

III-7 WATER QUALITY AND QUANTITY

General Policies

- WQ-100** The Mason County Comprehensive Plan should be consistent and compatible with the Mason County Shoreline Management Act.
- WQ-101** Water conservation should be reflected in development regulations, and development features such as landscaping, architecture, and storm water runoff collection and detention systems.
- WQ-102** Conservation and efficiency strategies should be developed and implemented County-wide to provide the most efficient use of all water resources.
- WQ-103** Conservation plans and programs should be coordinated with Grays Harbor, Jefferson, Kitsap, Pierce and Thurston Counties to ensure water resource protection measures address the needs and conditions of entire watersheds.
- WQ-104** Mason County should continue and enhance County-wide education efforts on water use, conservation and protection.
- WQ-105** Mason County should actively promote the concept of watershed management with respect to land use planning and the review of proposed development.
- WQ-106** Mason County should discourage future development in the 100-year floodplain as identified in the Mason County FEMA Flood Insurance Study maps.
- WQ-109** The volume of surface and ground water used should be limited through comprehensive conservation programs, including provisions for emergency restrictions on use, and design standards promoting efficiency.
- WQ-110** Uses such as landfills, junk yards, salvage yards, auto wrecking yards, businesses that use hazardous substances or generate hazardous waste in their operation, solid waste disposal facilities, or other uses and activities determined by the Directors of the Mason County

Department of Community Development and the Mason County Health Department that are likely to pose a threat to groundwater should be regulated via permit.

- WQ-111 The County should encourage those engaged in agricultural activities, including commercial and hobby farms, to utilize best management practices regarding animal keeping, animal waste disposal, fertilizer use, pesticide use, and stream corridor management.
- WQ-112 The County should review all proposals for subdivision, short subdivision, and other divisions of land to evaluate the impact on groundwater quality.
- WQ-113 The County should monitor the quality and quantity of surface and ground water on an ongoing basis.
- WQ-114 The County shall ensure that adequate potable water is available for all new construction and proposed subdivisions and short subdivisions prior to approval.

Harstine Island Sub-area Plan

B6 Natural Systems

- B-6-d:** Protect or enhance existing groundwater resources in the subarea by educating the public about the importance of high quality and reliable water sources.
- B-6-d • 1:** The extent of areas critical to the protection of aquifers and drinking water supplies should be identified and the measures needed to assure their protection and supply should be established.
- B-6-d • 2:** The areas where there are sensitive aquifer areas (i.e., low supply of groundwater) should be restricted to low intensity and compatible land uses; more intensive land uses may be permitted if alternative domestic water supplies are available from other sources.
- B-6-d • 3:** Community water systems should be encouraged where multiple services are planned. When done, locating a community well should be at a maximum practical distance from salt water.
- B-6-d • 4:** Surface water in subarea marshes, ponds, wetlands, and

lakes should be recognized as visible indicator of groundwater regime and should be protected from possible encroachment or contamination.

B-6-d • 5: Land uses which cause contamination to groundwater should be brought into compliance with the goals of the current standards in use by the Mason County Department of Health Services.

B-8 On-Site Sewage Disposal

B-8-a: Ensure that septic installations are in compliance with current Mason County Department of General Services, Environmental Health Division requirements.

B-8-a • 1: Data on each newly installed on-site sewage system in the subarea should be accessible to system installers and pumpers and to county health and assessor staff, as well as to the real estate industry, for disclosure in the sale of a residence.

B-8-a • 2: On-site sewage systems will be maintained in a condition that will ensure longevity, protect public health, and prevent contamination of surface and ground waters. Periodic inspections will be done by Mason County.

B-8-a • 3: On-sight sewage systems which do not meet minimum operation standards will be repaired or upgraded within 6 months of notification that the system is failing. On-site sewage systems which do not meet Mason County minimum operation standards will be repaired, upgraded, or replaced to meet Mason County and State of Washington Environmental Health standards as follows:

Any effluent discharge to the land surface, surface or ground waters, or to any body of water, shall be stopped immediately, and Mason County approved corrective action shall take place prior to any further use of the septic system, except that by order of the Mason County Environmental Health Department an alternative plan of action may be allowed.

B-8-a • 4: A financial assistance program such as revolving loan with a payback provision should be considered to aid area property owners unable to pay for repairing or replacing their failing on-site sewage.

B-9 Clearing and Grading

- B-9-a • 1** Enforce the performance standards in Mason County Clearing and Grading Standards, when evaluating new land use activities and development proposals in the subarea.

B-10 Stormwater and Surface Water

- B-10-a:** Ensure that adequate controlled surface water management is part of each development proposal.

- B-10-a • 1:** Incentives should be provided for proposed residential and commercial land uses to utilize innovative stormwater management techniques, such as on-site retention and detention areas. These techniques should protect existing natural drainage ways and associated steep slopes, wetlands, floodplains, and erosion areas.

- B-10-a • 2:** All land use requests, from single-family residences to subdivisions, or from commercial to industrial uses, should be evaluated for drainage or stormwater impacts and permitted only after meeting necessary development requirements.

- B-10-a • 3:** Stormwater management and surface drainage systems should be integrated into land use proposals as major design elements which enhances open space, wildlife, fisheries, recreation, and aesthetic quality throughout the county.

North Mason Sub-area Plan

Shoreline/Upland Use

- 1.** Shoreline development activities should be evaluated with consideration of their varying degrees of suitability for development based on the sensitivity of their natural waters, the uses made of their waters, and the potential impacts on short and long term water quality.
- 2.** Clearing, grading, development and other upland activities should be done in a manner that minimizes the adverse impacts to water quality.
- 3.** Erosion control practices such as natural vegetative buffers, settling ponds, silt

curtains, hydro seeding, manufactured slope protection covering, and other appropriate methods need to be utilized when a potential exists for water quality degradation.

4. Developments should be undertaken in such a manner so as to minimize increases in runoff to adjacent properties and minimize water quality degradation.

Storm and Surface Water Management

1. Existing and new developments should minimize degradation of water quality from runoff, along with increases in peak storm water runoff. They should also avoid altering natural drainage systems in order to minimize flooding and water quality degradation.
2. Streams and other natural waterways, which convey runoff to lakes, rivers and Hood Canal or Puget Sound, should be protected for their wildlife, fisheries and aesthetic values.
3. Wetlands and floodplains should be retained because of their ability to reduce flood peaks and provide treatment to improve water quality. They should generally be preserved in their natural state and have their water quality protected. Alterations or enhancement should be allowed, if necessary, only after evaluation of the biological, ecological, and hydrological functions.
4. Resource industries (forestry, agriculture, aquaculture, mining) should use management practices that minimize the hydrological impacts of erosion and sedimentation. Those management practices should also minimize the occurrence of natural or man made pollutants from entering ground or surface waters.
5. The quality of water entering wetlands, streams and ponds should be maintained and/or improved where necessary so that the capability of these systems to cleanse the water is not overloaded.
6. Recognize that preventing water quality problems from storm water is better than correcting such problems after-the-fact.
7. Recognize storm water management systems and surface drainage systems as major design elements that enhance open space, wildlife, fisheries, recreation and aesthetic quality throughout the County.

On-Site Sewage Disposal

1. On-site septic systems should be required to function properly and not degrade surface or ground water quality.

2. **Financial support should be made available to those individuals who do not have the resources to upgrade their systems.**
3. **New developments should provide adequate on-site sewage disposal systems.**
4. **Encourage education of home owners on proper installation and maintenance of on-site systems.**
5. **On-site sewage disposal systems should not be allowed in areas deemed inappropriate by the Environmental Health Department.**

Groundwater Management

1. **Long-term reliability and quality of water supplies should be encouraged.**
2. **Community water systems should be encouraged in un-sewered areas.**
3. **Water quality of all aquifers used for drinking water should be regularly monitored and protected. Resources should be primarily assigned to areas of greater threat (i.e. landfills, sludge disposal sites, master drain fields, etc.).**
4. **Ground water quality should be protected and aquifer contamination or degradation prevented through comprehensive management of the ground water resource.**
5. **Areas where the supply of ground water is limited should be restricted to low intensity and compatible uses unless alternative domestic water supplies are available from other resources.**
6. **Visible surface water such as marshes, ponds, wetlands, and lakes must be recognized as "windows" in the ground water regime and must be protected from encroachment and contamination.**

Monitoring

1. **Support efforts to monitor all aspects of water quality.**
2. **Emphasize that monitoring is an essential tool needed to manage water quality.**
3. **Support intensive monitoring for areas that have a great potential for water quality degradation/contamination (i.e. landfills, sludge disposal sites, master drain fields, etc.).**

Education

1. Recognize and support citizen group efforts toward public involvement and education on water quality issues.
2. Encourage public to use the "least toxic alternative" through education.

Southeast Mason County Sub-area Plan

E. COMMERCIAL AND INDUSTRIAL LAND USES

- A2:** Site development of commercial and industrial land uses should integrate stormwater retention standards in the preparation, construction, and operation of the land use.
- A3:** The operation of commercial and industrial land uses should not discharge wastes directly into the waters of the State.
- A4:** Industries which threaten ground or surface water should be prohibited from locating within the planning area if the business or use cannot ensure protection of these resources.

G. NATURAL SYSTEMS

- D1:** The extent of areas critical to the protection of aquifer recharge areas should be identified and the measures needed to assure their protection and supply should be established.
- D2:** Surface water in subarea marshes, ponds, wetlands, and lakes should be recognized as visible indicators of the groundwater regime and should be protected from possible conversion or contamination.
- D3:** Sensitive aquifer recharge areas, as an identified critical area, should be restricted to low intensity and compatible land uses.
- D4:** Community water systems should be encouraged in unsewered areas, both to avoid existing or future contamination problems.

D5: Land uses which cause contamination to groundwater should be brought into compliance with the goals of the Totten-Little Skookum Watershed Action Plan and the current standards in use by the Mason County Department of Health Services.

H. STORMWATER AND SURFACE WATER

A1: Residential, recreational, and commercial land uses proposed in the planning area should use stormwater management techniques to control runoff and sedimentation. These techniques, such as on-site retention, detention, and infiltration, should protect natural drainage ways and associated steep slopes, wetlands, floodplains, and erosion areas, and should keep additional surface flows from running off the project site.

A2: All land use requests, from single-family residences to subdivisions, or from commercial to industrial uses, should be evaluated for drainage or stormwater impacts and permitted only after meeting necessary development requirements.

A3: All development proposals should incorporate measures to minimize impervious areas and altered land surfaces in order to maintain the normal rates of surface water infiltration and overland flows.

A4: Stormwater management and surface drainage systems should be integrated into land use proposals as major design elements which enhance water quality, open space, wildlife, fisheries, recreation, and aesthetic values throughout the county.

I. ON-SITE SEWAGE DISPOSAL AND TREATMENT

A1: The database on each on-site sewage system in the subarea should be accessible to system installers and pumpers and to county health and assessor staff, as well as to the real estate Multiple Listing Service for disclosure in the sale of a residence.

A2: Re-examination of the county on-site sewage system criteria should focus on the site suitability of the proposed sewage system location; factors to consider include soil physical properties, slope, depth to water table, proximity

to surface water, lot size, and number of bedrooms in the residence.

- A3: On-site sewage systems should be maintained in a condition that will ensure longevity, protect public health, and prevent contamination of surface and ground waters. Monitoring inspections and necessary maintenance, such as pumping the system, should be required every five years or less, based upon the size or design of the system or upon a county Environmental Health recommendation.
- A4: On-site sewage systems which do not meet minimum design standards should be upgraded at times of opportunity, such as the sale of the residence, home remodeling, and system repair.
- A5: A financial assistance program, such as revolving loan with a payback provision, should be provided to aid area property owners in repairing or replacing their failing on-site sewage systems.
- A6: The Mason County Shoreline Master Program should be revised to prohibit any direct outfalls from sewage treatment plants or any other point source discharges into surface waters of the subarea, and to maintain the 100-foot shoreline setback for on-site sewage systems currently in effect.

J. CLEARING AND GRADING

- A1: Activities which involve vegetation removal and surface alterations, except those actions covered by state forest practice rules, should be regulated by an established permit and review process and should be consistent with the Natural Systems and Stormwater goals and policies contained in this Subarea Plan.
- A2: Site preparation by clearing and/or grading, development, and other upland activities should be undertaken using methods which minimize increased runoff to adjacent properties and degradation to area water quality.
- A3: Appropriate erosion control practices should be required in approving proposed site preparation and development activities; such techniques include natural vegetation buffers, proper sloping, detention or retention ponds, silt

curtains, hydroseeding, and slope surface protection materials.