

THURSTON COUNTY

WASHINGTON
SINCE 1852


COUNTY COMMISSIONERS
Cathy Wolfe
District One
Diane Oberquell
District Two
Robert N. Macleod
District Three

DEPARTMENT OF WATER AND WASTE MANAGEMENT

Richard D. Blinn, P.E.
Director

NOTICE OF ADOPTION

To: Drainage Design and Erosion Control Manual (DDECM) Holders and Interested Parties

From: Richard D. Blinn PE, Department Director 
DDECM Administrator

Date: November 5, 2004 (FINAL)

Subject: **Use of Storm And Surface Water Pump Stations, Mechanical Equipment and Other Related Appurtenances Not Permitted**

Summary:

Effective immediately, the DDECM Administrator finds the use of pump stations, mechanical equipment, and other related appurtenances for the purpose of conveying, directing or managing storm and surface water is not provided for under the DDECM, and is subsequently not permitted.

Background:

All storm and surface water improvements must comply with applicable requirements outlined by the DDECM. Under Section 1.1 Intent, the DDECM sets "the design standards and specifications for construction of stormwater conveyance, detention, retention and infiltration facilities for Thurston County." However, the DDECM does not include the minimum design standards and material specifications necessary for the proper construction, operation, maintenance and repair of storm and surface water pump stations, mechanical equipment and other related appurtenances. Nor does the DDECM refer to any established standards or specifications on pump stations, mechanical equipment and other related appurtenances in order to design, review and approve proposals.

Recently, several applicants have sought approval to use pump stations to convey, direct or manage storm and surface water for privately owned parcels. These applicants have requested information from the County on what design standards and technical specifications might be used to design, review, and approve the construction of a pump station to convey storm and surface water.



The DDECM Administrator notes the on-going maintenance, repair, replacement, etc. of stormwater facilities is imperative for the continued operation of the facility in order to protect aquatic resources. The DDECM acknowledges unpredictable environmental factors can lead to flooding and other adverse impacts to properties when pump stations fail to operate properly during significant rainfall events.

The DDECM Administrator further notes that pump stations, mechanical equipment and related appurtenances can be costly to operate, maintain, repair and replace. Due to limited resources, there is significant risk that private organizations and individuals will largely neglect necessary maintenance, repair and replacement of the pump station's mechanical and electrical equipment until a failure occurs. Neglect increases the risks associated with flooding or may result in public health and safety concerns.

Conclusions:

Due to the lack of standards and specifications for pump stations in the DDECM, the many technical elements and considerations associated with the engineering design of a pump station, and the potential for hazards associated with neglected maintenance by private organizations and individuals, the DDECM Administrator finds that the use pump stations, mechanical equipment and other related appurtenances for the purpose of conveying, directing or managing storm and surface water is not provided for under the DDECM, and is subsequently not permitted.

The DDECM Administrator acknowledges however there may be circumstances or unknown conditions where the use of pump stations, mechanical equipment or other similar measures may be required to address an existing unforeseen or emergent community storm or surface water problems. Such circumstances may include periodic or sustained flooding of existing developed lands, failure of capital facilities, restrictive site limitations, etc. where strict adherence to the standards outlined in the DDECM would not be technically feasible. Measures used to address these circumstances tend to be temporary in nature and exist for the period necessary to alleviate flooding and until other more reliable measures are constructed. The continued or permanent use of a pump station, mechanical equipment or other similar measure in these circumstances shall be acceptable upon written approval of the DDECM Administrator (or his designee), PROVIDED THAT the pump station will be owned, operated and maintained by a municipality (local, state or federal) in perpetuity.

This action shall take effect immediately under the authority granted the DDECM Administrator under Ordinance No. 9859 and Ordinance No. 10610 accordingly.