



# Clallam Conservation District

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## MEMORANDUM

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**To:** Steve Gray, Clallam County Department of Community Development  
**From:** Clea Rome, Clallam Conservation District  
**Date:** December 21, 2007  
**Re:** Small Projects BMP Manual

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In December 2006, Clallam County and Clallam Conservation District entered into an interlocal agreement whereby we agreed to develop a draft of a Small Projects Stormwater BMP Manual. In the Interlocal Agreement for Development of a Small Projects Stormwater BMP Manual signed between Clallam County and the Conservation District, the Conservation District agreed to develop the following:

Recommended minimum practice design standards and criteria for development and land-disturbing projects that do not require an engineered drainage plan for Clallam County approval. These minimum design standards and criteria will include, but not be limited to:

- a. Recommended small site drainage plan minimum requirements necessary for permit approval;
- b. Site planning recommendations;
- c. Vegetation and soil protection standards;
- d. Recommended erosion and sedimentation control BMPs for small site development and land disturbing activities;
- e. Stormwater run-off management, conveyance, and discharge system practice design standards.
- f. Construction drawing templates for individual BMPs.

The Clallam Conservation District forwarded an initial draft of the manual to the County in the spring of 2007. Over the past months Conservation District and County staff have worked collaboratively to revise drafts of the manual. This week we received final comments from the County on the last draft submitted by the Conservation District. We have attempted to address those comments in the attached final draft of the Small Projects Stormwater BMP Manual. We are proud to present to the County a manual that addresses all of the above items, and will serve as a critical tool for Clallam County to manage stormwater run-off and protect natural resources.

The Small Projects Stormwater BMP Manual is a *technical manual* meant to provide landowners and contractors with technical guidance to address drainage management on small residential projects and to provide a framework for Clallam County to oversee such activities in the County. Currently, the standard drainage method used in the permitting process is a drywell. This manual is intended to replace the standard drainage method, as it includes new recommendations for

drywell use and sizing as well as a range of other BMPs that do not require engineering assistance.

This Manual does not include important elements that will make it stand alone as a comprehensive approach for permitting projects in Clallam County. It is our opinion that Clallam County will need to address several issues that are beyond the scope of developing a technical manual in order to adequately implement a small projects stormwater management program. Included among these issues are the following:

### **Permitting Procedures**

A process of reviewing and approving drainage plans and inspecting BMPs to ensure they have been implemented properly must be clearly defined. Which Clallam County department will accept and review applications? Who will be doing site inspections?

### **Operations and Maintenance Issues**

How will the County ensure that these stormwater facilities are a permanent part of a drainage network? How will the County ensure that the BMPs are not altered once they have been put in place? How will the County ensure that BMPs are properly maintained? Some jurisdictions have addressed this issue by requiring stormwater facilities on private land to be protected under a drainage easement held by that jurisdiction, or having the homebuilder sign a maintenance agreement as part of the permit approval process. However, neither of these options ensures that BMPs will indeed be properly maintained. Included in the Appendix is some introductory language about a drainage easement and a placeholder for a sample Drainage Easement Form. The CD that is included in this final package of material has several examples of drainage easements and maintenance agreements developed by other jurisdictions.

### **Critical Areas**

Steep slopes, riparian areas, and wetlands are all important to consider with regards to allowable proximity of stormwater discharge. How far should stormwater facilities be setback from critical areas? What triggers the need for an engineered plan?

Much of Stormwater Region I lies within the Critical Aquifer Recharge Area, and within these areas of well-drained soils, unique methods for stormwater management are allowed such as Small Lot Dispersion. Residential stormwater sources such as roofs and driveways do not normally generate high levels of pollutants, so the stormwater being generated by the projects addressed in the Small Projects BMP Manual is not of undue concern for the aquifer. Therefore, it is recommended that the CARA be excluded from the critical area setbacks for stormwater facilities that will be developed.

### **Split Parcels**

The three stormwater regions developed for the manual were based on physical conditions of the area including precipitation rates, soils, and topographical features. In addition, use of the BMPs listed in the manual is contingent on the soils present in the project area. In many cases, there will be several different soil types included in one parcel; in some cases, a parcel may lie in more than one stormwater region. It is our recommendation that in these cases, given that the soil survey data was developed for larger areas rather than site-specific conditions, the more constricting soil information should be the default or a soil pit test be conducted in the place where the stormwater facility is planned. In most cases on-site septic system design data will suffice.

### **Availability of Resource Materials**

The success of the manual will be dependant on the ease with which landowners can get the appropriate information that must be included in their drainage plan. Carol Creasey and I have discussed the concept of creating a new web page on the County's server where people can access

the necessary resources on-line. The website we have envisioned would at a minimum include the following information:

- a digital copy of the manual and appendix
- downloadable forms used in the permit application
- an interactive mapping site that includes parcel data, soils data, stormwater regions, topographic data (such as 2 ft. and 5 ft. LIDAR , or slope data that has been calculated from the LIDAR), and delineated Critical Areas.

Other issues that have been discussed throughout the development of the Draft Manual and need further discussion or exploration include the following:

### **Rainwater Catchment Section**

The manual includes a section on rainwater catchment. The technical requirements and legality of rainwater catchment under current DOE rules remain a gray area. Likely there will be changes to the rules within the next few years as the requests for rainwater catchment options increase. Because the Conservation District believes that rainwater catchment will be an important conservation tool in our County as the demand for water increases, we have outlined the use of catchment as a stormwater management tool and encourage the County to adopt a supportive policy for the use of rainwater catchment. Included in this packet of materials is a response from project engineer Pete Landry to some of the concerns voiced about the use of rainwater catchment as a stormwater management BMP, as well as a fact sheet issued by the Department of Ecology on the subject of rainwater catchment.

### **Off-site Discharge**

The first draft of the manual included a series of BMPs for the proper off-site discharge of runoff from a property in the event that not all stormwater could be infiltrated or managed on the property. This is a likely scenario given the poorly drained nature of much of our soil in Clallam County. Based on concern from the Public Works Department, the off-property discharge BMPs were taken out of the manual and all references to off-property discharge removed. While the Conservation District recognizes that off-site discharge is undesirable and problematic, it is a real situation happening in many places around the County currently, and if not acknowledged and adequately addressed additional problems result. We strongly recommend that the County consider including guidance on emergency off-site discharge methods in future editions of the manual.

### **Erosion and Sediment Control**

The appendix of the manual includes a section on appropriate Erosion and Sedimentation Control measures for projects less than 1 acre in size. These measures are included in the appendix rather than the main text. While this section provides guidance for small residential projects, it is by no means a stand-alone document that can be used for anything other than very small-scale site disturbances. It is the strong recommendation of the Conservation District that Clallam County adopt a comprehensive clearing and grading ordinance and erosion and sedimentation manual to be used in conjunction with this manual and other stormwater management documents for the County. A complete description of erosion and sediment control measures can be found in the *Stormwater Management Manual for Western Washington, Volume II, Construction Stormwater Pollution Prevention, February 2005, Department of Ecology Publication No. 05-10-30.*

**Opportunities for Feedback from Building Community**

We feel that it is critical for representatives of the building community to have a chance to review the Draft Manual before the document is approved for use by Clallam County. As the end users of the manual, builders and contractors must have the opportunity to comment and make suggestions to the County on the final product.

**Education and Outreach**

Lastly, a concerted education and outreach campaign to various audiences including permitting and planning staff, the building community, realtors, and homeowners about the new stormwater management options will ensure the success of the Manual. The Conservation District is interested in being a partner in developing and implementing education and outreach events around the Small Projects Stormwater BMP Manual.

Again, the Conservation District is proud to present Clallam County with a document that we believe will facilitate improved stormwater management in the County. We are happy for the opportunity to partner with Clallam County on this important project and we look forward to future collaborations.

Cc: Carol Creasey