



Note: This checklist must be submitted with a Shoreline Geotechnical Assessment and completed, signed, and stamped by the licensed professional(s) who prepared it for review pursuant to the Mason County Shoreline Master Program. If an item is found not applicable, the Assessment should explain the basis for the conclusion.

MCC 17.50.340 B.2. New structural stabilization measures shall not be allowed except as follows:

- a. To protect existing primary structures:
 - i. New or enlarged structural shoreline stabilization measures for an existing primary structure, including residences, shall not be allowed unless there is conclusive evidence documented by a Shoreline Geotechnical Assessment* that the structure is in danger from shoreline erosion caused by tidal action, currents, waves, or sea level rise. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical assessment shall evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization.
 - ii. The erosion control structure will not result in a net loss of shoreline ecological functions. This shall be demonstrated in a Habitat Management Plan as required in MCC 8.52.170(J).
 - iii. Primary structure means the structure or the only access associated with the principal use of the property that cannot feasibly be relocated. It may also include single family residential appurtenant structures that cannot feasibly be relocated.

Applicant/Owner _____ Parcel # _____

Site Address _____

Items to be included in assessment	Located on page(s):
Scope of review, including landowner concerns and site assessment objectives.	
Discussion of site development, including the location and setback of important primary and appurtenant structures, roads and utilities.	
Assessment of relevant wetlands and surface water drainage and control systems.	
Assessment of site vegetation, including species and communities present.	
Assessment of regional/site geology, including relevant rock/soil unit descriptions, geologic history and stratigraphic correlation.	
Assessment of regional/site geomorphology, including the influence of wave or tidal processes in controlling sediment transport and the evolution of the site's landform. Include assessment of the drift cell sediment budget and local beach conditions.	

Evaluation of erosion and/or flooding issues, including assessment of causes, and rates or timeframes associated with each issue. Include evaluation of how historic shoreline modifications near the site may have impacted patterns of erosion.	
Evaluation of the amount of time until primary structures or major utilities will be damaged by wave or tidal action, based on evidence of erosion rates, a slope stability analysis or other geotechnical considerations if no action is taken on the site.	
Discussion of alternative approaches to reduce risk from erosion on the site, including the use of nonstructural measures such as drainage and vegetation, and soft shoreline techniques such as gravel berms, large woody debris, or other measures. Explain why these techniques would be infeasible or insufficient to reduce the threat from erosion.	
Discussion describing the proposed shoreline stabilization is the minimum size necessary, placed as far landward as possible and will not result in a net loss of shoreline ecological functions.	
A site map drawn to scale which identifies property boundaries, scale, north arrow and the location of proposed development, geologic features and ordinary high water mark (OHWM). All development setbacks should be delineated and marked.	
Cross-section(s), identified on site map, showing both horizontal and vertical scales, and identifying important features such as: MHHW and OHWM, top and bottom of bluff, location of upland structures and utilities, and geologic units where relevant.	
Supplementary photographs.	

I, _____ hereby certify under penalty of perjury that I am a civil engineer licensed in the State of Washington with specialized knowledge of geotechnical/geological engineering or a geologist or engineering geologist licensed in the State of Washington with special knowledge of the local conditions. I also certify that the Geotechnical Assessment, dated

(Signature and Stamp)

_____, and entitled _____ meets all the requirements of the Mason County Shoreline Master Program, Shoreline Stabilization Section (MCC 17.50.340), and is complete and true.

***MCC17.50.020 Definitions: Shoreline Geotechnical Assessment.** A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical assessments shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.