Appendix E

Appendix E
Regulatory Programs

Introduction

Federal, state, and local regulatory programs directly affect flood hazard management. For the purpose of sorting out the numerous jurisdictions that have a role in flood hazard management, the many regulations are grouped here into four major types:

1. Land Use Management
2. Resource Management
3. Environmental Protection
4. Flood Hazard Management

There will be a brief discussion concerning their individual rationale, the regulatory mechanisms that drive them, and how the jurisdictions are responsible. Each regulation will be discussed in greater detail, exploring the individual tools available and how they relate to a Flood Hazard Management Plan (FHMP). A summary of these regulations is provided as Table 3-1.

Land Use Management

The purpose of land use management is to provide guidance for growth and development and the associated physical improvements that coincide with it. Both the State of Washington and federal agencies require counties to adopt specific regulations concerning land use issues and as such, many of the county regulations are very similar. Within most cities/counties, development regulations will include a comprehensive plan, zoning ordinance, building code, subdivision ordinance, shoreline master program and possibly a flood plain management ordinance. Those land use management regulations that affect flood hazard management plans are discussed briefly below.

Comprehensive Plan

The purpose of a city/county comprehensive plan is to give long range direction and guidance for systematic growth and development. The plan should emphasize immediate local concerns that can include land use, transportation, utilities, water resources, open space,

environmentally sensitive areas, drainage, and others. Typically, these plans are non-regulatory, lacking the enforcement mechanisms to ensure compliance. Their purpose is to provide goals, objectives, and policy statements that are met through various ordinances set by the jurisdiction.

The State of Washington Growth Management Act (GMA) of 1990 is an integral part of the comprehensive planning process. The intention of the GMA is to manage growth in the State's fastest growing counties through the adoption of local comprehensive land use plans and development regulations. Even in counties with smaller populations and growth rates, such as Grays Harbor, portions of the GMA have been adopted. Although comprehensive planning is a common tool used by many local governments, the legislature found that too often growth occurred in an uncoordinated and unplanned manner, lacking common goals that expressed the public's interest in conservation and wise use of lands. The citizenry of the State saw the effects of undirected growth as a threat to their quality of life. Growth without direction was seen as posing a threat to not only the environment, but to the sustainability of economic development across the state. The GMA attempts to bring consistency and coordination to long-range planning by reforming the decision-making processes that have been often unpredictable and disjointed.

The planning goals of the GMA focus on economic land use issues such as urban growth, transportation, housing and economic development, as well as resource/environmental issues dealing with open space, conservation, and cultural resources. The resource/environmental planning goals specifically address critical areas (including: wetlands, critical recharge areas affecting aquifers used for potable water, fish and wildlife habitat, frequently flooded areas, and geologically hazardous areas), requiring affected counties to adopt development regulations that preclude land uses or development deemed incompatible with those critical areas. The protection given these critical areas is intended to cross over jurisdictional boundaries in a coordinated manner.

It is at the comprehensive plan level, whether defined by the GMA or through a local effort, that communities are able to set a direction for regulations. For example, some comprehensive plans identify special flood hazard areas and include a set of guidelines to direct growth within those areas. These areas are typically designated by the United States Department of Housing and Urban Development using maps developed by the Federal

Emergency Management Agency (FEMA). Using the FEMA maps to designate special flood hazard areas in a comprehensive plan is one of several necessary steps.

Zoning Ordinance

The purpose of a zoning ordinance is to implement the growth management policies of the Comprehensive Plan. Typically, the zoning code assigns use and density requirements that guide land use in either a city or county. The major tools are a zoning map that identifies specific land use zones accompanied by a zoning code book that defines each zone and provides specific regulations. Zoning codes have the ability to grant variance and conditional uses as well as to enforce the code.

Land use zones are determined by environmental constraints and infrastructure. The availability of water, sewer, fire protection and transportation sets limits to construction densities. Environmental constraints include: geology, soils, slopes, drainage, earthquake potential, avalanche danger, flooding, as well as wildlife protection for fisheries and endangered species.

Development diminishes the ability of soils to absorb precipitation and recharge groundwater. This removal of pervious soil increases the loads on drainage systems and elevates the frequency and extend of flooding. Similarly, development constructed on fill intended to withstand a 100-year storm reduces the flood plain's capacity to carry the increased flow by displacing volume. Employing zoning regulations is a useful tool in flood hazard management. Zoning sets the density and standards of development and has the ability to direct growth in such a way as to minimize the impact on flood plains.

Building Code

Building codes are meant to regulate the safety and quality of a structure. The Uniform Building Code (UBC) is often used to set those standards. Of particular interest to low lying areas prone to flooding, the UBC regulates excavation and filling on private property. The building code is intended to be used in conjunction with other regulations such as the zoning ordinance.

When used with flood hazard management planning, the building code ensures proper flood proofing of new construction in flood hazard areas. The UBC grading regulations are implemented through local zoning codes.

Subdivision Ordinance

A Subdivision Ordinance prescribes procedures and conditions for dividing land into smaller parcels. The definition of a subdivision may vary among jurisdictions but is usually determined by some specified amount of parcels, usually five or more. Typically, subdivisions must conform to zoning regulations in effect at the time of the proposed subdivision.

Subdivision ordinances typically contain drainage plans and drainage system standards. These plans set out criteria for the collection, storage, and discharge of runoff from subdivisions. Because they are tied to zoning, subdivision are often limited by environmental constraints including flood hazards.

Washington State Shoreline Management Act

The purpose of the Washington State Shoreline Management Act (SMA) is to protect the public's interests in preserving natural resources such as water, fish, and wildlife and their habitat by regulating public and private development in shoreline areas. Although the administrative framework includes both state and local jurisdictions, the Department of Ecology (Ecology) is the agency mandated to oversee the development of local Shoreline Master Programs and their subsequent implementation. The legal basis for SMA regulatory documents is through the Washington Administrative Code (Chapter 173-14, 16, 17, 18, 19, 20, and 22).

The Shoreline Management Act and local shoreline master programs are extremely useful in flood hazard management planning. The SMA requires local governments to define their shoreline jurisdictions along rivers in one of two ways:

1. The area 200 feet from the ordinary high water mark (OHWM) or floodway, whichever is greater, plus all wetlands in the 100-year flood plain associated with them; or
2. All or any portion of the 100-year flood plain as long as it includes all of those areas falling within the area described in option 1 above.

The SMA requires permits for any "substantial development" within the 200-foot shoreline jurisdiction. A substantial development is defined as any development where the total cost of fair market value is equal to or exceeds $2,500, or any development which materially interferes with the normal public use of the water or shorelines of the state; except as specifically exempted pursuant to RCW 90.58.030(3)(e) and WAC 173-14-040. Permits can be issued through the local Shoreline Master Programs and are reviewed by Ecology.

Proposed developments that do not include wetland areas and are not within 200 feet of the floodway do not require a shoreline permit. These developments, however, may still be required to attain local flood permits and go through a State Environmental Policy Act (SEPA) review process.

Sometimes a diked floodway is used as the boundary from which the 200-foot shoreline jurisdiction is measured. In order to qualify under FEMA requirements, the dike must extend at least as high as the 100-year flood elevation plus 3 feet.

Another important element of the SMA and local Shoreline Master Programs is shorelines of statewide significance. Designated by the SMA, Chapter 173-16 WAC, these shorelines have a set of prioritized policies that first and foremost "recognize and protect the statewide interest over local interest" and secondly, "preserve the natural character of the shoreline." The consequences of these policies is a strong shoreline management policy that provides another layer of protection to particularly unique shorelines within Washington.

The SMA recognizes Washington's shorelines as an important public natural resource which should be protected from degradation. The SMA authorizes local jurisdictions to develop local Shoreline Master Programs that reflect a community's goals and values in keeping with the SMA. The local regulations are used as an overlay to zoning and as such can guide future development within the flood plain and its watersheds.

Shoreline Master Program

The Shoreline Master Program (SMP), developed at the local, city, or county level, is mandated by the state's SMA for the purpose of protecting the public's shoreline resources. Local governments develop SMPs, guided by the Department of Ecology, the SMA, and the WAC's pertaining to it as briefly discussed above.

As a regulatory tool, the SMP provides local government a strong means by which to manage the effects of development on shorelines, including flood plains. All streams with a mean annual flow of 20 cubic feet per second (cfs) or more, and associated wetlands, are included within the shoreline management jurisdiction. Development can be regulated around these streams, reducing urban runoff and reducing densities. Wetlands can be retained to perform one of their major functions, absorbing excess water, thereby reducing storm surge effects downstream.

The SMP is an excellent tool to be used in consort with a flood hazard management plan because it directs land use and activities along shorelines, sets design criteria to ensure best management practices, and provides the enforcement mechanism that will be backed by Ecology.

Resource Management

The purpose of resource management is to preserve and protect the nation's natural resources from degradation. Resource management emphasizes sustainability of natural resources while recognizing the economic realities of industries using these resources. To this end, resource conservation and best management practices of productive forest and agricultural lands, and habitats associated with fisheries is the direction resource management regulations has taken. Various state and federal agencies are involved in resource management. All cities/counties must comply with these state and federal regulations depending on the type of project. Resource management regulations affecting flood hazard management include the Washington State Hydraulic Code (Hydraulic Code), Sections 404 and 401 of the Federal Clean Water Act, Section 10 of the Rivers and Harbor Act, and other local ordinances developed to reflect the needs of the particular community.

Hydraulic Code

The purpose of the Washington State Hydraulic Code, RCW 75.20.100-103, is to preserve fish and wildlife habitat by regulating activities within the state's salt and fresh waters. Any construction that will use, divert, obstruct, or change the natural flow or bedding of any of Washington's waters within high water areas, including many wetlands, will require a Hydraulic Project approval (HPA) permit. Such activities include, but are not limited to, streambank protection, dredging, culvert installation, pile driving, construction of bridges,

piers and docks, pond construction, log jam or debris removal, mineral prospecting and extraction, and alteration or realignment. Within the code, specific technical provision for hydraulic projects are provided by the administrating agency, the Department of Fish and Wildlife. An application may be denied when the administering agency determines that the project will be directly or indirectly harmful to fish life and acceptable mitigation cannot be assured.

The Hydraulic Code provides city and county jurisdictions with a tool to ensure that no harm to fish and wildlife habitat will occur during the construction of any structural or bio-engineering modifications of shorelines. The provision given to assist in the design and construction of shoreline modification structures can also be useful to evaluate proposed projects.

Section 404—Clean Water Act

Section 404 of the Clean Water Act is one of three federal laws that empowered the Army Corps of Engineers to maintain the biological integrity of the nation's waters. Section 404 requires a COE permit for any project that alters or degrades the waters of the United States, ranging from the open water disposal of dredge or fill material to the filling of near-shore areas. This includes adjacent wetlands and tributaries to navigable waters, and any degradation or destruction that could affect interstate or foreign commerce. Guidelines for permit approval have been developed by the Environmental Protection Agency (EPA). There are two types of permits issued: an individual permit and a general, or nationwide, permit. The following details each.

1. Individual Permit—This permit is generally issued for a single proposed activity, unless it falls under a blanket authorization for a general permit or if the project involves an especially valuable ecological area such as a wetland. The determination is based on whether the benefits of the project outweigh the predicted environmental impacts. Known as a public interest review, the evaluation process involves an optional meeting with the COE and other resource agencies prior to the submission of a permit application. Public notice and review are required, and a public hearing is held if required. The COE decides on whether to prepare an Environmental Assessment and Finding of No Significance, or to prepare a National Environmental Policy Act (NEPA) Environmental

Impact Statement (EIS). The District engineer can then either approve or reject the permit application.

2. General Permit—The General Permit, also called the Nationwide Permit, provides blanket authorization on a nationwide, state or regional level for actions which have minimal adverse impacts on the environment. Such actions would include, but are not limited to, bank stabilization projects, navigation markers, utility line structures, minor road crossings and bridges and boat docks. Also included are minor dredge and fills involving less than 10 cubic yards, or fills involving 1 to 10 acres of isolated wetland or adjacent wetlands located above the headwaters of a stream with an average annual flow of less than 5 cfs. The process involves notification of the EPA and other permitting agencies for a review of the potential environmental impacts. The COE will then either accept or reject the permit; whereupon the applicant may appeal the decision.

Section 401—Clean Water Act

Section 401 is closely tied to Section 404 with the difference being that it is a certification process issued through the Washington Department of Ecology. Whenever there is an activity requiring a federal permit, the applicant must obtain certification as a prerequisite. The state essentially certifies the materials discharged into a water body, ensuring compliance with discharge limitations, water quality standards and any other applicable conditions of state law (Chapter 173-201 WAC). This certification and those conditions become part of the federal permit.

As Section 401 applies to flood hazard management measures, the application often requires what is called a 'modification.' Typical structural flood control measures such as stream bank protection and instream gravel removal have the potential to temporarily create excess instream turbidity during the construction phase. This will require a Temporary Modification of Water Quality Criteria from Ecology before a water quality certification will be issued.

Structural shoreline modification or bioengineering techniques have the potential to affect water quality due to the proximity of construction to the shoreline. Section 401 certifications are an important part of the permitting process required through Section 404 of the Clean Water Act, and in fact takes precedence over it.

The certification process begins with notification to Ecology at the time a Section 404 permit is filed with the COE. The Environmental Review Section (ERS) prepares a state comment letter based on the responses from the various state agencies, along with the 401 certification or denial. All State 401 certifications are exempt from the State Environmental Policy Act (SEPA).

Section 10—Rivers and Harbors Act

Enacted in 1989 to preserve the navigability of the nation's waterways, Section 10 prohibits the unauthorized obstruction or alteration of those navigable waters without a permit from the COE. The provisions apply to all structures or activities associated with a structure located "in, over, or affecting" navigable waters below the mean high water mark of tidal waters or ordinary high water mark of fresh waters.

This law pertains to navigable waters that are presently, were historically, or have a reasonable potential to be navigable, and all waters subject to the ebb and flow of the tide up to mean higher high tide or ordinary high water mark. The permit process includes consideration of navigational waters, flood control, fish and wildlife management and environmental impacts. Section 10 review often occurs simultaneously with the Section 404 permitting process and includes compliance with the National Environmental Policy Act (NEPA).

Environmental Management

Environmental management concerns the natural resources of our state, including fish and wildlife and their habitats, along with recreational resources. Landmark legislation at the federal and state levels have provided a strong foundation for management of our environment. These laws are not strictly preservation or conservation oriented, but rather attempt to link our natural resources (i.e., air, water, public access and wildlife) to provide rigorous examination of proposed projects to minimize adverse environmental impacts.

These regulations consist of the national Environmental Policy Act, State Environmental Policy Act, Shoreline Management Act and its Shoreline Master Programs, several Executive Orders for Wetland and Floodplain Protection, and other local ordinances developed to reflect the needs of the particular community.

National Environmental Policy Act

With the passing of the National Environmental Policy Act (NEPA) (42 USC 4321 et. seq.) a process was initiated requiring federal agencies to consider the environmental impacts of both development projects sponsored by the agency and those privately sponsored projects that require agency permits and approval. Concerned with project impacts, the NEPA process stresses full disclosure of environmental impacts along with technical and economic considerations of a development project, prior to an agency decision.

The Council of Environmental Quality (CEQ) provides the guidance to implement NEPA; however, most federal agencies have adopted their own regulations for implementation. The CEQ Regulation (40 CFR 1500-1508) emphasizes the consideration of alternatives, including ways to mitigate harmful environmental effects through reducing or avoiding impact. The NEPA process generally occurs concurrently with Section 404.

To determine whether a proposal would produce significant adverse impacts, an environmental assessment (EA) must be performed. Typically the permit applicant provides much of the information and analysis used to prepare the EA. If it is determined that an EIS is not required, a "Finding of No Significant Impact" document is prepared, explaining why an EIS is not needed.

Any major federal action that would have significant adverse environmental impacts is required by NEPA to prepare an environmental impact statement (EIS). The EIS must thoroughly evaluate any negative environmental impacts caused from the proposed action and its alternatives. Privately sponsored projects may also be required to perform an EIS if any federal monies are a part of the project or if anyone recommends to the permitting federal agency that an EIS be performed. Such a recommendation should be based on evidence that indicates a proposed action would result in significant adverse environmental impacts.

Generally, all structural and bioengineering flood control projects are federally funded, as such, they must comply with NEPA requirements. Even when grants are appropriate for operations and maintenance, those funds trigger the NEPA process and must comply with the rules. Private projects are also subject to preparing an EIS when, during review by state or federal agencies, the project is seen as potentially detrimental to the environment.

Washington State Environmental Policy Act

The Washington State Environmental Policy Act (SEPA) was passed by the legislature in 1969 for the purpose of providing a process to analyze the environmental impacts of development. SEPA is not a permit but rather a process of information gathering for the purpose of helping agency decisionmakers and the general public understand how a project would affect the environment. SEPA requires a full disclosure of likely significant adverse environmental impacts of a proposed action and a mitigation plan for identified impacts to either the natural or built environment. Many agency decisions can only be made after the SEPA process has been completed. This process may include: Hydraulic Project Approval, Shoreline Substantial Development permit, and many other local permits (clearing and grading, utility, street use, etc.).

There are a variety of actions that are "categorically exempt" from the SEPA process. For example, size is used as the criteria to differentiate between an exempt or nonexempt action. Exempted projects include most single-family homes, commercial buildings under 4,000 square feet, parking lots for 20 cars or less, and any landfill or excavation of 100 cubic yards or less. SEPA rules allow cities and counties to set their own size criteria based on a specific range for five categories of exemptions. The criteria cannot be more restrictive than those of SEPA unless the action affects an environmentally sensitive area.

One of the first steps in the SEPA process is the analysis of alternatives. Funds are available through FCAAP to assist in the EIS process and can actually be extended up to the time of implementation.

Executive Order 11990 and Executive Order 90-40

Enacted in 1977, the Federal Executive Order 11990 (Protection of Wetlands) protects wetlands to the extent possible from short- and long-term adverse impacts associated with the destruction or modification of wetlands. It is intended to prevent direct or indirect support of new construction in wetlands wherever there is a practicable alternative. As well as structural impacts, "new construction" includes draining, dredging, channelizing, filling, diking, impounding and related activities. This legislation mandates that all agencies performing wetland-related regulation utilize their full legal power to protect the beneficial uses of wetlands.

In 1990, the State Executive Order 90-40 (Protection of Wetlands) was enacted. The sections of this act relative to flood hazard reduction planning mandate that all state agencies rigorously enforce their existing authorities to protect wetland functions and values. To the extent permissible, mitigation for all agency actions affecting wetlands is required under SEPA authority.

Executive Order 11988

Federal Executive Order 11988, passed in 1977, furthers floodplain management legislation such as the Flood Disaster Protection Act and the National Flood Insurance Act. It mandates that short- and long-term adverse impacts associated with the occupancy and modification of floodplains be avoided to the extent possible. Likewise, when practicable, direct or indirect support of floodplain development shall be guided as follows:

- Activities Involving or Using Federal Lands: Each federal agency shall provide leadership and take action to reduce the risk of flood loss and hazards.
- Activities in a Floodplain: Each federal agency shall plan for, evaluate alternatives for and provide budget requests for issues of flood hazard and floodplain management.
- Public Review: Each federal agency shall provide the opportunity for early public review of any plans or proposals for actions in floodplains.

Flood Hazard Management

This section is concerned with policies and programs relating directly to issues surrounding flood hazard management and the protection of life and property. A primary regulatory tool is the National Flood Insurance Program (NFIP) which provides low cost insurance to communities that have adopted approved flood plain management regulations.

National Flood Insurance Program

The U.S. Congress initiated the National Flood Insurance Program (NFIP) in 1968 for the purpose of relieving the national Treasury and local jurisdictions from the burden of disaster relief. This program is administered by the Federal Insurance Administration (FIA) which is part of the Federal Emergency Management Agency (FEMA). The thrust of the program is to make affordable flood insurance available to communities. To qualify, the

community must adopt approved flood plain management regulations. In 1973, Congress expanded the NFIP to require that funding for structures related to government programs within the 100-year flood plain be permitted only if the structure is covered under a flood insurance policy and the community participates in the NFIP.

The NFIP administers two separate programs, the emergency program and the regular program. Each has their own process within FIA and each provides for the community differently.

- Emergency Program—The process begins with the identification by FIA of flood prone communities. Notification comes in the form of a Flood Hazard Boundary Map (FHBM) which is a preliminary delineation of flood hazard areas. Along with the FHBM, the community receives an application from the FIA for the purpose of attaining limited amounts of flood insurance. Based on the FHBM, the community is required to adopt minimum flood plain management regulations. They are also encouraged to use any additional information available to establish flood elevations.

- Regular Program—The regular program provides communities full flood insurance once that community adopts a local flood plain management ordinance approved by FEMA. The ordinance is based on a detailed technical flood insurance study involving hydrologic and hydraulic analyses culminating in the Flood Insurance Rate Map (FIRM), and a report. Data on floodway width, cross sectional area and flood water velocity are provided at various points along the water course. The purpose is to determine the flood risk and thereby the insurance rates for areas adjacent to the river. The floodway map defines the areas along the river channel where encroachment is not allowed.

The floodplain management ordinance is a local ordinance which is intended to satisfy the FEMA requirement for participating in the NFIP. Washington State requirements for floodplain management ordinances are contained in Chapter 86.16 RCW. Typically, floodplain management ordinances contain the floodway designation, special flood hazard areas identified by the FIA and specific development regulations intended to minimize losses due to flooding. Specific regulations concern building codes for onsite disposal systems, the use of flood-resistant materials, the flood-proof design of onsite disposal systems, and special

designs for RV parks. Other specific regulations involve land use, such as limiting subdivision for residential or commercial use and permitting agricultural, recreational and business uses in the floodplain. Variances and conditional use permits are often allowed for hardship situations which demonstrate need, or actions that will not increase flood levels or result in the habitable portion or a structure being below the base flood elevation. Variances should maintain the minimum requirements of FEMA to continue participation in the NFIP.

State Flood Plain Management

Chapter 86.16 RCW—Flood Plain Management forms the core of the state's regulatory program. WAC 173-158 are the rules developed by Ecology to administer the provisions of Chapter 86.16 RCW. The State's regulatory program has adopted the NFIP minimum standards as the State minimum standards for floodplain management. Washington exceeds the minimum federal standards in one area—Chapter 86.16 RCW—which has a provision prohibiting new or substantially improved residential development in any designated floodway. Other provisions of the State's program include the availability of technical assistance to localities in determining floodplain boundaries and the ability to assist localities in the development of additional standards that exceed the minimum federal requirements.

Local Regulations

Floodplain Management. Grays Harbor County Comprehensive Zoning Ordinance No. 38, Chapter 13.07, Combining Districts, addresses floodplain districts and floodplain management regulations. It is designed to "control the use, alteration, modification, and construction of and on lands which are subject to periodic flooding and to carry out the mandate contained in the National Flood Insurance Program 42 U.S.C. 40013-4128." This combining district applies to all areas of special flood hazard within the jurisdiction of Grays Harbor County as identified by the Federal Emergency Management Agency (FEMA) on its Flood Insurance Rate Maps (FIRMs). Using its State Environmental Policy Act (SEPA) authority, the County should require compliance with the combining districts for this area and any others subsequently identified.

To reduce flood hazards, the following methods and provisions are instituted by the ordinance:

- A permit is required for all development within the floodplain. This shall include the elevation of the lowest habitable floor of the structure in relation to mean sea level, the elevation of any floodproofing, certification of floodproofing of nonresidential structures, and descriptions of watercourse alterations related to the development.
- The Planning Director shall assure that development proposals meet the provisions for flood hazard reduction. This includes utility system standards, construction methods, minimum elevation standards, floodproofing, and the anchoring of structures.
- Provisions for flood hazard reductions in floodways and coastal high hazard areas are also contained in the Combining District standards. These provisions are intended to lessen the special hazards resulting from the velocity of debris-carrying flood waters and from tidal surges that have a high potential for producing projectiles and/or causing erosion.

Stormwater Management. No County Stormwater Management Ordinance exists; however, stormwater regulations are implemented through the Uniform Building Code, SEPA, the County Zoning Code, and the County Subdivision Ordinance.

The Grays Harbor County Utilities Comprehensive Plan Phase I states, "In its subdivision ordinance, the County has stormwater management regulations which limit the impacts of new development. These regulations apply to long, short, and large lot subdivision developments, as well as mobile home parks, recreational vehicle parks, and commercial and industrial developments. The design storm used is the 25-year, 24-hour storm...The County's current stormwater regulations are deficient in three areas: 1) offsite analysis of stormwater facilities, 2) stormwater design standards for closed drainage basins, and 3) enforcement and maintenance of stormwater facilities. Offsite analysis is necessary to determine downstream impacts to be avoided or mitigated. Design standards for closed basins are particularly important along the coast, where the areas between the dune ridges have no drainage outlet and pond water for long periods. New stormwater management facilities have no provision for perpetual maintenance. The County should determine whether revisions to the drainage regulations are warranted."