense land uses instead of conservation.

Local Timber Industry Support

Recently, Forterra and other local leaders have been sparking conversations to develop a cross-laminated timber (CLT) plant to support CLT building and home construction. Forks has a potential site, and the wood from Jefferson and Kitsap Counties is particularly appropriate for a CLT plant.

7. Forestry Management Support (Medium Priority)

Because forests are so important, this study recommends assisting small working forest landowners by providing programs that allow them to share information about forestry management and strategies for reducing inefficiencies in the regulatory process. For example, the Navy and the local jurisdictions could support the information sharing efforts of the Kitsap and Jefferson Counties' Rural Forestry and Conservation Districts, the State's Family Forest Fish Passage Program, and WSU Extension; and establish resource-based forest and agriculture commissions (like King County's Rural Forest Commission). In particular, the Navy and jurisdictions might consider funding 1) more forest staff at Washington State University to provide forest landowner education classes and 2) shared staff between Kitsap and Jefferson Counties to promote forest tax conservation programs such as open space designation and forest land tax. In addition, the jurisdictions could adopt policies that support the local timber industry (e.g., permitting and possibly incentivizing high-rise wood structures and timber industry infrastructure). The Counties should consider adjusting their development regulations to promote cross-laminated timber (CLT) buildings construction.

8. Carbon and Ecosystem Services Markets (Medium Priority)

Carbon markets, which allow the trading of carbon emission allowances in order to limit carbon dioxide production, and ecosystem services markets, which place an economic value on the environmental benefits of ecosystems, can help farms and forests stay economically viable. If this is the case, then land use compatibility – in most cases – can be preserved.

In 2014, Governor Jay Inslee announced a plan to use a carbon cap-and-trade system, in addition to electric vehicle and clean energy incentives, to cut emissions by 15% by 2020 from 2005 levels. He formed a Carbon Emissions Reduction Taskforce to study the issue, and he hopes to convince legislators to pass legislation that will allow the development of the market this year. Others have been promoting the idea of an ecosystem services market. This JLUS recommends supporting Northwest Natural Resource Group (NNRG) and Forterra efforts to develop both carbon and ecosystem services markets in the state.

C. Strategic Coordination among Stakeholders

Land use compatibility can be maintained and strengthened through effective coordination between military installations and the communities surrounding them. This section, therefore, identifies areas in which either existing coordination procedures can be supplemented or where increased coordination is recommended, based on anticipated growth trends and Navy operations.

Strategic Coordination: Ongoing Efforts

The history of pre-planning and coordination already in place has created an environment that is relatively free of significant urban or suburban encroachment on military operations.

- NBK and City of Bremerton officials and personnel work closely on matters of mutual concern, including parking, infrastructure, transportation, emergency services, transit, and housing. For instance, based on a prior experience, the Navy recently revised its procedures for releasing personnel from NBK-Bremerton during weather events. This change resulted in staggered releases in order to relieve the congestion in downtown Bremerton.
- Kitsap and Jefferson Counties both maintain Emergency Management Plans, which incorporate both NBK and NAVMAGII as part of their mutual aid agreements. These partnerships exemplify planning, preparedness, economic impacts, cost-sharing, and collaborative efforts at maintaining human health and safety. These entities could partner with the Navy to communicate these plans to the public.
- NBK, Bremerton, Port Orchard, and Kitsap Transit hold meetings of key staff to discuss issues related to transportation and parking; for members of the KRCC, this includes discussion through the KRCC TransTAC and TransPOL committees, which currently hold regular meetings.
- NBK-Bremerton periodically evaluates methods to reduce transportation and parking impacts in downtown Bremerton, including altering shift schedules and focusing on the worker-driver program.
- An informal “joint-services committee” works to identify and coordinate services that may be shared between the Navy and the off-base community.
- Jefferson County and NAVMAGII have a coordination agreement for fire and emergency services, and an MOU has been executed for mutual aid among Jefferson Fire District, Central Kitsap Fire and Rescue District, and NBK. These entities conduct ongoing collaboration and training to protect human health, safety, and welfare.
- Signage related to water-based military operations already is posted, including in several existing marinas.
- NBK has worked with adjacent private property owners to clarify the location of property lines shared with the Navy.

Strategic Coordination: What Could Be Done?

1. Military Planning and Coordination Committee and Community Workshops (High Priority)

Once the JLUS recommendations have been developed and full implementation has begun, the JLUS Policy Committee recommends that an ongoing, “standing” JLUS committee be maintained to address *ad hoc* issues arising from the communities’ and the Navy’s planning processes. The committee, perhaps designated as the “Military Planning and Coordination Committee,” or “MPCC,” would meet on a regular basis, or simply would be convened by its members as circumstances warrant. The Military Planning and Coordination Committee would serve as a clearinghouse for issues and information related to military-related planning in the region and may adopt bylaws to guide its structure and protocol. The primary objective is to ensure that the Navy, local jurisdictions, Tribes, and citizens have a designated agency to which they may address military compatibility issues.

If a Memorandum of Understanding, or MOU, was developed for purposes of ongoing military-civilian coordination – a topic addressed in the next section – the MPCC would be responsible for ensuring that its provisions are met and for overseeing changes to the agreement. The organizational structure of the MPCC could be formalized into the MOU, but a separate set of formal or informal bylaws may be more fitting.

In addition, during the JLUS process it was suggested that at least once every five years, a community workshop be held by the MPCC to evaluate JLUS implementation efforts, recommend any planning efforts needed to address base or community impacts, and evaluate pending infrastructure improvements or land use trends that could threaten compatibility between the bases and the communities. It would be anticipated that the Military Planning and Coordination Committee would oversee these workshops and identify any action steps following them that are recommended. Note that this workshop is in addition to the one recommended that the Navy hold – also at least once every five years – in order to provide a forum in which the Navy is a stakeholder but not the host of the workshop (see Task A2).

2. Memorandum of Understanding (High Priority)

Once the community develops the tools recommended here, in Phase II, the question arises of what framework will remain in place to monitor the implementation of those tools. This will be the final and ongoing phase referred to as Phase III in the section above titled “The Next Phases: JLUS Implementation and Tools Adoption”. In order to maintain compatibility of use between civilian and Navy lands, it is important to maintain a specific method and process of coordination on land use matters. The JLUS Policy Committee recommended consideration of a Memorandum of Understanding (MOU) to memorialize this local coordination framework for the purpose of maintaining the current positive encroachment environment.

There are two major areas an MOU could address. First, it may formalize how the Military Planning and Coordination Committee would be organized and how it would operate (similar to an organizational “charter” or “bylaws”), although a separate set of bylaws may be appropriate in this case, given the large number of potential parties to the MOU.

Second, an MOU would guide the continuing work of the MPCC and other community stakeholders in matters related to military land use planning, after the Joint Land Use Study recommendations have been developed in Phase II. Of course, the MOU is a “living document,” and would be amended or updated as circumstances change and the community has experience implementing it. An annotated outline of an MOU is provided at Appendix C1 and generally illustrates the matters an MOU would cover.

For example, an MOU likely would include points of contact by topic area at each installation, for each of the jurisdictions and Tribes, and for other stakeholder parties to the agreement. As is the case at most military installations, Navy personnel changes occur with some frequency. By identifying a positional liaison and establishing protocol for passing these responsibilities deliberately from one individual to the next as personnel changes do occur, communities have found that continuity in the planning process can be maintained.

The MOU would further detail how base and local government personnel will work together on land use and environmental issues on a consistent basis. This will help ensure that statutory and local coordination requirements are followed and that protocol for commenting on military matters – whether overseen by the Navy or its contractors – in a timely and consistent way is expressly laid out. As discussed in Task F3 below, utilities and other providers of “growth-inducing” infrastructure also may be parties to an MOU to ensure that coordination with the Navy occurs before extensions are made within the Military Planning and Coordination Area. The MOU is a useful mechanism for formalizing that coordination since, in most cases, these providers are not bound by local ordinances.

Although multiple MOUs may be necessary, it also may be that, at least for each installation, a single MOU will capture all major coordination efforts among the relevant parties. The appropriate number of MOUs will depend on the number and complexity of the matters the JLUS Implementation Committee decides are appropriate for inclusion in an MOU during Phase II.

3. Growth-Inducing Infrastructure (High Priority)

In order for land to develop, both the necessary infrastructure and the required permitting are needed. New infrastructure, such as new water and sewer lines, has the potential to increase encroachment since the increased capacity within the systems can support increased development. Likewise, new or improved system capacity also can support additional development. Therefore, this study recommends the jurisdictions coordinate with the Navy during the concept and inception phase and prior to approving plans, land uses, regulations, UGA expansions, or the funding of “growth-inducing” infrastructure, including water, central sewer, and major roads within Military Planning and Coordination Areas.

4. Tribal Cultural Resources (High Priority)

In Jefferson, Mason, and Kitsap Counties, five Tribes could be directly affected: Jamestown S’Klallam, Lower Elwha Klallam, Port Gamble S’Klallam, Skokomish, and Suquamish. Federally recognized Tribes have Treaty-Reserved Rights protected under the 1974 US v. Boldt decision (“Judge Boldt Decision”) requiring the United States government to consult Tribal entities if any Tribal resources will be affected in their Usual and Accustomed fishing and hunting areas. The Navy and Tribes should continue participating in government-to-government consultation processes on issues related to Treaty-protected natural resources.

Tribal cultural resources (i.e., historic, archaeological, and spiritual sites) will be found along most shorelines in this region. Cultural resources are protected under a separate law, the National Historic Preservation Act, as well as State laws. All jurisdictions and the Navy follow these regulations, with special federal law considerations triggered when federal funds, permits, or licenses are implicated in a particular project. However, the notification and permitting processes would improve by coordinating with all affected Tribes.

Currently, the Navy conducts formalized government-to-government consultations for development on Treaty-protected resources with the appropriate Tribal Governments. Some nearby jurisdictions (e.g., Poulsbo and Bainbridge Island) have Memorandums of Understanding (MOUs) set up with some of the Tribes to improve coordination. The JLUS Jurisdictions should develop MOUs with appropriate Tribes and also develop strategies and actions for improving the associated permit processes that are designed to protect current and historic cultural, archeological, and Treaty Right resources. The Counties and Cities should also coordinate with the applicable Tribes when updating their comprehensive plans for greater sensitivity to the importance of Tribal cultural and historic resources. Although this document lays a framework for strategies in coordination between local county jurisdictions and Navy entities, it does not supersede the need for federally mandated government-to-government consultations for development on Treaty-protected resources.

During Phase II, the JLUS Implementation Committee may develop language for signage, identify gaps in existing public awareness campaigns, and identify the most urgent areas that impact civilian safety and the Navy mission.

5. Boater/Seaplane Pilot Education (Medium Priority)

Although significant education efforts have been made, the Navy reports that recreational boaters and seaplanes on occasion travel into military operational areas associated with both NBK and NAVMAGII operations and properties, which creates the threat of safety concerns and interruptions to military training. It is believed that local boaters familiar with the waters of Hood Canal, Dabob Bay, Port Townsend Bay, and Killisut Harbor are aware of military operations, but that many transient recreational boaters may not be. The Policy Committee therefore recommends that the Navy work with the local governments, the Tribes, applicable state agencies, and the U.S. Coast Guard to encourage recreational boating in safe areas and to evaluate whether changes to the warning signals or increases in outreach are warranted. The Policy Committee’s recommendations did not include any new restrictions on civilian recreational activities on the water.

Placing additional signage and informational materials at marinas and boat launches and with seaplane operators throughout the region may help increase awareness of the military, although this information already is being provided in some areas and at most marinas. Including the magnitude of the financial impacts

of invalidating a test in the outreach campaign may help convey to the public the importance of maintaining a safe distance (see also, Task E3, “Recreational Boating”). While some of this information is shown on navigational charts, having information that is both easy-to-understand and readily available at all current and any new marinas and boat launches would increase even casual boater awareness. In any case, special attention should be given specifically to the 500-yard Vessel Protection Zone, restricted Navy beaches, and underwater ranges.

It was also noted during the study that the Kitsap Peninsula Water Trails are now part of the National Water Trail System and that publicity associated with this program should include awareness of the Navy’s water-based operations.

6. Other Shared Services (Medium Priority)

Due to the interconnected nature of water, sewer, electrical, and storm water systems, the Navy frequently shares infrastructure with surrounding jurisdictions. When infrastructure is shared, coordination between the military and the local governments has been successful in terms of basic service provision, cost sharing, infrastructure maintenance, and, in particular, emergency management functions. The Navy and local governments may also coordinate to prioritize military construction (MILCON) in order to meet mutual planning and infrastructure goals.

A coordination agreement exists already between NAVMAGII and Jefferson County for fire and emergency services, for example. In addition, an MOU has been executed for mutual aid among Jefferson Fire District, Central Kitsap Fire and Rescue District, and NBK. These efforts have resulted in an informal “joint-services” committee coming into operation.

The Study, therefore, recommends simply that the Navy and its civilian partners formalize ongoing coordination protocols and continue to evaluate the status of shared facilities and services in relation to their operations, facility capacity, funding, compliance, and monitoring. A formalized committee should evaluate all potential shared services opportunities, including storm water, wastewater, water, public safety, and housing (including temporary fluctuations in housing demand). Finally, of course, this committee may serve to oversee existing MOUs/MOAs related to these types of arrangements.

The findings and recommendations of the committee should be reported to the Military Planning and Coordination Committee and, as appropriate, the governing bodies and NBK officials for possible additional coordination efforts. It was noted during the Study that for some areas, the Kitsap Regional Coordinating Council (KRCC) might handle cooperation.

7. Coordinate Database and Mapping Files (Medium Priority)

Because infrastructure coordination is so important, and proper coordination relies on accurate data and maps, NBK, NAVMAGII, and the local governments should explore opportunities for sharing their existing databases and mapping files. This issue is particularly important in Bremerton, where the community and Navy activities take place in close proximity. In this area alone, for example, a large number of easements already exist; the ownership is often difficult to ascertain, but remains relevant to each of these entities.

The Navy may also work with local jurisdictions to ensure that property databases accurately reflect the locations of right-of-way and property lines associated with NBK, as well as the Navy railroad (see Task C8, below).

Kitsap County has developed a system that allows for flagging parcels intersecting/abutting Navy property. This flagging would note that these parcels warrant coordination with the Navy before the land uses change or the parcel is developed.

In addition to reducing redundancies in the work required to collect and prepare the information, if the jurisdictions were to share their database information and map files in a more deliberate manner in the future, informational gaps like these could be avoided. Additionally, more information would help facilitate the strategic planning efforts for each jurisdiction. The information exchange may also include information on utility lines and mutual access agreements.

8. Right-of-Way and Property Line Encroachments (Medium Priority)

Because the fences are usually built inside the Navy's property – in order to allow the Navy to inspect and maintain both sides of the fence – the actual location of property lines shared with the base is not clearly apparent upon casual observation. This has led some to assume that all land outside the fence is private property and, in some instances, civilian property owners have installed structures on Navy property.

For this reason, NBK has worked with adjacent property owners and the real estate community to increase awareness about the locations of right-of-way and property lines. The Policy Committee recommended during the JLUS process that both bases evaluate the need to expand this effort to other properties and perhaps to consider signage as a way of providing additional notice of the location of property lines shared with the Navy.

9. Height Impacts; NBK Perimeter (Medium Priority)

Downtown Bremerton has experienced consistent urban growth over the last decade, which has brought increased pressure for multi-story buildings in areas close to NBK-Bremerton. Because tall buildings could complicate security monitoring for the base, this study recommends that NBK and Bremerton survey existing areas of concern as well as properties that could cause security problems if developed in the future at certain heights. The survey should include information on topography, development capacity, and existing and potential building heights. After surveying these areas, NBK and Bremerton should jointly identify standards for development and procedures for mitigating these impacts on military function. A preliminary map indicating the maximum extent of the areas of potential concern is included at Figure 4.2.15 in Section 4.2.

D. Regional Land Use Planning

A number of recommendations set out in this chapter require the coordination of more than one level of government or action by more than one agency. The Implementation Tasks that are particularly “regional” in nature, therefore, are discussed in this section.

Regional Land Use Planning: Ongoing Efforts

Current regional planning efforts include:

- The bases are participating and contributing to regional planning and coordination in the area, including in regards to economic development, transportation, environmental issues, and general planning.
- NBK and NAVMAGII participate as members of or liaisons to regional planning groups in order to remain aware of civilian land uses that could impact the base, and to make the public aware of military operations that could affect civilians.
- NBK and NAVMAGII actively participate on the Kitsap Regional Coordinating Council, the Jefferson Economic Development Council (Team Jefferson), the Hood Canal Coordinating Council, and the Kitsap Economic Development Alliance.
- NBK and NAVMAGII coordinate with WSDOT on issues related to state roads, including parking, transportation, and transit challenges in Bremerton and matters related to the Portage Canal Bridge and freight routes used by the Navy.

Regional Land Use Planning: What Could Be Done?

1. Freight Routes used by the Navy (High Priority)

This study recommends that the PRTPO and KRCC, which are charged with developing regional transportation plans as described above, indicate existing freight routes used by the Navy in their plans, as WSDOT already has done. This would ensure that regional transportation planning efforts take the existing routes into account. The regional planning efforts also could help them identify alternative or new routes as needed. This added level of coordination will ensure that Navy interests and impacts are part of the dialogue as planning around these freight routes occurs over time.

To that end, the Policy Committee recommended that a design study be conducted to identify needs (e.g., intersection design specifications) for the proposed new freight route to Manchester and for the new route to be designated as a freight route in regional transportation plans. A design study will allow the community to assess the feasibility of the new route for military freight and to identify areas where concentrations of “vulnerable populations” (e.g., schools, daycare facilities) should be avoided (see Task F4 for a discussion of recommended zoning overlays).

2. Washington Military Alliance (WMA) (High Priority)

The Washington Military Alliance (WMA), a statewide coalition of military and defense-related stakeholder organizations, serves as a policy advisor to the Governor, other state agencies, the Legislature, and others regarding military and defense issues in the state. A 2014 Memorandum of Agreement established the WMA's purpose, message, and initial membership, which, regionally includes the Puget Sound Military Bases Association, the Kitsap Economic Development Alliance, and the Puget Sound Regional Council.

Last year, the OEA awarded Washington State a \$4.3 million grant to address the impact of potential reduced defense spending statewide. The plan, developed in collaboration with the Washington Military Alliance and the Department of Commerce, is intended to:

- Assess the extent of the military and defense contracting footprint in the state;
- Create a strategy and support system to reduce the exposure of regional businesses that are overly reliant on defense spending;
- Support the capacity for technology transfer and advanced commercial spinoff of DOD programs to the private sector;
- Generate a seamless transition to retrain and place dislocated defense contract employees in new jobs;
- Study future opportunities for industry growth in both the public and private sector to meet defense needs; and
- Focus on retaining and strengthening the state's defense industry and workforce.

This study recommends that the standing Military Planning and Coordination Committee coordinate with the WMA on *statewide* military planning strategies, including this study, and recommend what actions, if any, it might take to support the efforts of the WMA.

3. NAVMAGII Participation in Regional Transportation Planning (Medium Priority)

The Technical Committee recommended that informal coordination between NAVMAGII and WSDOT might be formalized, particularly with respect to state improvements and maintenance efforts near the installation. Matters for coordination are the Portage Canal Bridge, freight roadways, and considerations for recreational opportunities in the area (see Section 4.4).

E. Local Government Comprehensive Planning

Each of the local government jurisdictions participating in the JLUS was approaching comprehensive plan updates at the time the JLUS was performed. In addition, the Policy Committee identified the parking and transportation challenges in Bremerton to warrant further study and evaluation of policy options. Therefore, this section identifies recommendations for avoiding future potential encroachment through the comprehensive planning process.

Local Government Comprehensive Planning: Ongoing Efforts

- NBK and the City of Bremerton have historically coordinated on proposed land use changes or developments that could impact or be impacted by Navy operations or missions.
- Significant work has been done on the parking challenges in Bremerton, which are discussed in detail in Section 4.4 of the JLUS; this includes the 2007 *Bremerton Downtown Subarea Plan*.
- Puget Sound Regional Council maintains extensive and updated data on parking behavior and inventories in the areas near NBK.
- Alternative scenarios to address congestion and connectivity at the SR 3/SR 304 interchange have been developed and a recommended scenario has been identified for improvements.
- Additional transportation improvements for the Gorst area are programmed to improve the transportation network, including the SR 3 Defense Industrial Corridor project list.
- NBK participates with the Puget Sound Partnership's Local Integrating Organizations on ecosystem issues within the area.
- At the time the JLUS was conducted, the local governments were updating their comprehensive plans and incorporating relevant aspects of the Study's findings into those updates. The update process includes review and input opportunities for NBK and NAVMAGII.

Local Government Comprehensive Planning: What Could Be Done?

1. Update Local Government Comprehensive Plans (High Priority)

Updated every eight years, comprehensive plans guide future decisions on land use, infrastructure, public services, and resource conservation, among other topics required by the Growth Management Act. Now through 2016, the local jurisdictions will be preparing updates to their comprehensive plans that will address growth over the next two decades. During these updates, the study

recommends that the local governments incorporate the JLUS study results and recommendations into the appropriate and applicable elements of their plans. They could either do this through existing topical elements in their plans or they could add a separate military planning element. Incorporating the JLUS findings and recommendations into the comprehensive plans during the upcoming amendment cycles would facilitate planning compatibility between the jurisdictions and the Navy in order to minimize encroachment.

Urban Growth Areas, or UGAs, are a statutory planning tool for identifying “areas within which urban growth shall be encouraged and outside of which growth can occur only if it is not urban in nature.” (see RCW 36.70A.110). UGAs are planned to accommodate growth with the most efficient use of resources, efficient infrastructure, and provision of urban services with greater efficiency and cost. With urban growth, however, comes the potential for additional density and population, which in turn may create conflicts between military activities and community quality of life. It is for this reason, in fact, that the local governments have historically coordinated changes to the UGAs with the Navy. The Committee, therefore, recommends that the jurisdictions continue this practice by formalizing military coordination with the Navy prior to any changes to the UGAs. This is discussed in Task E4, and in Tasks F1 through F3, as well.

Finally, the Policy Committee recommends that local governments update their comprehensive plans to reflect relevant components of the NBK and NAVMAGII Integrated Natural Resource Management Plans (INRMP), which each installation uses in part to protect their shorelines. INRMPs ensure that natural resource conservation efforts and the impacts of military operations are balanced. This helps the bases to meet regulatory requirements while protecting fish and wildlife species, and their habitat areas. By aligning local comprehensive plans with military environmental planning, the potential to collaborate on land buffers against military encroachment is increased.

Since the local governments were preparing for plan updates during the JLUS, amendments to the comprehensive plans may involve a two-step process. First, a general amendment to the plans at this time would recognize that the JLUS was completed and that it is the intent of the local government to conform the plan to the recommendations that are appropriate and applicable to that local government. This amendment would outline the JLUS process, describe the relationship of the JLUS to the individual local government, and recognize that, once specific Implementation Tasks are completed (during Phase II), that the plan may be amended a second time to provide the planning basis for implementation of specific tools. Appendix C2 includes sample language for this comprehensive plan amendment, which local governments may use at any time.

The second step, of course, will be to develop more specific plan language during JLUS Implementation based on the actual tools developed in Phase II. These amendments – more so than the first – will vary by jurisdiction, based on the type of tools developed, their particular applicability to each jurisdiction, and the relative extent of the Navy’s presence in that jurisdiction.

2. Transportation and Parking Plan (High Priority)

The study suggests that NBK, Bremerton, Port Orchard, and Kitsap Transit continue to build on background planning, studies, and existing parking inventory to identify additional steps that may be taken to address parking demand and traffic surges in association with NBK-Bremerton. Unmitigated traffic congestion and parking conflicts can impede critical Navy operations and municipal quality of life.

Resolving these conflicts, however, increases the cooperative nature of the Navy's relationship with the City and its residents; an important component in maintaining operational compatibility in urbanized areas.

Significant data already exists, as is discussed in Section 4.4. The Navy should remain involved in KRCC's Transportation Policy (TransPOL) and Technical Advisory (TransTAC) Committees. Bremerton, NBK, and Kitsap Transit might consider creating a joint transportation committee to address localized issues.

However, the Technical Committee recommended that these agencies continue to evaluate options for mitigating off-base transportation and parking demand (which largely stems from NBK-Bremerton), alternative parking availability, and trip origins and demand sources. Improvements could include enhancing the park-and-ride system, allowing more commuters to park in designated parking lots outside of the main employment areas to commute the rest of their trip via transit and worker-driver programs. Many personnel park off-base and walk onto the property, and information on where these personnel park was seen as a data gap that needs to be filled. The options for mitigating impacts may include staggering shifts, new gate locations, locating housing projects within walking distance of the employment centers, expanding the worker-driver program, and supporting Kitsap Transit in expanding bus service.

The communities may find it useful to explore funding options, including those through the Defense Access Roads (DAR) program. The DAR program allows the Secretary of Transportation to provide for the construction and maintenance of roads that give access to military installations and other defense-related properties and for the replacement of highways that are closed to the public due to closures or restrictions at military installations and defense industry sites. Authorized by 23 U.S. Code sec. 210, the program is jointly administered by DOD's Military Surface Deployment and Distribution Command (SDDC) Transportation Engineering Agency and the Federal Highway Administration (FHWA). It is the only federal mechanism that allows for the military to fund improvements to roads outside of an installation.

In order to improve the Charleston Boulevard Corridor, the planned SR 3/SR 16 improvements should be prioritized on the KRCC programmed projects list and the City of Bremerton Comprehensive Plan, in coordination with the recommendations that result from the SR 3/SR 16 WSDOT Design Study. Additionally, funding through the KRCC TransPOL and TransTAC committees to lobby the state should be pursued for the purpose of implementing recommended improvements at SR 3/SR 304.

Finally, stakeholders and the JLUS Implementation Committee should remain engaged with the KRCC in regards to the SR 3 Defense Industrial Corridor Initiative and the improvements considered for inclusion on its project list, as they may impact NBK and its surrounding jurisdictions and/or include projects of mutual benefit to these entities.

3. Recreational Boating (High Priority)

Underwater testing in the Puget Sound has taken place here since the 1950s and continues today in the Hood Canal Military Operational Area and Dabob Bay Range Complex. This type of testing is uniquely suited to the quiet, deep, cold water environment. Some of this testing depends on quiet waters, and the noise generated by even one boat can invalidate results.

As these tests can cost approximately \$250,000 each, the invalidation of a test due to noise that could have been avoided is clearly significant. Because increased boat

and seaplane traffic is such a major concern for the Navy, this study recommends consideration of comprehensive plan policies that would discourage incompatible recreational impacts within military operational areas, reflect the needs of the boating public, and identify opportunities to provide improved recreational boating opportunities outside of military operational areas. Including the magnitude of the financial impacts of invalidating a test in local comprehensive plans may help elevate its importance in local planning and raise awareness around the need for boaters to maintain a safe distance (see also, Task C5, “Boater Education”). As noted earlier, the JLUS Policy Committee’s recommendations in this study do not include any increased regulation of civilian boating activities.

4. Plan Coordination Overlay (Medium Priority)

The JLUS Jurisdictions may wish to adopt a “plan coordination overlay district” in which the consideration of certain policies, long-range planning documents, or land use program by local governments would trigger advanced coordination with the bases on the topic at hand. It is hoped, of course, that by coordinating early and often, the Navy and its civilian partners can avoid land uses that are incompatible with Navy operations before they advance past the planning stages.

The trigger points may include consideration of Comprehensive Plan amendments, shoreline protection programs, expansions to UGAs, and other land-use policies that affect the bases. This would allow the bases to give input into the plans, programs, and policies as they are developed. By including the overlay in the comprehensive plan, the local governments and Navy provide a basis for coordination throughout the land use process.

Since the local government jurisdictions already were in the process of updating their comprehensive plans during the development of the JLUS, sample comprehensive plan language has been included at Appendix C2 to this Study. The language used should be a starting point for the jurisdictions or may be used by the JLUS Implementation Committee, during Phase II, to develop language specific to each of the jurisdictions.

Once incorporated into the plan, the coordination processes would be included in local development regulations, with detail sufficient to guide local planners and to make the Navy and the general public aware of how coordination will occur and in what cases. Tasks F1 through F3 detail the Navy coordination processes, based in part on statutory requirements.

5. Sub-Watershed Planning (Medium Priority)

To reflect regional goals and policies of directing development where it has the fewest environmental impacts while allowing for economic growth in the communities and the fulfillment of the military mission, this study suggests developing stream-based sub-watershed plans among the jurisdictions and bases. The Navy should continue to be an active participant in watershed planning activities, building on its work with the Puget Sound Partnership’s Local Integrating Organizations and using Jefferson and Mason Counties’ watershed management plans as a base for future planning efforts.

The plans and coordination should address issues affecting more than one jurisdiction, such as the protection of critical areas and buffers, including wetlands, as well as fish and wildlife conservation, water quality and storm water runoff.

6. Freight Routes Used by the Navy (Medium Priority)

The Navy uses designated railway lines and freight routes to move supplies, personnel, and ordnance through the area. Thus, the Navy Railroad and the freight routes that serve the Manchester Fuel Depot and NAVMAGII are critical to the Navy's mission. Yet the need for safe passage for commercial freight traffic and the Navy along the routes in the future may create conflicts with private interests in developing lands near these routes. At the same time, the types of developments that are allowed to locate adjacent to the routes can impact the ability of commercial traffic and the Navy to safely transport its materials and personnel.

Therefore, in addition to recommending that these routes be added to the PRTP and KRCC transportation plans (see Task D3), the Committee recommends that local governments indicate existing freight routes and applicable safety standards, which can be made public, in their comprehensive plans to guide future land use decisions near the routes. The study also recommends that the communities strive to maintain a Level of Service on the designated routes consistent with comprehensive plan policies.

J. Land Use and Development

Though current encroachment potential is relatively low, the most likely threat to compatibility between the Navy's operations and the local community is the development of land within the Military Planning and Coordination Areas. Incompatible development impacts the military's ability to operate and train safely as well as the quality of life for future residents. Therefore, in addition to the coordination, conservation, and planning Implementation Tasks recommended above, the jurisdictions may consider amending their development regulations or formalizing coordination with the Navy, in order to further protect existing levels of compatibility. The decision of whether to make any regulatory changes is, of course, entirely up to the local communities, which would be participants and partners in the JLUS implementation and adoption phases.

Land Use and Development: Ongoing Efforts

The Navy and the local jurisdictions and Tribes have a history of operating under a "good neighbor" policy by coordinating on land use and environmental matters when they reasonably become aware of them and typically before permitting decision are made.

- Effective coordination among JLUS participants already is occurring even where processes have not been formalized or adopted by local ordinance, including but not limited to development projects involving SEPA review.
- Jefferson County sends notice to the Navy for boat/dock access and marijuana operation projects.
- NBK coordinates with City of Bremerton on proposed land development projects in the vicinity of the base or which could impact base operations.

State Requirements for Military-Local Government Coordination

Since 2004, the GMA has required that the comprehensive plans and development regulations of cities and counties required to plan under the GMA “should not allow development in the vicinity of a military installation that is incompatible with the installation’s ability to carry out its mission requirements.”

First, under the GMA, these cities and counties are now required to find that their existing comprehensive plan and development regulations will not allow incompatible development, or to make amendments that would prohibit incompatible development.

Second, cities and counties must notify the commander of their Navy installations prior to amending at least the land use element, if not the entire plan, and implementing regulations, when to do so would affect lands “adjacent to” military installations.

The commander then has 60 days to make a written recommendation regarding the proposed change. If the commander does not submit a response within the specified time period, the local government may presume that the proposed plan or amendment or regulation will not have any adverse effect on the operation of the installation.

Land Use and Development: What Could Be Done?

1. Statutory Notice Area: Comprehensive Plan and Development Regulations (High Priority)

As part of the mandatory land use element requirement, the Growth Management Act (GMA) directs cities and counties, planning under RCW 36.70A.040, to provide notice to the military when they intend to amend their “comprehensive plan or development regulations to address lands adjacent to military installations to ensure those lands are protected from incompatible development” (See RCW 36.70A.530(4)). RCW 36.70A.530 is included in its entirety at Appendix C4.

Currently, the local jurisdictions with lands “adjacent to” NBK and NAVMAGII do not expressly provide for this notice *by ordinance* to the Navy, although in most cases, coordination is occurring informally.

The Policy Committee, nonetheless, recommends that NBK, NAVMAGII, and the local governments evaluate the current process each jurisdiction uses to provide required notice, and amend their development regulations to meet statutory notice requirements.

Unfortunately, RCW 36.70A.530 does not define what the Legislature intended “lands adjacent to military installations” to mean. In many instances, the statute clearly will apply. However, in others it may not, as for example, in cases of very large parcels, multiple small parcels, PUDs, or, as is the case with NAVMAGII, where an installation is separated from civilian lands by a water body. Furthermore, each county and city participating in the JLUS has a different process for considering plan, development regulation, and development permit approvals. The most conservative approach would be to provide statutory notice to the Navy for each of these categories of approval. Expanding notice locally beyond only those approvals required by statute is discussed in the following Implementation Task.

The Policy Committee, therefore, recommends that the Navy and the jurisdictions work together with their local legal counsel to consider the appropriate extent of the statutory notice requirement locally and to amend development regulations accordingly. In 2012, the City of Spokane adopted wide-ranging compatibility standards in compliance with RCW 36.70A.530 after participating in a JLUS for Fairchild Air Force Base. For reference, Appendix C3 includes those compatibility standards.

2. Notice for Development Permits and Rezonings (High Priority)

As noted above, the GMA does not require military-local government coordination prior to development permitting and approvals or, necessarily, rezonings that do not require an amendment to the comprehensive plan. Nonetheless, several jurisdictions are coordinating informally prior to these land use actions, in order to avoid future encroachments on military operations.

The Jefferson County Unified Development Code, for example, provides for a fourteen- and twenty-eight-day notification period to “affected agencies” for development permit applications (see Jefferson County Code, s. 18.40.120), which historically has encompassed the Navy when appropriate.

As a further example, the City of Spokane gives notice to Fairchild Air Force Base for a number of categories of development approvals, including plats, new commercial and industrial uses, some public facilities, and certain other structures and land use type. (See 17C.182.600, Spokane Municipal Code, Appendix C3.)

The study, therefore, recommends that NBK, NAVMAGII, and the local governments evaluate whether to adopt notice requirements for development permits and rezonings similar to, but not necessarily mirroring, those required by statute for comprehensive plan and development regulation amendments within the Military Planning and Coordination Area.

3. Collaborate to Develop a Streamlined System to Identify Potential Projects of Concern (High Priority)

Of course, while it is important that the bases receive notice of land use actions that present real threats to compatibility, it also is in all parties' interests to avoid providing notice of developments that fall well below that threshold. The bases and the local governments likely can find a comfortable balance in this regard, perhaps by identifying thresholds based on project size (acres, units, square footage), distance from the base, or land use types. Therefore, beyond the mandatory notice required by the GMA, the Technical Committee recommended that the Navy and the local jurisdictions reevaluate the types of developments and land use changes on which they would coordinate, as well as the areas within which they would coordinate.

The need to coordinate on land use matters may go beyond those necessarily captured in the local planning and zoning context. For example, expansions to growth-inducing infrastructure initiated by agencies other than the local governments or Tribes do not require coordination with the Navy at this time. If a Memorandum of Understanding is developed, it may include agencies responsible for infrastructure and utilities as parties to the MOU, as well as their agreement to coordinate with the Navy prior to making extensions into areas that could impact or be impacted by Navy operations.

4. Freight Routes used by the Navy (High Priority)

The Navy needs to utilize DOT, WSDOT, and regionally designated freight routes so that it can continue to transport equipment, including ordnance and personnel in a safe manner. Because certain types of development around the freight routes can create land use conflicts, this study recommends that the local governments and Navy consider whether freight route overlay corridors are appropriate at this time.

The overlay corridors would be designed to maintain the integrity and purpose of the military transport function while protecting public safety and quality of life. An overlay could limit concentrations of people along the corridors, or discourage particularly sensitive uses such as schools, daycares, hospitals, and senior centers. They may also be designed to promote additional general planning objectives, such as increasing opportunities for cycling and walking.

Communicating “Early and Often”

When it comes to changes in land use, members of the Technical Committee pointed out the benefits of the officials at the bases and the local planning communicating “early and often,” even if doing so isn’t yet required by statute or ordinance.

If a local jurisdiction has begun informal discussions with a landowner regarding a development near a Navy boundary, the jurisdiction would communicate this to the designated Navy liaison, perhaps sooner and more broadly than may be required by statute, so that site planning may be finalized with preliminary base comments in mind. This type of communication would allow collaboration between the jurisdiction, the developer, and the Navy so that compatible development is achieved expeditiously.

Conversely, if a proposed Navy operation or land use near a base boundary could have an off-base impact, the Navy would consult the neighboring jurisdiction(s) to ensure that the project meets the community and environmental goals of both parties, even where state or federal law may not require coordination.

5. Coordination and Land Use Overlay Zones (High Priority)

In order to effectuate the above four recommendations, local jurisdictions may wish to consider adopting land use overlay zones within the Military Planning and Coordination Areas and the freight routes used by the Navy. Overlay zones are a commonly used zoning tool that add specific regulations to lands in a certain geographic area beyond those required generally by the underlying zoning district. They already are being used locally, as both Jefferson County and Kitsap County have overlay zones, as well as subarea plans. Military overlays could serve several purposes.

First, they could indicate areas within which notice and coordination between the Navy and the local governments would occur, providing a means of implementing the recommendations in Tasks F1 through F4 above. This type of overlay would indicate only those areas within which coordination would occur and would not govern allowable land uses within the overlay.

Second, an overlay zone could limit the allowable land uses within them to those that are compatible with the Navy's mission. This approach would be aligned with the existing zoning or uniform development code for the adopting local government and would identify any conditional, discretionary, or special uses that would be appropriate given a proposed development's proximity to a Navy installation or impacts from Navy operations.

6. Real Estate Disclosures (Medium Priority)

Real estate disclosures put future property owners on notice of the impacts of military operations they may experience after occupying the property. Doing so may, as a result, reduce complaints about Navy operations after the property is purchased. As mentioned in Task A2, Washington State requires that the sellers of property make certain disclosures known to potential buyers in Chapter 64.06 RCW. With certain limited exemptions, these statutory disclosures are mandatory for all sales of commercial property as well as for unimproved and improved residential properties. They are found on the Washington State "Seller Disclosure Statement," referred to as Form 17.

The required disclosures fall into seven sections: title and legal, water, sewer/on-site sewage system, structural, systems and fixtures, environmental, and "full disclosure by sellers." While no specific disclosure is required regarding the presence of nearby military operations, some may construe the "full disclosure by sellers" section to require that type of disclosure. It asks whether "there are other existing material defects affecting the property that a prospective buyer should know about." This study recommends that NBK, NAVMAGII, and the JLUS Implementation Committee work with the local real estate community to evaluate whether these disclosures should be made to pertain more explicitly to military impacts and then used by sellers within Military Planning and Coordination Areas or other appropriate geographic areas to be determined.

It was noted during the study that the need for disclosure might be greater in the Dabob Bay area, compared to in Bremerton, for example, since the presence of NBK is so apparent in most instances. New residents or employees in the Dabob Bay and other parts of the Hood Canal, on the other hand, may be less cognizant of military transit to and use of the underwater ranges.

However, the Policy Committee was not prepared to recommend that real estate disclosures be adopted at this time. Rather, the Committee recommended that the communities and real estate professionals evaluate disclosures and other means of notifying potential purchasers of military impacts during JLUS Implementation. Alternatives might include, for example, road signage and notice on local government websites, in permit application packets, and on approved plans and permits. Additional outreach by the jurisdiction and the Navy also may be a sufficient alternative at this time (see Section A(2)). It may also be that express authorization at the state level is a desired prerequisite to any local expansions to real estate disclosure requirements.

7. Airspace at NAVMAGII (Medium Priority)

The FAA requires flights taking off and landing at Jefferson County International Airport avoid the airspace over NAVMAGII. If the airspace cannot be avoided, then aircraft, including drones, should maintain minimum safe altitudes as prescribed by the FAA. Though currently not an issue of urgency, posted notices to pilots and, potentially, local ordinances may be supplemented during JLUS implementation to identify additional means of providing this notice.

JLUS Strategies and Recommendations Matrix

The preceding recommendations are summarized in the following matrix. For ease of reference, the Implementation Tools are numbered and ordered in the matrix consistently with the preceding discussion of each Implementation Tool. In addition, cross-references are made to Chapter 4, where additional context and information can be reviewed for each Implementation Task.

Each Implementation Task in the Implementation Matrix reflects a Policy Committee recommendation for maintaining or enhancing compatibility between Navy operations and civilian activities on lands in the vicinity of NBK and NAVMAGII. Some of these tasks may be accomplished with existing resources, staffs, agencies, and committees. However, others may require additional expertise, the development of more complex ordinances and implementation materials, or more extensive public outreach. The JLUS Implementation Committee may wish to seek any funding available from OEA for these purposes. In these cases, the availability of potential OEA funding is indicated in the Funding Sources column in the Matrix.

Table 5.2. Strategies and recommendations matrix key

Anticipated Timeframe	S (Short) = first 3 years; M (Middle) = between 4 and 10 years; L (Long) = between 11 and 20 years
Estimated Costs	\$ = < \$5,000; \$\$ = \$5,000 to \$25,000; \$\$\$ = greater than \$25,000
JLUS Jurisdictions	for NBK: Bremerton, Port Orchard, Poulsbo, Jefferson County, Mason County, Kitsap County for NAVMAGII: Port Townsend, Jefferson County
Participating Tribes	Jamestown S’Klallam, Lower Elwha Klallam, Port Gamble S’Klallam, Skokomish, and Suquamish

Table 5.3. Strategies and recommendations matrix

Procedural Context	Priority	Implementation Task	Task Description	Responsible Parties	Anticipated Timeframe	Estimated Costs	Funding Source	Study Cross-Reference
A. Community Outreach by the Navy	High	1. Updates to Elected Officials and Other Stakeholders	Update elected officials on base planning, operations, and anticipated changes, as requested; provide written updates and make hardcopy flyers downloadable from websites.	NBK NAVMAGII JLUS Jurisdictions Tribes	S	\$	Existing Staffing	4.1, 4.5
		2. Increase Community Awareness of the Navy Mission	Undertake a community awareness campaign, to include, for example: <ul style="list-style-type: none"> • Annual training sessions for area planners, • Expand awareness of annual “State of the Station,” • Maintain presence using social media, • Informational workshops held at least every 5 years, • Work directly with local real estate community, • Increase coordination with WSDOT, and • Continue history of informal “good neighbor” coordination on land use and training changes. 	NBK NAVMAGII	S	\$-\$\$	Existing Staffing	4.1, 4.5
B. Conservation Programs for Protecting Land Use Compatibility	High	1. Climate Change/ Sea Level Rise (SLR)	Monitor climate change and SLR initiatives, data, and information for impacts on critical infrastructure, threatened and endangered species, other environmental impacts, and military operations and facilities. Consider participating in FEMA’s Community Rating System to protect development and infrastructure from sea level rise-related flooding and other climate change impacts. Continue supporting Hood Canal Coordinating Council’s climate change adaptation efforts. Develop similar climate change adaptation and mitigation efforts at local, county, and regional levels.	NBK NAVMAGII Tribes JLUS Jurisdictions	S	\$\$-\$\$\$	TBD	4.5
		2. Lease and Purchase of Development Rights, Easements, or Land	Identify available funding for acquiring development rights, easements, land, or leaseholds to protect prioritized lands and military mission; e.g., through the Community Forest Program (USFS), Community Forest Trust (DNR), the USDA’s easement programs, local TDR and Community Forest programs, and land trust organizations. Support local organizations’ efforts in elevating the region’s profile for grant funding and increasing staff capacity.	NBK Jefferson County Kitsap County Mason County State Agencies Tribes	M	\$\$-\$\$\$	TBD	4.5
		3. Readiness and Environmental Protection Integration (REPI) and Other Federal and Philanthropic Funding	Continue conservation and maintaining working lands through REPI participation and other funding mechanisms. Map shared priority areas for conservation, climate change adaptation, and working lands conservation through REPI application and other grant or funding processes.	NBK JLUS Jurisdictions State Agencies Tribes Conservation Organizations	M	\$\$-\$\$\$	Existing Staffing DoD Federal Agencies Conservation and Philanthropic Organizations	4.5

Procedural Context	Priority	Implementation Task	Task Description	Responsible Parties	Anticipated Timeframe	Estimated Costs	Funding Source	Study Cross-Reference
B. Conservation Programs for Protecting Land Use Compatibility	Medium	4. Shoreline Master Programs	Ensure that the Navy has a seat on any advisory bodies during SMP updates to continue coordination and review of shoreline designations.	JLUS Jurisdictions NAVMAGII NBK State of Washington DOE	S	\$	Existing Staffing	4.5
		5. Joint Environmental Planning for Conservation, Recovery, Restoration, and Climate Change	Jointly prioritize environmental enhancement sites to consider for potential off-site mitigation; consider mitigating current and future projects that impact the Hood Canal environment through the Hood Canal Coordinating Council's wetland and shoreline in-lieu fee mitigation and conservation program.	NBK NAVMAGII JLUS Jurisdictions			Existing Staffing	4.5
		6. Resource and Working Lands	Consider zoning commercial forests and working lands accordingly; and working with State agencies, counties, and the industry to simplify working forests regulations, as feasible.	JLUS Jurisdictions	M	\$	Existing Staffing	4.5
		7. Forestry Management Support	Support programs that share information about forestry management and advocate for working forests; reduce inefficiencies in process; assist small working forest landowners; and adopt policies that support the local timber industry.	JLUS Jurisdictions NAVMAGII NBK	M	\$	Existing Staffing	4.3, 4.5
		8. Carbon and Ecosystem Services Markets	Support efforts to develop carbon and ecosystem services markets.	JLUS Jurisdictions NAVMAGII NBK	M	\$	Existing Staffing	4.5

Procedural Context	Priority	Implementation Task	Task Description	Responsible Parties	Anticipated Timeframe	Estimated Costs	Funding Source	Study Cross-Reference
C. Strategic Coordination Among Stakeholders	High	1. Military Planning and Coordination Committee (MPCC) and Community Workshops	Establish a Military Planning and Coordination Committee to oversee ongoing land use matters affecting or affected by military operations; hold public workshops at least once every five years.	JLUS Implementation Committee	S	\$\$-\$	Existing Staffing	Ch. 5
		2. Memorandum of Understanding (MOU)	Develop an MOU to guide ongoing implementation of the JLUS and to provide the framework for the MPCC and other active stakeholders.	JLUS Implementation Committee	S	\$\$-\$	Existing Staffing Potential OEA Funding	Ch. 5
		3. Growth-Inducing Infrastructure	Coordinate prior to approving plans, land uses, regulations, or the funding of "growth-inducing" infrastructure, including utilities and roads.	NBK NAVMAGII JLUS Jurisdictions	S	\$	Existing Staff	4.1, 4.2, 4.3
		4. Tribal cultural resources	Supplement existing coordination with the Tribes and consider MOUs with applicable Tribes. Coordinate with Tribes when updating comprehensive plans for greater sensitivity to cultural resources.	Participating Tribes JLUS Jurisdictions SHPO DAHPP	S	\$	Existing Staffing	4.2
	Medium	5. Boater/Seaplane Pilot Education	Evaluate the need for changes to warning signals or increased outreach in order to increase awareness of military impacts.	NBK NAVMAGII Jefferson County Applicable State Agencies U.S. Coast Guard	S	\$\$	TBD	4.3
		6. Other "Shared Services"	Formalize a joint-services committee, continue regular meetings and updates involving shared facilities status, including facility capacity, funding, compliance, monitoring, existing MOUs/MOAs, operations; including for stormwater, wastewater, water, public safety, housing (including temporary fluctuations); report findings and recommendations to governing bodies and NBK officials; coordinate military construction (MILCON) funding projects.	NAVMAGII NBK Bremerton Port Orchard Kitsap County	S	\$	Existing Staff	4.2
		7. Coordinate Database and Mapping Files	Explore opportunities for sharing existing data bases and mapping files to facilitate strategic planning efforts and reduce gaps and redundancies regionally; including digitized PWD utility lines, mutual access agreements.	NBK NAVMAGII JLUS Jurisdictions	S	\$	Existing Staff	4.2

Procedural Context	Priority	Implementation Task	Task Description	Responsible Parties	Anticipated Timeframe	Estimated Costs	Funding Source	Study Cross-Reference
C. Strategic Coordination Among Stakeholders	Medium	8. Right-of-way and Property Line Encroachments	Continue and expand work with adjacent owners, real estate community, and local governments to ensure databases accurately reflect property lines and ensure awareness of ROW locations and property lines associated with NBK, NAVMAGII, and military rail right-of-way; consider signage along rights-of-way.	NBK NAVMAGII JLUS Jurisdictions	S	\$	Existing Staff	4.2
		9. Height Impacts; NBK Perimeter	Survey existing and potential line of sight concerns and identify standards and/or procedures for mitigating these impacts on NBK Bremerton operations.	NBK Bremerton	S	\$	Existing Staff	4.2
D. Regional Land Use Planning	High	1. Freight Routes used by the Navy	Indicate existing freight routes used by the Navy in PRTPO and KRCC transportation plans; undertake design studies as a prerequisite for new routes as needed.	NBK NAVMAGII PRTPO KRCC	S	\$	Existing Staffing Potential OEA Funding	4.4
		2. Washington Military Alliance (WMA)	Coordinate with the WMA on statewide military planning strategies; including the recent OEA grant related to potential reduced defense spending.	JLUS Implementation Committee	S	\$	Existing Staffing	4.1
	Medium	3. NAVMAGII participation in regional transportation planning	Formalize coordination and communication between WSDOT, Jefferson County, the Public Works Department, the Public Utilities District, and NAVMAGII, in particular related to state improvements and maintenance efforts affecting transportation facilities near the base.	NAVMAGII WSDOT PRTPO Jefferson County Jeff. Co. PUD	M	\$	Existing Staffing	4.1, 4.4

Procedural Context	Priority	Implementation Task	Task Description	Responsible Parties	Anticipated Timeframe	Estimated Costs	Funding Source	Study Cross-Reference
E. Local Government Planning	High	1. Update Local Government Comprehensive Plans	Local governments should incorporate the JLUS planning process and JLUS recommendations into Comprehensive Plan updates within existing plan elements or a separate military element.	JLUS Jurisdictions	S	\$-\$\$	Existing Staffing Potential OEA Funding Local Sources	4.1
		2. Transportation and Parking Plan	Inventory existing conditions (parking, trip origins, demand sources) and evaluate options for mitigating off-base transportation and parking demand; including, for example, walkable housing options, staggered shifts, gate locations; explore funding options including through the Defense Access Roads (DAR) program. Consider forming a joint NBK, Bremerton, and Kitsap Transit transportation committee	NBK Bremerton Port Orchard Kitsap County Kitsap Transit	S	\$-\$\$\$	Existing Staffing Potential OEA Funding	4.4
		3. Recreational Boating	Work cooperatively to find opportunities to provide improved recreational boating access outside of military operational areas and increase boater safety throughout.	JLUS Jurisdictions NBK NAVMAGII DNR WDFW	S	\$	Existing Staffing Potential OEA Funding	4.3
	Medium	4. Plan Coordination Overlay (see also, "Local Government Regulation," below)	Adopt policies and procedures for coordinating with the Bases and relevant facilities prior to amending Comprehensive Plans, Shoreline Protection Programs, and other land-use policies.	JLUS Jurisdictions	S	\$	Existing Staffing Potential OEA Funding	4.1
		5. Watershed-wide Planning	Continue good practices of land use plans taking a watershed approach into account when planning, especially in localized areas around resources that transition onto military base.	JLUS Jurisdictions NBK NAVMAGII	M	\$	Existing Staffing	4.5
		6. Freight Routes used by the Navy	Indicate existing freight routes (rail and road) used by the Navy and (as available per security protocol) applicable safety standards, in local comprehensive plans.	JLUS Jurisdictions	S	\$	Existing Staffing	4.2, 4.4

Procedural Context	Priority	Implementation Task	Task Description	Responsible Parties	Anticipated Timeframe	Estimated Costs	Funding Source	Study Cross-Reference
F. Land Use and Development	High	1. Statutory Notice Area: Comprehensive Plan and Development Regulations	Coordinate to ensure that local jurisdictions planning under RCW 36.70A.040 are complying with RCW 36.70A.530, which requires a 60-day comment period by the military prior to certain amendments to a comprehensive plan or development regulations.	JLUS Jurisdictions NBK NAVMAGII	S	\$-\$\$	Existing Staffing Potential OEA Funding	4.1, 4.2, 4.3
		2. Notice for Development Permits and Rezoning	Evaluate whether notice for development permit applications or rezonings are needed in addition to those required by statute (see above).	JLUS Jurisdictions NBK NAVMAGII	S	\$-\$\$	Existing Staffing Potential OEA Funding	4.1, 4.3
		3. Collaborate to Develop a Streamlined System to Identify Potential Projects of Concern	Map shared-interest planning areas to identify specific areas, types of projects/uses, or design features (e.g., height), of potential concern to the bases. Work with JLUS Jurisdictions to develop an efficient process to send notice to the military according to this map (i.e. flagging parcels)	NBK NAVMAGII JLUS Jurisdictions	S	\$	Existing Staff	4.1
		4. Freight Routes used by the Navy	Consider adoption of a “freight overlay corridor,” in order to (a) maintain safe freight transport; (b) protect public safety/quality of life; and (c) meet bike/pedestrian, urban design, and other planning objectives.	NAVMAGII NBK WSDOT PRTPO JLUS Jurisdictions	S	\$\$	Existing Staffing Potential OEA Funding	4.2, 4.4
		5. Coordination and Land Use Overlay Zones	Consider Overlay Zones within the relevant Military Planning and Coordination Area, within which 1) notice/recommendations would occur for proposed land uses (including boat ramps, marinas, boat trailer parking, seaplanes) or 2) only compatible land uses would be allowed (or conditionally allowed).	JLUS Jurisdictions NBK NAVMAGII	M	\$\$	Existing Staffing Potential OEA Funding	4.1, 4.3
	6. Real Estate Disclosure	Evaluate authority and need for real estate disclosures and other notification methods to purchasers, lessees, and developers of land within base areas of influence.	NBK NAVMAGII Local Real Estate Community JLUS Jurisdictions	M	\$\$	Existing Staffing Potential OEA Funding	4.1, 4.2	
	7. Airspace at NAVMAGII	Evaluate options and authorities for ensuring pilots from Jefferson County International Airport are aware of and comply with airspace advisory at NAVMAGII; including local ordinances and posted notices to pilots.	Port of Port Townsend NAVMAGII Jefferson County	S	\$	Existing Staffing Potential OEA Funding	4.3	