## Chapter 3 — Rural Areas and Natural Resource Lands

## III. Rural Densities and Development

### **B.** Residential Densities

((R-307 For Vashon-Maury Island, a residential density of one home per 10 acres:

- a. Shall be maintained on area zoned RA-10 as of 1994 to help protect community character and reduce adverse impacts on the island's infrastructure; and
- b. Shall be applied to areas with a predominant lot size of 10 acres or greater and mapped as category

  I Critical Aquifer Recharge Areas.))

# Chapter 9 — Services, Facilities and Utilities

## II. Facilities and Services

# I. Public Sewers and On-Site Wastewater Treatment and Disposal Systems

F-258 ((The existing public sewer system in the Town of Vashon cannot be expanded to serve land beyond the boundaries of the town, except as provided in Policy F-264 and as consistent with Title 57 Revised Code of Washington. )) Onsite systems, community on-site systems or decentralized treatment systems may be used as appropriate for planned growth in ((other)) the Rural Towns of Fall City and Snoqualmie Pass.

## Chapter 11 — Community Service Area Planning

# VI. Vashon + - Maury Island Community Service Area

((The Vashon/Maury Island Community Service Area has identical boundaries to the original Vashon Community Planning Area. The name is updated to include the Maury Island section of Vashon Island. The "Vashon Town

Center Plan" is a separately adopted subarea plan (1996) that covers only the Rural Town of Vashon. The 1986 Vashon Community Plan includes policies that address the remainder of the islands.

In 2014 the population in the Vashon/Maury Island CSA was approximately 11,000. In 2010, the CSA had an estimated 5,550 housing units.

#### **Background**

The Vashon Community Plan commenced in the spring of 1977 and was adopted in June 1981. Due to concerns about Vashon Maury Island's water supply, which consists of local rain fed aquifers, a revision to the plan was set for 1986 after completion of the Vashon/Maury Island Water Resources Study. The revision process began in April 1984, and the updated Vashon Community Plan was adopted in October 1986. In addition to responding to the Water Resources Study, the plan update also implemented the 1985 King County Comprehensive Plan's designation of the entire planning area as rural.

In 1996 the Vashon Town Plan repealed or modified several of the 1986 plan's policies, and adopted new policies and area zoning to guide development in the unincorporated Rural Town of Vashon. The Vashon Town Plan was adopted as a subarea plan and therefore is part of the King County Comprehensive Plan, as provided by the Growth Management Act. The policies below are the issue- or area specific policies retained from the 1986 plan.

#### **Vashon Policies**

CP-601	All of Vashon-Maury Island is recognized for its unique ecological functions as a
	Puget Sound island, and is designated in this plan as rural. Development activities
	should protect the entire ecological system, including the Puget Sound shoreline,
	island habitat areas, and ground and surface water resources. (V-1)
CP-602	All land use policies and regulations for Vashon shall reflect the overriding
	importance of the fact that the whole Island is the recharge area for a single-source
	aquifer. All of Vashon Island shall therefore be considered a groundwater recharge
	area. Within the Island, based largely on soil types, there are areas of relatively
	high, medium, and low susceptibility to groundwater contamination. Areas deemed
	highly susceptible to contamination in the KCCP should receive extra protection.
	<del>(V-3)</del>
CP-603	Home occupations should continue to be allowed in residential areas on Vashon
	Island. (V-27)
CP-604	Development should be minimized and carefully managed in sensitive areas. The
	most fragile, hazardous or valuable areas, including areas highly susceptible to

contamination, landslide hazard areas and wetlands, should remain largely undeveloped through application of a low density designation. (V-31)

CP-605 Protect and preserve the Island's wildlife habitats. (V-33)

CP-606 Where fish or wildlife habitat occur within a proposed short plat or subdivision, the proposal should be reviewed to ensure that the ingredients necessary for the habitat's preservation are not destroyed. Special conditions should be attached to protect the habitat, if necessary. (V-34)

CP-607 Fish and wildlife habitats identified on Vashon Island and considered to be especially unique and valuable or of potential countywide significance should receive special attention. Where these occur within a proposed plat or subdivision, Department of Permitting and Environmental Review, or its successor, may require the developer to submit a special report to assess more closely the impacts of the proposal on the habitat and to recommend specific measures to protect them. (V-35)

Most fisheries in King County are regulated by agencies other than the county. Policies throughout this plan address fish habitat and the response to Endangered Species Act listings. A harvestable fisheries habitat not otherwise addressed is the intertidal shellfish habitat on Vashon Island. The King County Department of Natural Resources and Parks owns some of this habitat. While the State of Washington governs the harvest of some species in this habitat, the county should take affirmative action to assure long term productivity and to protect public health. The 1997 report of the Beach Assessment Program documents the degradation of this resource from over harvesting, increased beach use and other causes.

CP-608 Intertidal shellfish habitat on Vashon Island shall be protected for its key role in the marine food chain, to protect public health, and to assure long-term productivity.

King County shall explore effective means to protect this fisheries resource.

CP-609 Island water resources should continue to be the sole water-supply source in the future. The plan discourages importing water for domestic uses from off the Island.

(V-52)

CP-610

Land uses and development densities should be planned so that demands on the Island's groundwater resources do not exceed its capacity to provide adequate supplies without deterioration of quality. In order to achieve this, ongoing research and monitoring as recommended in the Vashon Maury Island Water Resources

Study should be conducted. (V-53)

CP-611 Protection of the groundwater aquifer is of primary importance to Vashon Island.

Further water quality degradation which would interfere with or become injurious to existing or planned uses should not be allowed. (V-54)

CP-612 To protect domestic water resource, areas deemed highly susceptible to groundwater contamination and watersheds should be maintained in residential or similarly nonintensive uses at low densities. (V-57) CP-613 As an additional requirement for the comprehensive plans of public water systems on Vashon Island, the county shall ask that information be included assessing the ability of existing and potential water sources to meet anticipated population growth. Planned expansion of the water system should be prohibited if the analysis reveals a risk to the adequacy of service including quality of water being provided to current users. (V-59) **CP-614** Special consideration should be given to the impacts of new development on the Island's groundwater resources. This should apply to major developments, development in areas highly susceptible to contamination, or development near public water supplies. (V-61) CP-615 Park-and-Ride lot development both on the Island and at or near the ferry terminals which serve Vashon Island (Fauntleroy, Southworth, Pt. Defiance) should be encouraged. (V-67) CP-616 Provide a safe and efficient system of commuter and recreational routes for bicyclists, pedestrians, and equestrians. (V-69) **CP-617** Street and highway improvements should be low-cost safety and maintenance projects wherever possible. (V-71) **CP-618** Additional water-related parks and beaches should be acquired along the saltwater shorelines of Vashon-Maury Islands. These parks should be retained as passive, natural areas. (V-83) **CP-619** Additional park sites should be acquired in the island's most environmentally sensitive natural areas. These sites should be retained as passive, open space areas allowing only those uses that would be compatible with sensitive areas. (V-84) **CP-620** A public trail system should be identified and encouraged for preservation on Vashon Island. (V-85) **CP-621** Trails on Vashon Island should serve bicyclists, equestrian and pedestrian uses. (V-85a) **CP-622** Trail systems at parks and on other public land should be encouraged on Vashon Island. Trails on public lands should be officially recognized and preserved. (V-85b)

- CP-623 If and when county- and state-owned land on Vashon is logged, trails should be preserved for equestrian and pedestrian use. If possible, an unlogged buffer zone should be left when logging occurs. (V-85c)
- CP-624 Voluntary dedication of trails should be encouraged when land is developed for more intensive uses. (V-85d)
- CP-625 Trails should provide multiple uses where possible, serving both recreational and commuter needs. (V-85e)
- CP-626 Trail corridors on Vashon Island should be established and designed based upon the following criteria:
  - a. Connect park and open space areas;
  - b. Provide access to shoreline areas, particularly public parks;
  - Incorporate views and other special features of scenic, historic, or archaeological interest;
  - d. Traverse development limitation areas where not incompatible with hazard or fragile natural areas;
  - e. Follow streambanks and ravines:
  - f. Follow undeveloped rights-of-way or alongside existing roads; and
  - g. Provide access to and connect schools. (V-85f)
- CP-627 The quantity and quality of Vashon-Maury Islands' groundwater supply should be monitored, along with building permit and subdivision data, to determine if planned densities can be achieved. If new information indicates the groundwater supply is endangered, the County shall take immediate steps to ensure new development does not impair the groundwater supply.

#### **Groundwater Management**

Vashon Maury Island is unique within King County in that it is an island community dependent upon a designated sole source aquifer for its water supply. A Groundwater Management Plan was completed for the Island and approved by both King County and Ecology in 1998. Given that the only source of drinking water is ground water, a higher level of protection of groundwater recharge is warranted on Vashon Maury Island than in the rest of King County. Land clearing and building activities can reduce groundwater recharge. Low impact development (LID) practices involve protecting and enhancing native vegetation and soils, reducing impervious surface and managing storm water at the source. These techniques are well suited to development in Rural Area zone and can be an effective way to protect groundwater quality and recharge, particularly on Vashon Maury Island.

CP-628 King County should work with residential builders and developers on Vashon-Maury Island to encourage the use of low impact development practices that protect and enhance native vegetation and soils and reduce impervious surface. King County should promote preservation of at least 65% forest cover on rural-residential zoned parcels. The 65% forest cover goal may be adjusted for parcels less than 2 ½ acres

in size. Dispersion of runoff from impervious surfaces into native vegetation in accordance with the Surface Water Design Manual shall be the preferred method of stormwater management in the Rural Area.

CP-629 King County should include water quality monitoring and reporting in the scope of work for new low impact development projects on public properties to the maximum extent practical.

In June 2011 the Vashon Maury Island Groundwater Protection Planning Committee recommended new policies to be incorporated into the Comprehensive Plan to further the objectives of the Vashon Maury Island Watershed Plan and Vashon Maury Island Groundwater Protection Plan concerning sustainability of the islands groundwater, streams and marine waters.

CP-630

The Vashon-Maury Island Groundwater Protection Committee, with King County support should:

a. Complete and implement measures for the sustainability of water quality, water quantity and ecosystem health on Vashon-Maury Island;

b. Report the findings to the community; and

c. Evaluate the results to help guide ongoing watershed management activities.

Seasonal dissolved oxygen levels within inner Quartermaster Harbor have fallen well below the Washington State marine water quality standard of seven mg per liter over the last four years of monthly monitoring by King County. Quartermaster Harbor is a regionally significant natural resource area that provides rearing and spawning habitat for herring, surf smelt, sand lance, salmon (i.e., Chinook, Coho, chum, and cutthroat) plus shellfish resources, including geoduck clams. Based on the value of the harbor's natural resources and to protect and restore shellfish harvest opportunities, Quartermaster Harbor was included in the Maury Island Marine Reserve designated by the Department of Natural Resources and the Marine Recovery Area designated by Public Health—Seattle & King County.

Excess nutrients, nitrogen compounds in particular, can lead to excessive phytoplankton and algae growth that can then deplete oxygen concentrations when the algae die. Nitrogen and phosphorus are essential nutrients for marine plants and phytoplankton, particularly nitrate, as phytoplankton preferentially take up nitrate and other nitrogen compounds. Potential sources of nitrogen loading include on site sewage systems, animal manure, fertilizer and other less direct sources like nitrogen fixing vegetation including alder trees and atmospheric deposition.

In 2009, King County in cooperation with the Washington State Department of Ecology and University of Washington Tacoma, started a four year study to identify and quantify the sources of nitrogen loading in Quartermaster Harbor. The draft 2010 Washington Water Quality Assessment under review by Ecology proposes to upgrade the Quartermaster Harbor dissolved oxygen listing to "Category 5" based on Ecology ambient monitoring station QMH002 (#10178). Designation as a Category 5 polluted water body means that Ecology has data showing that the water quality standards have been violated for one or more pollutants and there is no Total Maximum Daily

Load (TMDL) pollution control plan. TMDLs are required for the water bodies in Category 5 to bring water quality up to standards.

Education and incentives to implement best management practices to reduce nutrient and bacteria loading can improve water quality. Routine on site sewage system inspection and maintenance can help to control nutrient loading from existing on site sewage systems. When new on site sewage systems are installed, using a system rated to provide nitrogen reduction could limit total nitrogen loading on average by approximately 50% or more depending on system loading and site conditions.

CP-631 King County should focus outreach education and incentives to implement best management practices designed to reduce excessive nutrient and bacterial contaminate loading within the Quartermaster Harbor drainage area. The Vashon-Maury Island Groundwater Protection Committee, with King County support, should seek grants to enhance existing outreach education and incentives when funding opportunities occur.

CP-632 King County should revise regulations to require new on-site sewage systems within the Quartermaster Harbor drainage area to meet the nitrogen reduction treatment standard established by the Washington State Department of Health, where feasible, if the final Quartermaster Harbor Nitrogen loading study demonstrates it would significantly reduce future nitrogen loading in the harbor.

CP-633 King County should request Ecology assistance to develop a Total Maximum Daily

Load water quality improvement plan to reduce point and nonpoint pollution sources

to Quartermaster Harbor if the harbor water quality is listed as a Category 5 polluted

water body on the 2010 Washington State Water Quality Assessment.

Island wide there are approximately 5,000 on site sewage systems used to treat the wastewater for residences, businesses and public facilities not served by the Vashon Sewer District. Failing on-site sewage systems can contaminate surface, ground and marine waters with hazardous bacteria and excessive nutrient loading (nitrogen and phosphorus). Regular inspection and maintenance of on-site sewage systems can ensure system performance, extend system life and identify failing systems so they can be repaired when needed.

CP-634 The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate need and potential sources of funding for an enhanced management program for existing on-site sewage systems on Vashon-Maury Island to ensure they receive routine inspection, maintenance and repair if necessary to protect water quality.

Water use on Vashon is supplied by rainfall and typically reaches a seasonal peak in the late summer long after the early winter peak in rainfall. Water conservation is the best strategy to reduce peak water use and reduce the need to develop new water supply capacity. Conservation efforts should consider use of appropriate technology to further

conservation strategies including supply supplement alternatives like grey water reuse and rainwater harvest.

Incentives, such as providing access to water use efficiency audits or developing model conservation plans for Group

A, Group B and individual systems similar to the LEED model, can be useful in encouraging implementation of water conservation.

CP-635

The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate setting specific goals for water conservation starting with public facilities under the Vashon-Maury Island Groundwater Protection Committee auspices and promote and partner with public agencies, special districts and non-profit organizations to implement water conservation demonstration projects in new and renovated public facilities.

CP-636 The Vashon-Maury Island Groundwater Protection Committee, with King County,
support should evaluate ways to provide or enhance incentives to implement water
conservation.

CP-637 King County should evaluate the use of greywater as a supplemental source of water supply for non-potable uses both interior and exterior on Vashon-Maury Island.

Public Health—Seattle & King County (PHSKC) is considering rule changes to permit use of harvested rainwater for potable supply. This evaluation should consider both the potential benefits, and possible land use and environmental impacts associated with such changes pertaining to Vashon-Maury Island. Islander views should be considered by PHSKC and any water supply policy revisions in the comprehensive plan should address use of rainwater harvest in a manner that is takes into account conditions on Vashon Maury Island, specifically including the potential for nitrate contamination from increased septic use, consistent with the interests of Group A and Group B water systems.

CP-638 The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate allowing use of harvested rainwater as both a supplemental and sole source of potable water supply for individual water supply on Vashon-Maury Island under the following conditions:

- a. Any location outside of the designated service area for an existing Group A or Group B water system; and
- b. Within the service area of an existing Group A or Group B water system
  when the system cannot provide potable water in a "timely and reasonable
  manner." Where an existing Group A or Group B water system can provide
  fire flow if necessary, allow separate services for "potable" water and fire
  flow, ensuring effective cross-connection control.

There are approximately 1,200 known wells on Vashon Maury Island and approximately 50 of those wells supply water for Group A water systems. Water produced by Group A water systems is tested routinely for compliance with drinking water standards and the results are reported to the State Department of Health. All Group A water systems will also report the annual quantity of water they produce from their supply source wells. The monitoring performed for Group A water systems protects the public health of their water users and will provide the data necessary for water resource sustainability monitoring.

Of the remaining 1,150 wells, approximately 150 supply Group B water systems (2-15 connections) and the remainder are individual water supplies, most for potable use. Public Health Seattle King County requires that Group B and individual water supply wells (and springs) be tested for nitrate, fecal coliform and arsenic at the time the water system is approved for construction but ongoing monitoring is not required for individual wells and ongoing testing, while required per code for Group B systems is not enforced. The lack of periodic monitoring and metering for Group B water systems and individual water supplies leaves the public health of their water users at risk and creates a significant gap in the data needed for comprehensive monitoring of water resource sustainability.

CP-639 The Vashon-Maury Island Groundwater Protection Committee, with King Count support, should evaluate the need and potential sources of funding to establish management programs for individual water systems and Group B water systems on Vashon-Maury Island to periodically monitor water quality and promote water conservation in conjunction with water system and well owners.

Vashon Maury Island is part of Water Resource Inventory Area 15. The Vashon-Maury Island Watershed Plan was completed in 2005 and accepted for implementation by King County Water and Land Resources. The broader Kitsap County WRIA 15 planning group also completed a draft watershed plan for Kitsap County in June 2005, but was unable to reach consensus due in part to objections of the Squaxin Island Tribe on the Kitsap portion of the overall WRIA 15 plan (including both Kitsap and VMI).

As a result King County is unable to get formal Ecology approval and implementation funding for the Vashon Maury Island Watershed Plan. Vashon Island should develop a pathway to secure Ecology assistance on watershed plan implementation funding.

CP-640 The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate options to develop a pathway to secure Ecology assistance on watershed plan implementation funding and seek formal Ecology and King County recognition or adoption of the Vashon-Maury Island Watershed Plan.

#### **Watershed Planning**

For the past 25 years, through several community planning processes, the Island community has been proactive in protecting its water supply. There is broad recognition of the shared responsibility for this common resource, and recognition that each water use can affect the quantity and quality of the water supply of others. Although in many areas of the Island there is not a current problem with water quality and quantity, planning and preparation to secure and protect Island water resources is warranted.

The principal reasons for preparing a watershed plan in 2005 was that there is uncertainty about the amount and availability of groundwater, a local trend showing increasing nitrates in some wells, potential for degradation of Island streams and potential for contamination of the Island sole source aquifer. The Vashon Maury Island Watershed Plan completed on June 6, 2005 intends to protect and assure the water supply by making and implementing specific recommendations on water quantity and quality issues affecting the Island.

In April 2007 the Vashon Maury Island Groundwater Protection Planning Committee recommended the following priority action items in the Vashon Maury Island Watershed Plan be incorporated into the 2008 King County Comprehensive Plan as follows:

CP-641	King County should develop an on-going island-wide education program to inform
	Islanders about groundwater resources, drinking water supplies, water availability,
	and water quality issues. The education program should include alternative water
	supply choices such as water retention, rain water harvesting, use of gray water,
	deepening of wells, groundwater recharge, water rationing in emergencies, recycled
	water and desalinization.

- CP-642 King County shall seek funding and work with state agencies to encourage removal of old or failing residential fuel storage tanks on Vashon-Maury Island.
- CP-643 King County should encourage the use of demonstrated new and alternative on-site septic treatment technologies on Vashon-Maury Island with priority on Marine Recovery Areas.
- CP-644 King County should seek funding to expand the Public Health Seattle & King
  County septic education program to inform property owners about septic system
  failures and steps they may take to ensure effective maintenance and operation of their system.

CP-645 King County and the Vashon-Maury Island Groundwater Protection Committee should continue to collaborate to develop an education program on pesticide and fertilizer use.

CP-646 King County should work with the Vashon Community to define specific actions to implement the stormwater recommendations in the 2005 Vashon-Maury Island Watershed Plan within available resources.

CP-647

New roads or road improvements required for new development in the town of Vashon should use a rural road section when possible, consistent with the King County Road Standards. Although the roadway section within the Vashon Town Center typically includes curb, gutter, and sidewalk, the residential roadway section throughout the Island should generally be rural in character with shoulders and an open ditch/swale on both sides of the roadway. When a roadway project exceeds the thresholds identified in Section 1.1.1 of the County's Surface Water Design Manual, flow control and treatment facilities should mitigate the impacts generated by surface and stormwater runoff. Swales should be used when ecologically appropriate to treat runoff.

CP-648

King County should adopt a "business district design guideline" for the Vashon

Town Center calling for installation of a rural type road section with either a

road/sidewalk/bio-swale configuration, or a road/swale/trail configuration, where

there is sufficient right of way, unless an alternate design that can protect

groundwater recharge can be constructed.

CP-649 King County should protect the quality and quantity of groundwater on

Vashon/Maury Island by measuring, monitoring, and reporting information on

groundwater quality and quantity to provide the information needed to manage

groundwater resources.))

#### **Plan History**

The first Vashon Community Plan commenced in the spring of 1977 and was adopted in June 1981. Due to concerns about the Island's water supply, a Vashon-Maury Island Water Resources Study was conducted, and the updated plan was adopted in October 1986. The 1986 plan implemented the 1985 King County Comprehensive Plan's designation of the entire island as Rural.

In 1996, the Vashon Town Plan repealed or modified several of the 1986 plan's policies and adopted new policies and area zoning to guide development in the unincorporated Rural Town of Vashon. The Vashon Town Plan was adopted as a subarea plan.

In 2016, Vashon-Maury Island was initiated as King County's first Community Service Area Plan under its reconfigured subarea planning program. The new plan addresses the entire Island. The full plan (bound in a separate document), is adopted as a component of the King County Comprehensive Plan and replaces the prior plans.

#### **2017 Plan Process Highlights**

- 15-member Community Advisory Group representing a broad cross-section of island interests
- <u>Kick-off forum to identify community</u>
   <u>opportunities and challenges</u>
- <u>2016 Strawberry Festival booth and community</u> survey
- Community forum with small group discussions to refine plan priorities
- Monthly Community Advisory Group working group meetings to review prior plan policies and prioritize new actions
- Dedicated CSA Plan web site and digital portal for online review and open public commenting
- Community forum focused on affordable housing with town hall style public feedback
- <u>Partnerships with Vashon-Maury Island</u>
   Beachcomber newspaper and Voice of Vashon
- <u>300+ Island participants in planning process</u>

#### **CSA Statistics**

- Land Area: 37 square miles
- Population (2016 est.): 11,000
- Median Age: 51.4
- Total Jobs (2014): 2,390
- Median Household Income (2015): \$71,820
- Total Housing Units (2015): 5,600
- Median House value (2016): \$467,200

#### **Vashon-Maury Island Vision**

A healthy, rural environment with a strong sense of community where people value:

- <u>Independence and self-sufficiency</u>
- Natural environment
- Equity and diversity
- <u>Island history</u>
- <u>Creativity and self-expression</u>
- Sustainable local employment
- <u>Community collaboration</u>

#### **Priority Policies & Actions**

- Affordable Housing create an affordable housing incentive for Vashon Rural Town and encourage County

  Code amendments to increase the number of Accessory Dwelling Units
- Agriculture support a permanent farmer's market location and new food hub
- Climate Change develop a suite of climate change adaptation and mitigation strategies
- Public Transportation provide ridesharing, community van and mobile carpool matching services across the <u>Island</u>
- Regional Trail perform a feasibility study for trail to connect north and south ferry terminals
- Shoreline Access expand public access to non-sensitive shoreline areas
- Wastewater conduct an island-wide on-site sewage system study



