



# STATE AND LOCAL FUNDING OF NONPOINT SOURCE CONTROL PROGRAMS

TD365  
.U5S7  
1992



**Recycled/Recyclable**  
Printed on paper that contains  
at least 50% recycled fiber

## ACKNOWLEDGEMENTS

These case studies were developed with the active assistance of state and local officials who are managing nonpoint source abatement programs on a daily basis. Among the principal providers of information regarding these programs are:

### MARYLAND CRITICAL AREAS PROGRAM

Dr. Sarah Taylor, Manager of the Maryland Critical Areas Program: Rubert Friday, Chesapeake Bay Foundation

Steve Bunker, former employee of the Chesapeake Bay Foundation

William Clarke, Calvert Soil Conservation District

### CITY OF BELLEVUE, WASHINGTON

Nancy Hanson, Storm and Surface Water Utility

### JEFFERSON COUNTY SUBSTATE REVOLVING FUND, WASHINGTON

Teresa Barron, Jefferson County Planning and Building Department

Robert Leach, Jefferson County On-Site Maintenance Utility

### CALIFORNIA STATE REVOLVING FUND

Bill Campbell, California State Water Resources Control Board

### CHERRY CREEK RESERVOIR PROJECT, COLORADO

Lou Short, Cherry Creek Basin Water Quality Authority

### IOWA'S GROUNDWATER PROTECTION ACT

Jim Gulliford, Division of Soil Conservation (DALS)

Mark Lohafer, Laboratory Division (DALS)

Ubbo Agena, Environmental Protection Division (DNR)

Lyle Asell, USDA Soil Conservation Service

Dr. Jerry Miller; Dr. Reggie Voss; Wendy Wintersteen; Elaine Hall and Kay Connelly of the

Iowa State University Cooperative Extension Service

Dan Bruene, Iowa Association of Soil and Water Conservation District Commissioners

Jim Hosch, Clayton County Cooperative Extension Service

John Kerkove, Division of Soil Conservation (DALS)

### U.S. ENVIRONMENTAL PROTECTION AGENCY

Edward Richards, Washington D.C.

Hank Zygmunt, Region III

Jovita Pajarillo, Region IX

Julie Elfving, Region VII

Carroll Russell, Region VIII

Elbert Moore, Region X

Lynn Schuler, Chesapeake Bay Liaison Office

#28653540

TD365 . 1537 1992

## TABLE OF CONTENTS

<b>PREFACE</b> .....	<b>Page</b>	<b>1</b>
<b>INTRODUCTION</b> .....	<b>Page</b>	<b>2</b>
<b>PART I - ALTERNATIVE APPROACHES TO FUNDING STATE AND LOCAL NPS PROGRAMS</b> .....	<b>Page</b>	<b>3-6</b>
• Traditional Approaches		
• Recent Approaches		
<b>PART II - Case Studies and Related Materials</b>		
<b>A. Stormwater and On-Site Utilities</b> .....	<b>Page</b>	<b>7-41</b>
• Bellevue, Washington: A Surface and Stormwater Utility		
• Two Additional Examples of Stormwater Utilities		
• Three Examples of On-Site Utilities		
• Bellevue Ordinance Numbers: 2003; 2429; 3158 B; 3334; 3688; and 4309		
• Memorandum of Agreement		
<b>B. State and Sub-State Revolving Funds</b> .....	<b>Page</b>	<b>42-59</b>
• California's State Revolving Fund		
• List of Loans from California's SRF		
• California Law		
• Jefferson County, Washington's Revolving Fund		
• Resolution 11-90		
• Memorandum of Agreement		
<b>C. Funding Regional Programs</b> .....	<b>Page</b>	<b>60-81</b>
• Maryland Critical Areas Program		
• Cherry Creek Basin Water Quality Authority		
<b>D. Use of Special Fees and Taxes to Fund NPS Programs</b> ...	<b>Page</b>	<b>82-86</b>
• Iowa's Fee System for Dealers in Pesticides and Fertilizers		
<b>APPENDIX ONE- PRIMARY CONTACT PEOPLE</b> .....	<b>Page</b>	<b>87-88</b>
<b>APPENDIX TWO-SUPPLEMENTAL MATERIALS</b> .....		
• Iowa Ground Water Protection Act		
• Text of the Act Establishing The Maryland Critical Area Program		
• Cherry Creek Basin Authority: Legislation		

## PREFACE

The technical measures or best management practices which can be used to abate nonpoint source (NPS) pollution are improving, and states and local governments are employing them to address a wide variety of NPS problems. At the same time, resources for NPS programs at all levels remain relatively static.

Because some states and localities have developed particularly effective methods for funding NPS programs and have thereby increased the Nation's capacity to utilize BMPs to control NPS pollution, EPA has sought the cooperation of several state and local agencies to assist in the development of case studies and related materials on NPS funding. These case studies demonstrate a variety of effective techniques which are currently being used by state and local governments to fund NPS programs.

Our hope is that manager in jurisdictions will look carefully at the methods described in this document for techniques which will be useful for their purposes. If the specific techniques identified in this document do not appear suitable for your situation, perhaps the case studies will stimulate new ideas in your attempts to find new solutions.

DOV WEITMAN, CHIEF  
NONPOINT SOURCE CONTROL BRANCH  
ASSESSMENT AND WATERSHED PROTECTION DIVISION

## INTRODUCTION

The major contribution of nonpoint source (NPS) pollution to the degradation of the quality of the Nation's waters has prompted state and local governments to initiate programs to abate NPS pollution. Often the impetus for these programs has been the desire to protect particularly valuable waterbodies, such as recreational lakes, sole source aquifers, the Chesapeake Bay and the Puget Sound.

In part, state and local governments have taken action, because existing Federal programs are not intended to address the wide range of specific problems caused by NPS pollution. Although Federal agencies, such as the Department of Agriculture and the Environmental Protection Agency (EPA), have limited programs to address some NPS categories and provide some funding for state and local programs, these programs are very small in comparison with the magnitude of the NPS problems across the Nation.

The purpose of this document is to describe particularly effective state and local NPS programs and the methods used to fund them, so that other jurisdictions will have an understanding of these approaches, as they develop their own NPS programs. In all but two of these studies, the NPS programs are funded primarily or exclusively with state and local resources, reflecting the creativity and initiative which originated in those jurisdictions.

The reader may ask whether the approaches reflected in the case studies are readily transferred from one jurisdiction to another. In the case of on-site and storm water utilities, the conceptual approaches are not complex, and the primary difficulties appear to be political - how to convince citizens and officials that the benefits resulting from these utilities (improved health, recreation, etc.) are worth the additional costs.

Regarding state revolving funds, which already exist in every state (funded by EPA grants and the state match), each state decides whether to use its fund for NPS programs, municipal treatment plants or estuarine projects. Consequently, state environmental officials and legislators currently have the authority to make the decision to use the very large, existing sums in revolving loan funds for NPS purposes.

On the other hand, Maryland's Chesapeake Bay Critical Areas Program is quite complex and would not be easy to transfer to another region in its present form. However, the conceptual approach is clearly applicable to many waterbodies, and a tailored, simplified version of the program might be a very attractive alternative to other states with particularly valuable waterbodies which are threatened by NPS pollution.

Our analysis of the programs discussed in the case studies indicates that the approaches used can be adopted by others, and that many of the NPS funding techniques outlined in the studies are particularly effective. Whether or not one is able to use these specific techniques, the variety of funding mechanisms presented here may stimulate readers to create other approaches and apply them appropriately in states, counties and cities across the country.

Assisting in editing the manuscript were EPA's NPS coordinators from Regions III, VIII, IX and X. Our thanks to Hank Zygmunt, Julie Elfving, Carroll Russell, Jovita Pajarillo and Elbert Moore for their help.

This project was funded through EPA Contract Number 68-C9-0013 with Tetra Tech Inc. Resource Management 3 carried out all field work and prepared the manuscript under subcontract with Tetra Tech. Ed Richards of EPA's Nonpoint Source Control Branch was the Project Manager.

# **PART I**

## **ALTERNATIVE APPROACHES TO FUNDING STATE AND LOCAL NPS PROGRAMS**

**Traditional Approaches**  
**Recent Approaches**

## ALTERNATIVE APPROACHES TO FUNDING STATE AND LOCAL NPS PROGRAMS

Because the rainwater runoff which creates most nonpoint source (NPS) pollution takes many forms, solutions to NPS problems must be varied. The problems range from runoff from the vast acreage of farms and forests across the country to drainage from abandoned mines and to runoff from city streets.

Only recently have government agencies begun in a more comprehensive way to identify the types of NPS pollutants, measure the volume of NPS loadings which affect surface and ground water and design effective watershed projects and regulatory programs to abate NPS pollution. Only a few states have been implementing NPS watershed projects to reduce loadings and improve water quality for more than five years.

In 1989 the Congress appropriated the initial funds for the Environmental Protection Agency (EPA) to award demonstration grants to states to develop and implement statewide NPS management programs under section 319 of the Clean Water Act. Section 319 specifies that states shall "to the maximum extent practicable, develop and implement a management program under this subsection on a watershed-by-watershed basis within such State".

Section 319 grants (totalling \$52.5 million in fiscal year 1992) provide sufficient funding to State agencies for them to hire NPS staff and to carry out several projects each year. This grant program can be considered an initial step toward a national effort by EPA to assist states to abate NPS pollution. However, it is clear that much more will be necessary if the nation as a whole is to succeed in abating NPS pollution.

Prior to the initial appropriation of section 319 funds, other federal agencies, most notably the Department of Agriculture (USDA), were providing funding and technical assistance to producers, such as farmers and coal operators, to encourage voluntary reduction of NPS pollution created by their economic activities. USDA, for example, provides direct grants (cost sharing) to individual farmers to pay part of the cost of selected practices used by the farmer to reduce runoff. Technical assistance to the farmer which facilitates implementation of the practices is often provided by the USDA Soil Conservation Service (SCS) and local Conservation Districts. To date, private and governmental actions at all levels have not resulted in significant net reductions of NPS pollution on a national scale. Indeed, the problem has become the most important source of degradation of water quality in this country.

In some cases, state and local governments have decided not to rely upon national solutions and have developed their own, often unique, programs for controlling NPS pollution and equally unique means to pay for the control programs. An understanding of selected current NPS programs operated by state and local governments can assist other jurisdictions to develop and fund effective NPS abatement programs in the future.

## RECENT APPROACHES

One method which local governments are increasingly using to address runoff problems is the development of utilities specifically designed to abate a particular type of NPS pollution. One approach, currently used by over one hundred jurisdictions, is the stormwater utility. The experience of many of these utilities indicates that they are able to effectively manage the technical aspects of urban runoff, while also solving the problem of obtaining adequate revenues from reliable funding sources.

The Bellevue, Washington case study describes a utility which has been in operation for 18 years and has demonstrated its capacity to successfully address flood control, water quality issues and protection of wildlife. Approximately fifty percent of the utility's annual budget of \$ 800,000 is derived from service fees (utility rate charges) with the balance coming from permit fees and grants. In addition to the Bellevue case study, we have also included two somewhat different examples of other stormwater utilities.

Use of utilities to address urban runoff is particularly timely, given the November, 1990 EPA regulation requiring 220 cities and counties with populations of 100,000 and above to obtain NPDES permits to discharge stormwater. This regulation is causing many jurisdictions to search for ways to finance stormwater programs.

### ON-SITE UTILITIES

Another common type of NPS pollution is caused by failed septic systems. On-site issues and ways to assure functioning systems are particularly relevant for jurisdictions located adjacent to confined waterbodies, such as lakes, aquifers and estuaries, because of the tendency of nutrients from failed septic systems to cause eutrophication in such waterbodies.

Local governments are beginning to use the utility concept to develop institutional approaches incorporating homeowner responsibility for maintaining septic systems. Funding for soil testing, inspection and correction of failed systems comes directly from the homeowner or indirectly from utility rates paid by the homeowner. Local government assures that problems resulting from failed systems are remedied.

The three examples of on-site utilities presented here provide varied ways in which counties and towns can structure their approaches to assure functioning septic systems. In Otter Tail County, Minnesota, homeowners may choose to pay a relatively low fee and then make any repairs called for by the County's periodic inspections. The other examples feature stronger regulatory approaches with the counties taking direct action (e.g., suspending the owner's water service) in the event that the problem is not remedied within a reasonable time.

Although these utilities vary, their purposes are the same - to protect highly valued waterbodies (an aquifer, a beach and a lake). Their basic methods are also similar. They are using the utility

approach to assure a regular source of funding, so that these counties can make sure that all homeowners have functioning septic systems which do not pollute neighboring waterbodies.

## **REVOLVING FUNDS**

The existence of large state revolving funds (SRFs), which have been established since the Clean Water Act Amendments of 1987 by annual capitalization grants from EPA and state matching funds, provides all states the opportunity to use these funds to finance NPS projects. SRF loans are particularly suitable for funding structural best management practices (BMPs), such as manure holding structures and retention basins. Generally, these loans are not suitable for other program costs, such as salaries and indirect costs.

SRFs were originally established to assist states to upgrade their sewage treatment systems, but the authorizing statute also specifies that NPS activities are eligible for SRF loans. As the number of states meeting performance levels for municipal waste treatment increases, additional states will have the option of using all or part of their SRF resources for NPS abatement.

At present, three states- Washington, California, and Wyoming-are using SRF loans to fund a wide variety of NPS projects. The California case study explains how one state manages the loan process (targeting of loans, loan application, repayment, etc.) and indicates the diversity of NPS projects which can be funded by a SRF. California is providing the largest loans to date, with Fresno County alone receiving twenty million.

Jefferson County, Washington illustrates another way to use SRF funds for NPS purposes. Here, the County uses part of the States's SRF monies to operate a sub-state revolving fund which focuses its loans on two NPS problems: 1) failed septic systems and 2) agricultural runoff. These two problems have been identified as contributing pollution to the Puget Sound. The County provides loans with interest rates as low as zero percent to individuals who meet income and water quality criteria.

Thus far, the NPS funding techniques discussed here have been designed primarily to pay for specific best management practices or BMPs, such as detention basins or septic systems. Other states and localities have taken a different approach. They have established goals for improving water quality in a waterbody and have also found the funding mechanisms to raise the necessary resources to accomplish these goals.

One impressive example of this type of approach is Maryland's Critical Area Program (CAP). To reduce NPS loadings, Maryland employs land use management in a 1000 foot strip around that State's portion of the Chesapeake Bay. Consequently, most of the activities which reduce or prevent loadings (e.g., spacing of housing development and creation of filter strips ) are paid for by individuals or corporations.

However, the State and local governments also provide funding for many planning and legal functions, as well as providing more direct assistance to landowners, for example cost-sharing

of agricultural BMPs. This blending of public and private resources is only one of the many interesting and environmentally valuable aspects of the Critical Areas Program.

Similarly, in Colorado the Cherry Creek Basin Water Quality Authority uses the authority of State a law to obtain revenues to fund both point and nonpoint control of runoff causing eutrophication in the Cherry Creek reservoir. This case study was selected to help other localities which ar seeking ways to finance controls for localized NPS problems.

## **USE OF SPECIAL FEES AND TAXES**

The Iowa Ground Water Protection Act represents a good example of a user fee/tax program established to fund nonpoint source pollution projects and programs. The Iowa law places fees and taxes on the sale of fertilizers and pesticides, waste disposal and underground storage tanks. In this type of program, there is a delicate balance between establishing an economic disincentive which results in water quality benefits and an economic hardship which may be a critical factor for business survival. In Iowa the fees on the sale of pesticides and fertilizers were balanced with an extensive technical assistance and education program which actually resulted in substantial savings to many of the users.

The case studies which follow provide summary information on the funding approaches introduced above. Where additional information is needed by the reader, he or she may consult the Appendix for the names and telephone numbers of contact persons of the principal organization(s) discussed in each study.

# **PART II**

## **CASE STUDIES AND RELATED MATERIALS**

**Stormwater and On-Site Utilities  
State and Sub-State Revolving Funds  
Funding Regional Programs  
Special Fees and Taxes to Fund NPS Programs**

# **STORMWATER AND ON-SITE UTILITIES**

**A Surface and Stormwater Utility  
Examples of Stormwater Utilities  
Three Examples of On-Site Utilities  
Bellevue Ordinances  
Memorandum of Agreement**

**CITY OF BELLEVUE, WASHINGTON  
BELLEVUE STORM AND SURFACE WATER UTILITY**

**SUMMARY**

The Bellevue Storm and Surface Water Utility was formed in 1974 in response to citizen concerns that urbanization was degrading the city's streams and quality of life. Although many cities address surface water management as part of their public works or road maintenance programs, the City of Bellevue took a more comprehensive approach by forming a utility, the functions of which include flood control, protection of aquatic wildlife habitat, public education, maintenance, emergency response, planning, capital improvements, water quality control and regulation of development activities. Water quality control includes monitoring, enforcement and pollution prevention, through such activities as public education, structured inlet sumps and oil separators and regulations governing development.

**INTRODUCTION**

The Utility has an annual operations budget of about \$800,000, and is a significant model for funding NPS programs. Analysis of this budget and the utility's funding mechanisms indicates ways that localities can become financially self-sufficient protectors of their streams and lakes.

With a population of approximately 90,000 bordering Seattle, Bellevue is in the Puget Sound watershed. The city covers 30 square miles and includes over 50 miles of open streams. In 1974 Bellevue passed "An Ordinance relating to storm and surface water, establishing a storm and surface water utility, and adopting a plan and system of storm and surface water sewerage." The mission of the utility is "to manage the storm and surface water system in Bellevue, to maintain a hydrologic balance, to prevent property damage, and to protect water quality; for the safety and enjoyment of citizens and the preservation and enhancement of wildlife habitat."

Based on this ordinance, the Bellevue Storm and Surface Water Utility was formed with authority for construction, condemnation and purchase, acquisition, maintenance, operation and regulation. Responsibilities were transferred from other departments to the utility and the Director of Public Works was initially designated the ex officio administrator. The utility was given authority to raise funds through service charges and

utility revenue bonds. The population was concerned with the rapid growth and development of the 1960's and the resulting threats to Bellevue's quality of life.

The city passed a resolution in 1971 to address erosion and sediment control and a resolution in 1972 to develop policies for a comprehensive storm and surface water drainage system. After experience with these programs and on advice of the city's Citizens Advisory Committee for Stream Resources a public utility was proposed to provide unified management of storm and surface water including drainage as well as water quality.

The first efforts of the utility were focussed on flood control. With a concept of unified stormwater management the utility was receptive to both on site and regional stormwater facilities. As part of a master plan an open stream concept was adopted which was less expensive than traditional storm sewer systems and which favored wildlife habitat and water quality improvements. As the flood control systems were put in place, water quality became a higher priority issue.

Water quality activities include:

1. The installation, inspection and maintenance of inlet sumps for public and private drainage systems.
2. The installation, maintenance and operation of oil/water separators.
3. The use of decant stations to divert polluted storm water to sewage treatment facilities.
4. Water quality monitoring and complaint response for enforcement action.
5. Water quality research including two lake restoration projects.
6. Pollution prevention programs.
7. Development regulation for erosion and sediment control as well as protection of floodplain, wetlands and steep slopes.

8. Public Education including publications, school programs, community outreach, special activities and media materials. Some specific activities include:

- Stream Team Program
- Classroom Salmon Rearing Project
- City Hall "Mini Salmon Hatchery"
- Oil Recycling and Household Hazardous Waste Program
- Student Intern Program
- Business Water Quality/Certification Program.

9. Intergovernmental Coordination

10. Interdepartmental Coordination

The Bellevue Storm and Surface Water Utility receives funds through service fees (utility rate charges), permit fees and grants. The utility rate charges account for about 50% of the budget and are based upon acreage and the amount of impervious area. A typical single family residence is charged approximately \$16.44 every two months. Having a dedicated revenue base adds stability to the program which is no longer based on yearly political decisions. As discussed above, the broad interpretation of the utility mission allows for use of these funds for water quality as well as the traditional public works activities. A strong public education and outreach effort helps the average citizen see their connection to and service from the utility.

#### **COMMENTARY**

The Bellevue Storm and Surface Water Utility was one of the first such utilities in the country and is often used as a model for other areas. A key to the success of the program is the unified approach which integrates the various natural resource management issues from habitat improvements and flood control to water quality. Although other jurisdictions have adopted a utility approach, Bellevue had the foresight in 1974 to consider a broad interpretation of a traditional public works activity.

## **TWO ADDITIONAL EXAMPLES OF STORM WATER UTILITIES**

Storm water is the term generally used to describe rainwater runoff from urban or suburban areas. Much of this runoff is from impervious surfaces, such as roads, which cause flows to increase greatly in volume rather than be partially absorbed by fields and other porous surfaces. Pollutants in storm water include sediments, organic material and heavy metals which are transported via channels, such as sewers, to streams. Studies indicate that storm water adversely affects water quality and can preclude beneficial stream uses, particularly after storm events which dump large quantities of pollutants into streams in a short time period.

The 1987 amendments to the Clean Water Act authorized a Federal regulatory program to abate pollution from storm water. On November 16, 1990, EPA published regulations requiring 220 cities and counties with populations of 100,000 and above and about 100,000 industrial facilities to obtain NPDES permits to discharge storm water. Complying with these regulations will prove costly for many of these communities.

One way to manage and finance solutions to the water quality problems caused by storm water is for a local government to initiate a storm water utility. At present, more than 100 of these utilities exist in this country, and the number is growing. They serve communities ranging in size from 4,300 to 840,000 people and are usually managed by local public works departments. Monthly charges per household are generally quite moderate (less than \$4.00), but the resulting revenue stream is stable and reliable, requiring no subsidy from State or Federal programs.

The process of starting and operating a storm water utility requires an understanding of technical issues (e.g., legal authorities, financial matters including how to establish the rate structure and institutional arrangements such as an administrative structure for the utility). For jurisdictions considering the development of a utility, it may be helpful to consult other local governments which have already solved these problems. Washington State has a number of successful storm water utilities, including the ones described below.

### **SNOHOMISH COUNTY, WASHINGTON**

Snohomish County is an urbanizing area north of Seattle bordering on the Puget Sound, where initial efforts to establish a storm water utility met with considerable opposition. During the mid-eighties, county leaders found themselves in the dilemma of needing planning data to support the development of a utility but not having funding to produce a full range of data necessary to convince voters that the utility was necessary and that rates would be reasonable.

Finally, a solution was found by conducting a small study which documented the need to obtain capital to build six detention ponds. Once it was accepted that the ponds were needed, it was easier to convince people that a utility was the best way to meet all storm water needs. Another way of increasing the political acceptability of the utility was to combine construction of the detention ponds with development of a nature trail and other recreational facilities. The utility began functioning in 1988.

The utility's total budget in 1989 was approximately \$3 million, of which about 50% was generated through utility rates and the balance through a variety of sources, such as real estate excise taxes and the county general fund. Utility rates for landowners are determined by a rate schedule, which features flat rates for residential and agricultural properties and a sliding scale for commercial tracts based on the size of the property and the percentage of impervious surface. In 1989 the average monthly household rate was \$1.83.

The experience of this utility provides an example of successful efforts to overcome community opposition through creative approaches to designing facilities and by sensitivity to the broad needs of the users of the utility's services.

For additional information, please call:

William Derry  
Supervisor, Surface Water Management Program  
Snohomish Public Works  
Everett, WA 98201  
206-259-9464

### **EVERETT, WASHINGTON**

Everett is a city with a population of about 63,000 (area of approximately 50 square miles). Prior to 1989, the city's sewer utility was responsible for storm water functions, such as:

- drainage system maintenance
- construction of regional drainage improvements
- plan review/permit issuance for new development.

In part to comply with the requirements of the Puget Sound Water Quality Management Plan and EPA's storm water regulation and to give higher priority to mitigating NPS effects on water quality, in 1989 Everett expanded its storm water management program to include three new functions:

- capital improvement projects
- surface water monitoring
- community involvement.

In the same year, a separate storm water utility was organized with its own revenues and rate structure. Total revenues in 1989 were about \$1.4 million, of which all but \$10,000 came from rates charged to users. The additional funds came from fees charged to developers.

Residential landowners were charged \$3.40 per month in 1989, while other users were charged \$3.40 per 900 gallons of water used monthly. Exceptions were made for businesses which used large quantities of water but did not make major contributions to storm water (e.g., laundromats).

In addition to the shift to a storm water utility and the change in the rate structure, there has been greater emphasis on reduction of nonpoint source pollution. Capital funds were spent on settling ponds and acquisition of wetlands; water quality monitoring was initiated; and a program was developed to increase public awareness of NPS pollution and community cooperation in implementing NPS controls.

An understanding of the evolution of the program in Everett may be useful to other communities which want to both improve control of storm water and improve water quality.

For additional information, please contact:

Dan Mathias, P.E.  
Associate Engineer  
Public Works Department  
3200 Cedar Street  
Everett, WA 98201  
206-259-8800

## THREE EXAMPLES OF ON-SITE UTILITIES

Failed septic systems, which contribute particularly to contamination and eutrophic conditions in lakes, aquifers, estuaries and other confined waterbodies, are common throughout the United States. Generally, county health departments have some regulatory responsibility for septic systems, although in many cases their role is minimal. For example, a common function is to conduct soil tests prior to approval of the installation of a new system.

Because a significant percentage of septic systems fail after a number of years of use, an initial test does not protect the water quality of an adjacent waterbody for the life of the system. What is required from an environmental perspective is a septic management system featuring the following three functions:

- an initial soil test prior to installation of the system
- periodic inspections to determine if the system is clogged or otherwise malfunctioning
- an enforcement mechanism to assure that problems identified through inspection are corrected (either by the owner or by an agency of local government).

Each of these three functions requires the expenditure of public funds, primarily for staff costs. Rather than use general appropriations for these expenditures, local governments can establish self-funded systems known as on-site utilities.

These types of utilities generate revenues through fees and service charges, and the revenues are used to carry out the essential functions of the on site utility system.

Outlined below are three examples of successful on-site utilities. Each example is different and has one or more features which distinguishes it from the others.

### OKANOGAN COUNTY WASHINGTON

The utility in Okanogan County was established to monitor and protect water quality in a fragile aquifer, primarily by preventing or correcting on-site system failure through inspections and maintenance. Seventy-five percent of the initial capital costs were provided by grants from Washington State, and the balance through the sale of bonds. Operation and maintenance revenues are derived primarily through fees based on rates per unit (a house on a lot counts as two units). The annual fee is approximately \$50. per unit.

The homeowner is required to make the repairs that an inspection identifies as necessary and, if the repairs are not made within the allotted time, the utility will take a lien on the house

equal to the amount spent on the repairs. Water monitoring results indicate that the utility has been successful in its attempt to prevent any deterioration in water quality.

For additional information you may wish to contact:

Dick Sele, Assistant Director  
Public Works/Engineer (Facilities)  
Box 232, Okanogan, WA 98840  
(509) 422-3350

### **STINSON BEACH, CALIFORNIA**

The utility in Stinson Beach is managed by the County Water District. Formed in response to the realization that many of its on-site systems were failing, the utility received "start-up" money from a grant from EPA. The operation and maintenance of the utility is financed by a combination of permit fees, property taxes and additional small "special" fees (ie. new connection fees).

The utility is responsible for: monitoring the surface and ground water for any indications of pollution; to conduct inspections of all on-site systems every two years; and to provide necessary maintenance at the homeowner's expense. If the homeowner refuses to pay for the required maintenance, the utility is able to suspend his/her water service because of its close working relationship with the Water District. Monitoring has demonstrated improvements in Water Quality since the last failed system was corrected, and the community has taken pride in the success of the utility.

For additional information please contact:

Mark S. Richardson, Wastewater Program Supervisor  
Stinson Beach County Water District  
Box 245, Stinson Beach, CA 94970  
(415) 868-1333

### **OTTER TAIL COUNTY, MINNESOTA**

The utility in Otter Tail was created to protect the six lakes in the county from contamination due to on-site system failures and received "start-up" funds from EPA and State grants. Operation and maintenance costs are funded by fees paid by the homeowner. All on-site systems must pay a basic fee for inspections and administration costs, and beyond this initial expenditure the homeowner has the option to pay an additional amount for additional services.

Those who choose to pay an "active" rate receive regular inspections and all necessary maintenance on the system, while those who pay a "passive" rate receive only inspections. Repairs identified by the inspections are at the owners' expense. This approach is well-received by homeowners, and the utility appears to have prevented the deterioration of water quality in the lakes.

For additional information please contact:

Rollie Mann, District Officer  
Route 2, Box 319  
Battle Lake, MN 56515  
(212) 864-5533

CITY OF BELLEVUE, WASHINGTON

ORDINANCE NO. 2003

AN ORDINANCE relating to storm and surface water, establishing a storm and surface water utility, and adopting a plan and system of storm and surface water sewerage.

WHEREAS, by Resolution No. 1840 passed August 9, 1971, the City Council of Bellevue adopted an express policy to provide control of soil erosion and to retard and abate, wherever possible, siltation and sedimentation as the same affect or tend to affect directly or indirectly, streams and other bodies of water within the City, and

WHEREAS, by Resolution No. 2007 passed August 14, 1972, the City Council of Bellevue adopted the following express policies, among others:

a. To incorporate into all land-use planning and into land-use and development regulations of the City, provisions for adequate storm water and surface water drainage, and for protection of the waters of the City, by development as funds, conditions and opportunities permit, of a storm and surface water drainage system within the City, using streams, lakes, and wetlands as part of such system, with adequate protections provided against pollution of waters by silt and sediment, against erosion of lands and against development of excessive impervious land surfaces without adequate provisions being made for drainage of surface and storm waters; and

b. To so control land development and use that streams, lakes, and wetlands within the City and the lands bordering thereon may be used as a means for control and storage of surface waters and ground waters; and

WHEREAS, hydrology and engineering consultants retained by the City under contract entered into in May, 1973, the technical staff of the City, and a citizens advisory committee known as the Citizens Advisory Committee for Stream Resources created pursuant to Resolution No. 1840 have each made one or more presentations or reports to the City Council; and

WHEREAS, after review of the various presentations made to the City Council, and after public hearing thereon, the City Council reaffirms its policies as expressed in Resolution Nos. 1840 and 2007, and finds specifically that land use and development affecting storm and surface water should be managed, regulated and controlled under unified management of a storm and surface water public utility to reduce or control erosion, sedimentation, and particulate and other pollution of water, danger and damage to life and property, and to protect and encourage the use of natural and efficient man-made means to these ends, and

WHEREAS, it is the desire of the City to incorporate into the proposed utility all surface water courses the title to which is held by the City; now, therefore

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. There is hereby created and established a storm and surface water utility of the City which shall administer the City's storm and surface water public utility. The City elects to exercise all the lawful powers necessary and appropriate to the construction, condemnation and purchase, acquisition, addition to, maintenance, conduct and operation, management, regulation and control of, the storm and surface water public utility described in Section 4 of this ordinance and as the same may hereafter be added to, bettered or extended within or without the present and future limits of the City, including, without limitation, all the lawful powers to fix, alter, regulate and control the rate, charges and conditions for the use thereof.

Section 2. The Director of Public Works shall be ex officio administrator of the City storm and surface water public utility, and shall report directly to the City Manager.

Section 3.

(a) There is hereby specified and adopted the original system or plan of the storm and surface water public utility described as set forth on the map attached as Exhibit A hereto and made a part hereof by this reference, and which shall include all properties, interest, and physical and intangible rights of every kind or nature owned or held by the City, however acquired, insofar as they relate to or concern storm or surface water sewage, further including without limitation, all such properties, interests and rights acquired by adverse possession or by prescription, directly or through another, in and to the drainage or storage, or both, of storm or surface waters, or both, through, under, or over lands, landforms, watercourses, sloughs, streams, ponds, lakes, and swamps, all beginning, in each case or instance, at a point where storm or surface waters first enter the storm or surface water system of the City and ending in each case or instance at a point where such storm or surface waters exit from the storm or surface water system of the City, and in width to the full extent of inundation caused by the largest storm or flood condition.

(b) The City Council expressly finds that the value of the above described original system or plan of storm and surface water public utility is equal to the value of release from primary responsibility therefor insofar as they relate to or concern storm or surface waters. Accordingly, all of the City's above-mentioned facilities and rights, insofar as they relate to or concern storm or surface waters are hereby transferred to and subject to the administration of the storm and surface water utility created by this ordinance, and each institution and department of the City having responsibility therefor is, to the same extent, released from such primary responsibility.

Section 4. Inasmuch as the City now owns all those facilities and rights and the original system or plan set forth in Section 3(a) of this ordinance, there is no estimated cost thereof.

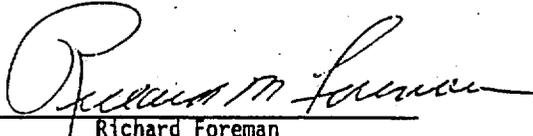
Section 5. If any portion of this ordinance as now or hereafter amended, or its application to any person or circumstances, is held invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole, or any

section, provision or part thereof not adjudged to be invalid or unconstitutional, and its application to other persons or circumstances shall not be affected.

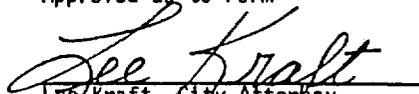
Section 6. This ordinance shall take effect and be in force five (5) days after its passage, approval and legal publication.

PASSED by the City Council this 25 day of February, 1974, and signed in authentication of its passage this 25 day of February, 1974.

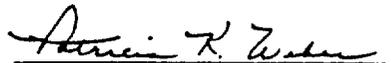
(SEAL)

  
Richard Foreman  
Mayor

Approved as to Form

  
Lee Kraft, City Attorney

Attest:

  
Patricia K. Weber, City Clerk

Published March 7- 1974

**CITY OF BELLEVUE, WASHINGTON**

**ORDINANCE NO. 2429**

**BELLEVUE, WA  
ORDINANCE NO. 2429**

AN ORDINANCE establishing rate classifications and service charges for the Storm and Surface Water Utility of the City of Bellevue.

WHEREAS, by Ordinance No. 2003 the Storm and Surface Water Utility of the City of Bellevue was established, and the City transferred to said utility the City's storm and surface water sewerage system; and

WHEREAS, by Resolution No. 2802 the City Council established a Storm and Surface Water Advisory Commission to review, advise and make recommendations to the City Council regarding, among other items, storm and surface water rate structures; and

WHEREAS, said Commission by its "Report on Utility Rate Structure" dated March 14, 1977, has recommended to the City Council a proposed rate structure; and

WHEREAS, the City Council has reviewed said report and the utility rate structure therein recommended, and concurs therewith; and

WHEREAS, the City Council finds that all real property in the City contributes runoff to common drainage systems, and all property in the City benefits from the Storm and Surface Water Utility System of the City of Bellevue, and therefore should participate financially in payment of the expenses for the maintenance, operation and improvement of said system; and

WHEREAS, the City Council finds that the intensity of development of real property and the area thereof are the primary factors in an individual property's contribution of total and peak flows of storm water runoff to the said utility system; now, therefore,

**THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:**

**Section 1. Definitions.**- The following words when used herein shall have the meanings indicated, unless the context clearly indicates otherwise:

- a. **Hydrologic Response** - The manner and means by which stormwater collects upon real property and is conveyed from real property, and which is a function dependent upon a number of interacting factors, including, but not limited to, topography, vegetation, surficial geologic conditions, antecedent soil moisture conditions and ground water conditions. The principal measures of the hydrologic system may be stated in terms of total runoff volume, as a percentage of total precipitation which runs off, or in terms of the peak rate of flow generated in the

event of a storm of given duration and intensity, or statistical interval of return (frequency).

b. **Total Flow** - The accumulative volume of water discharged from a property, basin, or watershed. The total flow is quantified in measures such as gallons or cubic feet of water.

c. **Peak Flow** - The highest momentary rate of water flow, measured or estimated in cubic feet of water per second or gallons of water per minute. It is differentiated from total flow volume by the introduction of a unit of time measure during which the maximum rate of flow is measured, calculated, or estimated.

d. **Contributors of Drainage Waters** - Shall include all real properties within the City from which flows storm or surface waters, or waters supplied by Municipal or private sources which exit the property as surface flows and/or enter the storm and surface water utility system of the City of Bellevue.

e. **Beneficiaries of Drainage Waters** - Shall include all real properties within the City of Bellevue which benefit by the provision, maintenance, operation and improvement of the storm and surface water control system by the City of Bellevue, regardless of how that system may be constituted. Such benefits may include, but are not limited to, the provision of adequate systems of collection, conveyance, detention, treatment and release of storm water, the reduction of hazard to property and life resulting from storm water runoff, improvement in the general health and welfare through reduction of undesirable storm water conditions, improvements in the water quality in the storm and surface water system in the water quality in the storm and surface water system and its receiving waters, and the limitations of potentially harmful land uses and land alteration activities which might otherwise negatively impact the storm and surface water system.

f. **Impervious Surfaces** - Those hard surfaced areas which either prevent or retard the entry of water into the soil mantle, as it entered under conditions pre-existent to development, and/or cause water to run off the surface in greater quantities or at an increased rate of flow from that present under natural conditions pre-existent to development.

Common impervious surfaces include, but are not limited to, rooftops, concrete or asphalt sidewalks and paving, walkways, patio areas, driveways, parking lots or storage areas and gravel, oiled, macadam or other surfaces which similarly impact the natural infiltration or run off patterns which existed prior to development.

**Section 2.** All real property in the City of Bellevue shall be classified by the Storm and Surface Water Utility according to the square footage of area of the property and the intensity of development set forth below:

- a. **Undeveloped** - Real property which is undeveloped and unaltered by buildings, roads, impervious surfaces or other physical improvements which change the hydrology of the property from its nature state.
- b. **Light Development** - Developed real property which has impervious surfaces of less than 20% of the total square footage of the property.
- c. **Moderate Development** - Developed real property which has impervious surfaces between 20% and 40% of the total square footage area of the property.
- d. **Heavy Development** - Developed real property which has impervious surfaces between 40% and 70% of the total square footage area of the property.
- e. **Very Heavy Development** - Developed real property which has impervious surfaces of more than 70% of the total square footage of the property.

**Section 3.** It is recognized that some properties, due either to their unique topographical, vegetative, surficial geologic, soil moisture and/or ground water characteristics, or to the construction and maintenance of storm and surface water control or detention facilities thereon, have a hydrologic response substantially similar to properties of a lower classification of intensity of development.

The Storm and Surface Water Utility may adjust the intensity of development classification of an individual parcel of property to a classification different than would be indicated by its percentage of impervious surfaces based on hydrologic data to be submitted by the property owner or his agent to the said utility, which demonstrates a hydrologic response substantially similar to that of a property of a different classification set forth in Section 2.

**Section 4.** There is hereby levied upon all real property within the City of Bellevue which contributes drainage water to or which benefits from the function of the storm and surface water utility of the City of Bellevue, and there shall be collected from the owners thereof, monthly service charges based on the square footage of the properties and on the appropriate intensity of development classification of such properties, as follows:

For each additional 2000 square feet of area or increments thereof, and in accordance with the intensity of development classification of the property, the property shall be charged an additional amount per month as follows:

<u>DEVELOPMENT</u>	<u>LIGHT DEVELOPMENT</u>	<u>MODERATE DEVELOPMENT</u>	<u>HEAVY DEVELOPMENT</u>	<u>VERY HEAVY DEVELOPMENT</u>
.078	.117	.156	.234	.312

**Section 5.** The service charges herein established shall apply to services provided on and after June 7, 1977.

**Section 6.** The authority set forth in Ordinance No. 2274 shall apply to the service charges herein imposed.

**Section 7.** If any provisions of this ordinance, or its application to any person or circumstance is held invalid the remainder of the ordinance or the application of the provision to other persons or circumstances is not affected.

**Section 8.** This ordinance shall take effect and be in force five days after its passage and legal publication.

PASSED by the City Council this 31 day of May, 1977, and signed in authentication of its passage this 31 day of May, 1977.

(SEAL)

\_\_\_\_\_  
Gary Zimmerman, Mayor Pro Tem

Approved as to form:

\_\_\_\_\_  
William G. Graves, Assistant City Attorney

Attest:

\_\_\_\_\_  
Sharon S. Stewart, Deputy City Clerk

Published: 6-4-77

TOTAL SQUARE FEET OF PROPERTY	INTENSITY OF				CLASSIFICATION
	UNDEVELOPED	LIGHT DEVELOPMENT	DEVELOPMENT MODERATE DEVELOPMENT	HEAVY DEVELOPMENT	VERY HEAVY DEVELOPMENT
0-2000	\$ .08	\$ .12	\$ .16	\$ .23	\$ .31
2-4000	.16	.23	.31	.47	.62
4-6000	.23	.35	.47	.70	.94
6-8000	.31	.47	.62	.94	1.25
8-10,000	.39	.59	.78	1.17	1.56
10-12,000	.47	.70	.94	1.40	1.87
12-14,000	.55	.82	1.09	1.64	2.18
14-16,000	.62	.94	1.25	1.87	2.50
16-18,000	.70	1.05	1.40	2.11	2.81
18-20,000	.78	1.17	1.56	2.34	3.12
20-22,000	.86	1.29	1.72	2.57	3.43
22-24,000	.94	1.40	1.88	2.81	3.74
24-26,000	1.01	1.52	2.03	3.04	4.06
26-28,000	1.09	1.64	2.19	3.28	4.37
28-30,000	1.17	1.76	2.34	3.51	4.68
30-32,000	1.25	1.87	2.50	3.74	4.99
32-34,000	1.33	1.99	2.66	3.98	5.30
34-36,000	1.40	2.11	2.81	4.21	5.62
36-38,000	1.48	2.23	2.97	4.45	5.93
38-40,000	1.56	2.34	3.12	4.68	6.24
40-42,000	1.64	2.46	3.28	4.91	6.55
42-44,000	1.72	2.57	3.44	5.15	6.86
44-46,000	1.79	2.69	3.59	5.38	7.18
46-48,000	1.87	2.81	3.75	5.62	7.49
48-50,000	1.95	2.96	3.90	5.85	7.80
50-52,000	2.03	3.04	4.06	6.08	8.11
52-54,000	2.11	3.16	4.21	6.32	8.42
54-56,000	2.18	3.28	4.37	6.55	8.74
56-58,000	2.26	3.39	4.53	6.79	9.05
58-60,000	2.34	3.51	4.68	7.02	9.36
60-62,000	2.42	3.63	4.84	7.25	9.67
62-64,000	2.50	3.74	5.00	7.49	9.98
64-66,000	2.57	3.86	5.15	7.72	10.30
66-68,000	2.65	3.98	5.31	7.96	10.61
68-70,000	2.73	4.10	5.46	8.19	10.92
70-72,000	2.81	4.21	5.62	8.42	11.23
72-74,000	2.89	4.33	5.78	8.66	11.54
74-76,000	2.96	4.45	5.93	8.99	11.86
76-78,000	3.04	4.56	6.09	9.13	12.17
78-80,000	3.12	4.68	6.24	9.36	12.48
80-82,000	3.20	4.80	6.40	9.59	12.79
82-84,000	3.28	4.91	6.56	9.83	13.10
84-86,000	3.35	5.03	6.71	10.06	13.42
86-88,000	3.43	5.15	6.87	10.30	13.73
88-90,000	3.51	5.27	7.02	10.53	14.04
90-92,000	3.59	5.38	7.18	10.76	14.35
92-94,000	3.67	5.50	7.34	11.00	14.66
94-96,000	3.74	5.62	7.49	11.23	14.98
96-98,000	3.82	5.73	7.65	11.47	15.29
98-100,000	3.90	5.85	7.80	11.70	15.60

**CITY OF BELLVUE, WASHINGTON**

**ORDINANCE NO. 3158B**

AN ORDINANCE separating the Storm and Surface Water Utility from the Department of Public Works and Utilities and establishing the powers of said departments, amending B.C.C. Ch. 3.39, B.C.C. 3.40.020, B.C.C. 23.76.020 and Ord. 2003 Section 2 (1974), Ord. 2544 Section 1 (1978), Ord. 2963 Section 1, (1981), and Ord. 2799 Section 2 (part) (1979) and adding a new section to B.C.C. Ch. 3.40. WHEREAS, the City Council requested that the City Manager evaluate the organization of the Public Works and Utilities Department and thereafter the City Manager appointed a committee to assist her in the evaluation of options for the reorganization of the Public Works and Utilities Department and the City Manager has considered the report of said committee; and,

WHEREAS, the City Manager submitted three possible methods of reorganization; and

WHEREAS, the City Council reaffirms its policies as expressed in Resolutions 1840 and 2007, and finds that land use and development affecting storm and surface water should be managed, regulated and controlled under unified management of a storm and surface water quality to reduce or control erosion, sedimentation, and particulate and other pollution of water, danger and damage to life and property and to protect and encourage the use of natural and efficient man made means to these ends; and

WHEREAS, by Ordinance 2003, the City Council of the City created and established a Storm and Surface Water Utility to administer, own and operate the City's storm and surface water public utilities and specified and adopted the original system or plan of the storm and surface water public utility, and provided for the management of said utility by the Director of Public Works, ex officio; and

WHEREAS, on November 2, 1976, the majority of the electorate voted on an advisory ballot in favor of the issue proposed to them which read:

Shall all property owners, including undeveloped and tax exempt properties, pay monthly service charges, such monthly rates to relate to the area and state of development of the property, to finance the operation and maintenance of the Bellevue storm and surface water system? The City of Bellevue will establish a citizen's commission, appointed by the Mayor and confirmed by the Council, to advise the City Council regarding rate structure, financial and long-term planning programs for the City's storm and surface water system. Capital improvements, funded by revenue bonds and financed by service charges, shall be subject to voter approval; and

WHEREAS, on September 12, 1977, the City Manager determined and the City Council concurred that Public Works and Utilities be combined into a single department, and such combined department was created by Resolution 2950 and Ordinance 2544; and

WHEREAS, the City Council believes that the Storm and Surface Water Utility needs greater independence and visibility to provide for absolute credibility and accountability, and that this can best be established by establishing the Storm and Surface Water Utility as a separate department operating as a component of the Waterworks Utility; and

WHEREAS, certain codes, heretofore administered by the Public Works and Utilities Department will be administered by the Storm and Surface Water Utility; now, therefore

**THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:**

Section 1: Ordinance 2544 Section 1, Ordinance 2963 Section 1, and B.C.C. 3.39.010, and B.C.C. 3.39.030 are hereby amended to read:

**3.39.010 Department established - Functions.**

The Department of Public Works and Utilities shall perform all functions heretofore performed by said department except the functions of the Storm and Surface Water Utility shall constitute a separate department, operating as a component of the Waterworks Utility as of the effective date of this ordinance. These functions shall include, but not be limited to, the administration, supervision, construction, maintenance and operation of the city's system of streets and other public ways and the water and sanitary sewer systems of the Waterworks Utility.

**3.39.030**

The Director of Public Works and Utilities is authorized to formulate written development standards applicable to the administration, supervision, construction, maintenance and operation of the city's system of streets and other public ways, the water and sanitary sewer systems of the waterworks utility, and the implementation of ordinances administered by the Department of Public Works and Utilities or its director regulating public and private development and work. Said standards shall be effective and shall be enforced by the Department of Public Works and Utilities upon their approval by resolution of the city council. Said standards shall be applied consistently with the provisions of state law and city ordinance.

Section 2. Ordinance 2003 Section 2, and B.C.C. 3.40.010 are hereby amended to read:

**3.40.010 Established - City Powers - Separate Department.**

There is created and established a Storm and Surface Water Utility of the city which shall be a separate department operating as a component of the Waterworks Utility and which shall administer the city's storm and surface water public utility. The city elects to exercise all the lawful powers necessary and appropriate to the construction, condemnation and purchase, acquisition, addition to, maintenance, conduct and operation, management, regulation and control of the storm and surface water public utility described in Section 4 of Ordinance 2003 and as the

same may hereafter be added to, bettered or extended within or without the present and future limits of the city, including, without limitation, all the lawful powers to fix, alter, regulate and control the rate, charges and conditions for the use thereof.

Section 3. Ordinance 2003 Section 2, and B.C.C. 3.40.020 are hereby amended to read:

3.40.020 Director - Appointment - Responsibilities.

The City Manager shall appoint the Director of the Storm and Surface Water Utility who shall report directly to the City Manager. The Director shall be appointed for an indefinite term and may be removed at any time pursuant to the provisions of R.C.W. 35A.13.100. The Director shall direct the operations of the utility including but not limited to the administration, planning, design, construction, operation, maintenance and regulation of the storm drainage system.

Section 4: A new section shall be added to B.C.C. Ch. 3.40:

3.40.040 Development Standards.

The Director of the Storm and Surface Water Utility is authorized to formulate written development standards applicable to the administration, supervision, construction, maintenance and operation of the storm and surface water utility of the city and the implementation of ordinances administered by the Storm and Surface Water Utility regulating public and private development and work. Said standards shall be effective and shall be enforced by the Storm and Surface Water Utility upon their approval by resolution of the city council. Said standards shall be applied consistently with the provisions of state law and city ordinance.

Section 5: Ordinance 2799, Section 2 and B.C.C. 23.76.020 are hereby amended to read:

23.76.020 Permit authority.

The Director of the Storm and Surface Water Utility or his/her designee, hereinafter termed the permit authority, is the designated agent for the issuance of clearing and grading permits. The permit authority shall have the authority to set administrative procedures to carry out the purposes and intent of the Clearing and Grading Code. Such administrative procedures shall be developed in consultation with the technical committee and shall be made available to the public for comment at least seventeen days before adoption.

Section 6: The separation of the Storm and Surface Water Utility into an independent department shall be reviewed by the City Council after one year of operation.

Section 7: This ordinance shall have no effect on the combination of the Storm and Surface Water Utility with the Waterworks Utility of the City of Bellevue under Ordinance No. 2845. In the event of any conflict between this ordinance and Ordinance No. 2845, said Ordinance No. 2845 shall control.

Section 8: This ordinance shall be published by posting it in the three official posting places of the city, and shall take effect and be in force January 1, 1983.

PASSED by the City Council this 27th day of September, 1982, and signed in authentication of its passage this 27th day of September, 1982.

(SEAL)

---

Roy A. Ferguson, Mayor

Approved as to form:

---

Linda M. Youngs, City Attorney

Attest:

---

Marie K. O'Connell, CMC  
Acting City Clerk

Published October 2, 1982

**CITY OF BELLEVUE, WASHINGTON**

**ORDINANCE NO. 3334**

AN ORDINANCE granting to certain senior citizens relief from the City's Utility Occupation tax and from Water, Sewer and Storm and Surface Water Utility service charges; specifying the qualifications and requirements for persons to be entitled to such relief; empowering the Department of Finance to make rules and regulations to implement such relief; adding a new Section 4.10.185 to the Bellevue City Code; amending Sections 1 and 2 of Ordinance No. 2147 and Bellevue City Code Sections 4.10.190 and 4.10.200, as last amended by Sections 1 and 2 of Ordinance No. 2787; amending Section 3 or Ordinance No. 2147 and Bellevue City Code Section 4.10.210; amending Section 4 of Ordinance No. 2787 and Bellevue City Code Section 4.10.220; amending Sections 1 and 2 of Ordinance No. 2880; and amending Section 3 of Ordinance No. 2819.

WHEREAS, because of increased costs of living there is a continuing need to relieve certain senior citizens residing in the City of Bellevue from the effects of the City's Utility Occupation tax and from Water, Sewer and Storm Water Utility service charges; and

WHEREAS, by Chapter 116, Laws of 1979, the City has been expressly authorized to provide utility services at reduced rates to low income senior citizens; and

WHEREAS, the City Council of the City of Bellevue desires to assist senior citizens who receive fixed limited incomes, and who therefore suffer severely from increased costs of living; now, therefore

**THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:**

Section 1. There is hereby added to the Bellevue City Code a new Section 4.10.185 to read as follows:

**4.10.185 Senior citizens - Definitions.**

As used in this chapter, the following terms shall have the following meanings:

- A. "Benefit year" shall mean the twelve month period ending on December 31st of any year during which a senior citizen has paid service charge billings to an organization described in Section 4.10.190;
- B. "Qualifying year" shall mean the twelve month period ending on December 31st of the year immediately preceding the benefit year.

- C. "Senior citizen" shall mean a person described by subsection A of Section 4.10.200.

Section 2. Section 1 of Ordinance No. 2147 as last amended by Section 1 of Ordinance No. 2787 and Bellevue City Code Section 4.10.190 are each hereby amended to read as follows:

4.10.190 Senior Citizen - Tax relief.

There is granted to senior citizens who meet the qualifications and requirements of Section 4.10.200 and 4.10.210, relief from the utility occupation tax of the City as follows:

- A. For all billings paid by the senior citizen during a benefit year for service charges to any organization which paid the utility occupation tax of the City, the City shall reimburse said senior citizen for the utility tax which applied to said billings or, in lieu thereof, at the election of the senior citizen, a minimum amount determined in accordance with subsection B of this Section.
- B. The minimum relief under this chapter for a benefit year is established to be forty-three dollars, adjusted for benefit year 1984 and each subsequent benefit year in accordance with Section 4.10.220, prorated for each month of residency in the City.

Section 3. Section 2 of Ordinance No. 2147 as last amended by Section 2 of Ordinance No. 2787 and Bellevue City Code Section 4.10.200 are each hereby amended to read as follows:

4.10.200 Senior citizen - Qualifications.

To qualify for the relief set forth in Section 4.10.190, a senior citizen shall:

- A. Be sixty-two years of age or older on the first day of the benefit year;
- B. Have an income during the qualifying year, from all sources whatsoever, not exceeding eight thousand eight hundred dollars if a single person, or, a combined income of husband and wife, from all sources whatsoever, not exceeding eleven thousand seven hundred dollars if a married person, adjusted for qualifying year 1984 and each subsequent qualifying year in accordance with Section 4.10.220; and
- C. Have been a resident of the City of Bellevue during all or a portion of the benefit year.

Section 4. Section 3 of Ordinance No. 2147 and Bellevue City Code Section 4.10.210 are each hereby amended to read as follows:

**4.10.210 Senior citizen - Requirements.**

- A. All claims for relief under Section 4.10.190 and 4.10.200 must be made annually and filed with the Department of Finance of the City of Bellevue during the first sixty days of the year following the benefit year.
- B. All billings for which claim is made under Section 4.10.190 and 4.10.200 must be submitted to the Department of Finance as part of the claim for relief.
- C. All claims for relief shall be submitted to the Department of Finance in writing on a form provided by said department and certified by the claimant.
- D. The Department of Finance shall publish rules and regulations to implement this section and Sections 4.10.185, 4.10.190, 4.10.200, and 4.10.220.

**Section 5. Senior citizen - C.P.I. increases.**

The amount of minimum relief established under subsection B of Section 4.10.190 and the amounts of maximum income allowed by subsection B of Section 4.10.200 are hereby increased by an increase in the Seattle-Everett Consumer Price Index for Urban Wage Earners and Clerical Workers for the period ending in September of the benefit year or qualifying year, as the case may be.

**Section 6.** The amendments contained in Sections 1 through 5 of this Ordinance shall apply to all billings paid on or after January 1, 1984.

**Section 7. Senior citizen - Utility service charges.**

**Definitions.** As used in Sections 7 through 11 of this Ordinance and in Sections 1, 2 and 3 of Ordinance No. 2819, as amended by this Ordinance, the following terms shall have the following meanings:

- A. "Benefit year" shall mean the twelve month period ending December 31st of any year during which utility service charges are paid to the City of Bellevue for utility service charges;
- B. "Direct billing customer" shall mean a senior citizen who is directly billed for and who pays the City of Bellevue for utility service charges;
- C. "Indirect billing customer" shall mean a senior citizen who is not directly billed for City of Bellevue utility service charges, but for whose residence some or all

of such charges are paid by a landlord, maintenance association or other third party;

- D. "Qualifying year" shall mean the twelve month period ending December 31st of the year immediately preceding the benefit year; and
- E. "Senior citizen" shall mean a person described by subsection A of Section 2 of Ordinance No. 2819, as amended by this Ordinance.

Section 8. Section 1 of Ordinance No. 2819 as amended by Section 1 of Ordinance No. 2880 is hereby amended to read as follows:

Section 1. Senior citizens - Utility service charges - Relief. There is hereby granted to senior citizens who meet the qualifications and requirements of Sections 2 and 3 of this Ordinance, relief from the City's water, sewer and storm drainage utility service charges as follows:

A. Direct billing customers. Subject to subsection C of this Section, all billings by the City during the benefit year to direct billing customers who meet the qualifications and requirements of Section 2 and 3 of this Ordinance shall be reduced by an amount equal to 75% of the aggregate of the minimum water, sewerage and storm drainage service charges as prescribed by the City's water, sewerage and storm drainage rate ordinance(s) then in effect.

B. Indirect billing customers. Subject to subsection C of this Section, for all billings paid to the City during the benefit year for indirect billing customers who meet the qualifications and requirements of Sections 2 and 3 of this Ordinance, the City shall reimburse such indirect billing customers in an amount equal to 75% of the aggregate of the minimum water, sewerage and storm drainage service charges as prescribed by the City's water, sewerage drainage rate ordinance(s) then in effect.

C. In determining the amount of relief granted under this Section, the minimum water service charge shall not include any consumption charges for water consumed beyond 1,000 cubic feet bi-monthly.

Section 9. Section 2 of Ordinance No. 2819 as amended by Section 2 of Ordinance No. 2880 is hereby amended to read as follows:

Section 2. Senior citizens - Utility service charges - Qualifications. To qualify for the relief set forth in Section 1 of this Ordinance, a senior citizen shall:

- A. Be 62 years of age or older on the first day of the benefit year;

B. Have an income during the qualifying year, from all sources whatsoever, not exceeding eight thousand eight hundred dollars, if a single person; or a combined income of husband and wife, from all sources whatsoever, not exceeding eleven thousand seven hundred dollars, if a married person. Such maximum incomes shall be increased for qualifying year 1984 and each subsequent qualifying year by any increase in the Seattle-Everett Consumer Price Index for Urban Wage Earners and Clerical Workers for the period ending in September of the qualifying year.

C. Have been a resident of the City of Bellevue during all or a portion of the benefit year.

Section 10. Section 3 of Ordinance No. 2819 is hereby amended to read as follows:

Section 3. Senior citizens - Utility service charges - Requirements.

A. All claims for relief under this Ordinance must be made annually and filed with the Department of Finance of the City of Bellevue within the following times:

1. Direct billing customers who file their claim during the first sixty days of the benefit year shall be eligible for a reduction in their billings effective as of the first billing date of the benefit year. Any such customer who files a claim thereafter shall be eligible for a reduction effective as of the billing as of the billing date next following the date of filing.

2. Indirect billing customers shall file their claim during the first sixty days of the year following the benefit year.

B. All billings for which claim is made under this Ordinance must be submitted to the Department of Finance as part of the claim for relief.

C. All claims for relief shall be submitted to the Department of Finance in writing on a form provided by said department and certified by the claimant.

D. The Department of Finance of the City shall publish rules and regulations to implement this Ordinance.

Section 11. The amendments contained in Sections 7 through 10 of this Ordinance shall apply to all billings to direct billing customers dated on or after January 1, 1984, and to all billings for indirect billing customers paid on or after January 1, 1984.

Section 12. This Ordinance shall be published by posting it in the three official posting places of the City, and shall take effect and be in force five days after the date of posting.

PASSED by the City Council this 19th day of December 1983, and signed in authentication of its passage this 19th day of December 1983.

(SEAL)

---

Roy A. Ferguson, Mayor

Approved as to form:

Linda M. Youngs, City Attorney

---

Richard L. Andrews, Assistant City Attorney

---

Marie K. O'Connell, City Clerk

Published: December 24, 1983

**CITY OF BELLEVUE, WASHINGTON**

**ORDINANCE NO. 3688**

AN ORDINANCE increasing storm and surface water drainage charges for the Storm and Surface Water Utility of the City of Bellevue; creating a new classification for wetland; amending the combined rate for large properties; amending the credit provided for detention facilities; adopting certain rate policies; and amending Sections 2, 3 and 4 of Ordinance No. 2429. WHEREAS, Section 4 of Ordinance No. 2429, as amended, requires that the rates and charges established therein be reevaluated no later than five years from March 1, 1982; and

WHEREAS, the Storm and Surface Water Utility, with the advice and assistance of a rate consultant, has reviewed the financial condition of the Utility and has reviewed the rates and charges provided by Ordinance No. 2429 as amended and the policies upon which said rates and charges were established; and

WHEREAS, the rate consultant and the Utility have determined and recommend that the rates and charges of the Utility be modified to provide for a more equitable distribution of said rates and charges; that revenues available to the Utility be increased; and that certain rate policies with respect thereto be adopted; and

WHEREAS, additional revenues for the Utility are necessary to fund the 1987-1991 Utility CIP, reestablish reserves used for the January, 1986 storm emergency, improve the Utility's debt coverage factor, and to provide for increased operations and maintenance costs resulting from CIP construction, plat dedications, annexations, and in anticipation of new federal regulations on storm water quality; and

WHEREAS, a public hearing was held on June 23, 1986, with regard to said proposed increase in the Utility's rates and charges; and

WHEREAS, the Storm and Surface Water Advisory Commission has reviewed the proposed modifications to the Utility's rates and charges and the proposed rate policies and on July 10, 1986 recommended adoption of said proposals and policies; now, therefore,

**THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:**

Section 1. Section 4 of Ordinance No. 2429 as amended by Section 2 of Ordinance No. 2577 and further amended by Section 1 of Ordinance No. 3080 is further amended to read as follows:

Section 4. There is hereby levied upon all real property within the City of Bellevue which contributes drainage water to or which benefits from the function of the Storm and Surface Water Utility of the City of Bellevue, and there shall be collected from owners thereof, monthly service charges based on the square footage of the properties on the appropriate intensity of development classification(s) of such properties, such that for each 2,000 square feet of area or increments thereof, the property shall be charged an amount per month as follows:

<u>Wetland</u>	<u>Undeveloped</u>	<u>Light Development</u>	<u>Moderate Development</u>	<u>Heavy Development</u>	<u>Very Heavy Development</u>
\$0.00	\$0.14	\$0.81	\$1.01	\$1.51	\$2.03

and each account shall be charged an additional customer charge in the amount of \$0.89 per month, and there shall be collected from the owners of undeveloped properties which become developed a "late-comer" facilities charge of \$11.87 per equivalent billing unit per year from March 1, 1982 to date of development, pro-rated on a monthly basis. An equivalent billing unit shall be defined as the number of square feet of property divided by 2,000 square feet times the runoff coefficient associated with the newly developed property's intensity of development classification. The runoff coefficient for the following development classifications are defined as follows: Wetland: 0.00; Undeveloped: 0.25; Light Development: 0.4; Moderate Development: 0.5; Heavy Development: 0.75; Very Heavy Development: 1.00.

The rates and charges established herein shall be reevaluated no later than five years from September 1, 1986.

Section 2. Section 3 of Ordinance No. 2429 as amended by Section 1 of Ordinance No. 2577 is hereby further amended to read as follows:

Section 3. The Storm and Surface Water Utility may reclassify an individual parcel of property to the next lower classification of intensity than would be indicated by its percentage of impervious surfaces based on hydrologic data to be submitted by the property owner or his agent to the said Utility, which demonstrates a hydrologic response substantially similar to that of a parcel of property of such lower classification of intensity.

The City Council further finds that, in the case of some parcels of property of more than 35,000 square feet in size, in addition to the conditions set forth in paragraph 1 of this section, there may be intensities of development on portions of such parcels of property which differ significantly from other portions of such property in terms of hydrologic response. To provide for consideration of the variation in intensity of development which may be present on such parcels of property, the Storm and Surface Water Utility may classify portions of such parcels of property in any of the classifications defined in Section 2 on the basis of hydrologic response. Provided, however, that at least 35,000 square feet shall be classified in the most intense classification appropriate to a portion of the parcel of property.

Section 3. Section 2 of Ordinance No. 2429 is hereby amended to read as follows:

Section 2. All real property in the City of Bellevue shall be classified by the Storm and Surface Water Utility according to the square footage of area of the property and the intensity of development set forth below:

- a. Wetlands - Real property or a portion of real property that has been designated as "wetlands" pursuant to the City's Sensitive Areas Notebook, as hereafter adopted. Such property shall continue to be charged under its existing classification until it has been specifically designated as "wetlands" pursuant to the Sensitive Areas Notebook.
- b. Undeveloped - Real property which is undeveloped and unaltered by buildings, roads, impervious surfaces or other physical improvements which change the hydrology of the property from its nature state.
- c. Light Development - Developed real property which has impervious surfaces of less than 20% of the total square footage area of the property.
- d. Moderate Development - Developed real property which has impervious surfaces between 20% and 40% of the total square footage area of the property.
- e. Heavy Development - Developed real property which has impervious surfaces between 40% and 70% of the total square footage area of the property.
- f. Very Heavy Development - Developed real property which has impervious surfaces of more than 70% of the total square footage area of the property.

Section 4. The rate policies given Clerk's Receiving No. 11466 are hereby adopted.

Section 5. The revised monthly service charges, monthly customer charge and late-comer facilities charge, herein established shall take effect on September 1, 1986.

Section 6. This ordinance shall take effect and be in force five days after its passage and legal publication.

PASSED by the City Council this 28th day of July, 1986 and signed in authentication of its passage this 28th day of July, 1986.

(SEAL)

\_\_\_\_\_  
Cary E. Bozeman, Mayor

Approved as to form:

Richard L. Andrews, City Attorney

\_\_\_\_\_  
Richard Gidley, Assistant City Attorney

Attest:

\_\_\_\_\_  
Marie K. O'Connell, City Clerk

Published August 3, 1986

**CITY OF BELLEVUE, WASHINGTON**

**ORDINANCE NO. 4309**

AN ORDINANCE increasing storm and surface water drainage charges for the Storm and Surface Water Utility of the City of Bellevue; and amending Section 4 of Ordinance No. 2429, as amended.

**WHEREAS**, the Storm and Surface Water Utility, with the advice and assistance of a rate consultant, has reviewed the financial condition of the Utility and has reviewed the financial condition of the Utility and has reviewed the rates and charges provided by Ordinance No. 2429, as amended, and the policies upon which said rates and charges were established; and

**WHEREAS**, the rate consultant and the Utility have determined and recommend that the rates and charges of the Utility be increased; and

**WHEREAS**, additional revenues for the Utility are necessary to fund the 1991-1997 Utility CIP; maintain adequate reserves; and to provide for continuance of water quality and education programs previously funded by grants; as well as other increased operating and debt service costs; and

**WHEREAS**, a public hearing was held before the Environmental Service Commission on November 7, 1991 and another public hearing was held on November 12, 1991, with regard to the budget of the City of Bellevue for 1992; and

**WHEREAS**, the Environmental Services Commission has reviewed the proposed modifications to the Utility's rate and charges and on November 21, 1991, recommended adoption of said modifications; now, therefore,

**THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES ORDAIN AS FOLLOWS:**

Section 1. Section 4 of Ordinance No. 2429 as amended by Section 2 of Ordinance No. 2577 and as further amended by Section 1 of Ordinance No. 3080, Section 1 of Ordinance No. 3688, Section 1 of Ordinance No. 3980 and Section 1 of Ordinance No. 4198, is further amended to read as follows:

Section 4. There is hereby levied upon all real property within the City of Bellevue which contributes drainage water to or which benefits from the function of the Storm and Surface Water Utility of the City of Bellevue, and there shall be collected from the owners thereof, monthly service charges based on the square footage of the properties and on the appropriate intensity of

development classification(s) of such properties, such that for each 2,000 square feet of area or increments thereof, the property shall be charged an amount per month as follows:

<u>Wetland</u>	<u>Undeveloped</u>	<u>Light Development</u>	<u>Moderate Development</u>	<u>Heavy Development</u>	<u>Very Heavy Development</u>
\$0.00	\$0.17	\$0.99	\$1.23	\$1.83	\$2.46

and each account shall be charged an additional customer charge in the amount of \$1.08 per month, and there shall be collected from the owners of undeveloped properties which become developed a "late-comer" facilities charge of \$11.87 per equivalent billing unit per year from March 1, 1982 to date of development, pro-rated on a monthly basis. An equivalent billing unit shall be defined as the number of square feet of property divided by 2,000 square feet times the runoff coefficient associated with the newly developed property's intensity of development classification. The runoff coefficient for the following development classifications are defined as follows: Wetland: 0.00; Undeveloped: 0.25; Light Development: 0.4; Moderate Development: 0.5; Heavy Development: 0.75; Very Heavy Development: 1.00.

The rates and charges established herein shall be reevaluated no later than five years from the effective date of this Ordinance.

Section 2. The revised monthly service charges and monthly customer charge established in Section 1 of this ordinance shall take effect on January 1, 1992.

**MEMORANDUM OF AGREEMENT  
SEPTIC SYSTEM REPAIR PROGRAM**

WHEREAS, the Jefferson County Planning and Building Department has been designated lead agency in addressing water quality issues in Jefferson County, and

WHEREAS, the Jefferson County Health Department Environmental Health Division is charged with the responsibility to oversee a number of environmental quality programs including the design and installation of on-site sewage disposal systems, and

WHEREAS, Jefferson County has received a Centennial Clean Water Fund (CCWF) grant to address non-point pollution problems or potential problems within the county, and

WHEREAS, said grant contains specific work elements (see Attachment A) concerning on-site sewage disposal systems as a potential contributor of water quality degradation, and

WHEREAS, Jefferson County has also received loan funds from the Washington State Water Pollution Revolving Loan Fund (SRF) to provide low interest loans to individuals with problem septic systems, and

WHEREAS, the two programs, the CCWF grant and the SRF loan, are intended to work in tandem to address on-site sewage disposal as a contributor or potential contributor to water quality degradation,

NOW THEREFORE IT IS AGREED, the Jefferson County Health Department Environmental Health Division will perform the tasks outlined on Attachment A: including septic repair design or design oversight, public education, promotion of SRF funds availability to assist in system repairs, oversight a repair installation and final approval all systems repaired under this program. The division will keep accurate records of assistance and education provided and transmit the same to the Planning and Building Department as provided for in Appendix A.

BE IT FURTHER AGREED, that the Jefferson County Planning and Building Department will transfer twenty two thousand dollars (\$22,000) annually to the Health Department to fund the work elements outlined in Attachment A. The department shall also act as the loan agent for SRF monies and provide loan assistance to all eligible parties referred by the Health Department.

BE IT FURTHER AGREED, that departments will work in mutual cooperation to accomplish the goals and objectives of the water quality grant and loan programs and perform the necessary tasks to ensure their successful implementation.

AGREED THIS \_\_\_\_ DAY OF \_\_\_\_\_ 1990

---

Cathy Stafford, Administrator, Health Department

AGREED THIS \_\_\_\_ DAY OF \_\_\_\_\_ 1990

---

David Goldsmith, Director, Planning and Building Department

# **STATE AND SUB-STATE REVOLVING FUNDS**

**California's State Revolving Fund  
Loans from California's SRF  
California's Legislation  
Washington's Revolving Fund  
Resolution 11-90  
Memorandum of Agreement**

## STATE OF CALIFORNIA NPS LOANS FROM THE STATE REVOLVING FUND

### SUMMARY

The State of California was one of the first states in the nation to use its state revolving fund (SRF) to make loans for NPS projects. The fund is administered by the State Water Board. The State Water Board has separated the administration of the fund from the wastewater treatment facilities program and has developed a flexible program which will evaluate and select for funding a wide variety of nonpoint source pollution projects.

To date, the state revolving fund has been used to purchase efficient irrigation equipment to reduce salt and selenium contamination, for sediment control, for wetlands development to improve water quality from storm water discharges, to connect storm sewers to combined systems, and to improve water quality through stormwater retention and detention basins. About ten projects are in various stages of development. These projects all have been evaluated and selected on the basis of water quality benefits.

### INTRODUCTION

The State of California recognizes that nonpoint sources are a major cause of water pollution in the state. The Federal Water Pollution Control Act, as amended in 1987, allowed states which had adequately addressed their needs for sewage treatment facilities to use funds from their state revolving funds to address nonpoint source pollution. California was one of the first states in the country to use its SRF for NPS purposes.

The administration of the program is through the State Water Resources Control Board which provides SRF loan funding for wastewater treatment facilities, nonpoint source pollution programs and estuary programs. The Board separated the management of its wastewater treatment projects and its nonpoint source pollution programs. This decision facilitated use of the fund for nonpoint source pollution projects without the traditional requirements of the municipal facilities program.

The State Water Board developed a NPS program for the SRF which has resulted in the funding of a variety of projects. Eligible NPS projects include construction of demonstration projects, retention/detention basins, wetlands for stormwater treatment and a variety of best management practices to reduce or remove pollutants. Eligible programs

could also include training, public education, technology transfer, ordinance development and/or development of management practices. Priority NPS categories for funding include silviculture, mining, agriculture and urban runoff.

The NPS program for the SRF also permits the establishment of substate revolving funds which can provide funding to private individuals, within septic system maintenance districts.

Interest on the loans is tied to 1/2 the states general obligation bond rate, as determined by the most recent bond sale; and terms of payments can be as long as 20 years. Loans can cover 100% of the project or program costs. Repayments usually begin one year after a program or project is implemented.

The types of projects funded so far by the SRF include three separate loans for water districts to purchase efficient irrigation equipment for agricultural use. By using better equipment, the drainage from irrigation is reduced and therefore selenium and salts from the soil are reduced. In addition, funds are being used to develop a wetlands as a treatment measure for stormwater runoff, to establish stormwater retention and detention basins to connect storm sewers to an upgraded combined sewer system, to control sediments and to develop a stormwater management program. In the future, California expects to establish substate revolving funds to address on-site treatment problems.

A loan request from the state revolving fund is made by submitting an eight page application which requires basic backup information. The local government is required to pass a brief resolution which establishes a dedicated source of repayment for the loan. The State Water Board identifies the project in the annual SRF Intended Use Plan which is approved through a public hearing process.

#### **COMMENTARY**

The State Water Resources Control Board has a variety of funding sources to provide resources for NPS projects and programs at the local level. In addition, local governments have bonding authority and other ways to generate revenues to carry out nonpoint source pollution control activities. Therefore, the Board has decided to use the state revolving fund to fund a broad range of activities, depending on local needs.

## **COMMENTARY Continued...**

Although requests for loans from the SRF have been limited, projects funded to date provide good examples of SRF use for NPS purposes. The State anticipates increased requirements for nonpoint source pollution, coastal zone management and stormwater management which will probably increase the use of SRF funds.

In setting up and administering the state revolving fund, state staff have emphasized the need for loan recipients to be credit worthy. In general, this issue has been addressed by selecting municipalities with assured sources of income as loan recipients. Some communities have also expressed concerns regarding other administrative requirements, such as annual public hearings on the list of projects which the state proposes for funding. However, in general, these administrative requirements do not appear to have adversely affected the selection of worthy projects.

The State of California has established the state revolving fund as one more tool to address nonpoint source pollution where it can be appropriately utilized. The State has left the interpretation of the program flexible so it can be used in a variety of situations. The projects selected were evaluated on the basis of water quality benefits and are expected to realize these benefits after construction or implementation.

## CALIFORNIA STATE REVOLVING FUND PROJECT LIST

### AGENCY

### DESCRIPTION

Fresno Metropolitan Flood  
Control District

Set up of a stormwater quality management program, purchase sites for stormwater retention and detention basins, and construct stormwater retention and detention basins. The loan contract was executed on 11/07/91. The District has begun work on several components of the agreement.

City and County of San  
Francisco

Construction of a 5' diameter transport, storage sewer in the 20th Street Subbasin to control stormwater flows to San Francisco Bay. The loan contract was executed on 11/14/91. Project is presently under construction.

Walker River Irrigation  
District

Removal of sediment from the East Fork of the Walker River. The loan contract was executed on September 23, 1991. The project was completed 7/92.

Firebaugh Canal Water  
District

Purchase of efficient irrigation equipment for lease to local farmers. More efficient irrigation results in a significant reduction in the amount of drainage, which is high in selenium and salts. The loan contract was executed on 01/02/92.

City of Davis

Construction of a wetland to treat stormwater prior to discharge to the Yolo Bypass. The project is in conjunction with a Army Corps of Engineers program to develop wetlands in the Pacific Flyway. Currently finalizing negotiations.

City of Stockton

Set up of a stormwater quality management program. State signature is pending. Work has begun.

## Senate Bill No. 1284

## CHAPTER 1313

An act to add Chapter 6.5 (commencing with Section 13475) to Division 7 of the Water Code, relating to water pollution control, making an appropriation therefor, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 28, 1987. Filed with Secretary of State September 28, 1987.]

## LEGISLATIVE COUNSEL'S DIGEST

SB 1284, Bergeson. Water pollution control: revolving fund.

Under existing law, various bond acts have been adopted to provide necessary funds to ensure the full participation by the state under the federal Clean Water Act in obtaining funds for the construction of treatment works.

This bill would create the State Water Pollution Control Revolving Fund and would continuously appropriate the moneys in the fund to the State Water Resources Control Board for expenditure, as specified. The bill would establish in the fund a Federal Revolving Loan Fund Account and a State Revolving Loan Fund Account to comply with the federal Tax Reform Act of 1986. The bill would specify the powers of the board in administering the fund, would authorize the board to enter into specified agreements with the federal government with respect to the fund, and would permit moneys in the fund to be used for specified purposes relating to the construction of treatment plants and related activities. The board would be authorized to enter into contracts or procure services or equipment, notwithstanding any other provision of law, to comply with requirements imposed by the federal Tax Reform Act of 1986, or the federal Clean Water Act, with respect to the fund.

The bill would make legislative findings and declarations.

The bill would declare that it is to take effect immediately as an urgency statute.

Appropriation: yes.

*The people of the State of California do enact as follows:*

SECTION 1. Chapter 6.5 (commencing with Section 13475) is added to Division 7 of the Water Code, to read:

CHAPTER 6.5. STATE WATER POLLUTION CONTROL REVOLVING FUND

13475. (a) The Legislature hereby finds and declares that since the federal Clean Water Act (33 U.S.C. Sec. 1251 et seq.) provides for

establishment of a perpetual water pollution control revolving loan fund, which will be partially capitalized by federal contributions, it is in the interest of people of the state, in order to ensure full participation by the state under the federal Clean Water Act, to enact this chapter to authorize the state to establish and implement a state/federal water pollution control revolving fund in accordance with federal provisions, requirements, and limitations.

(b) The primary purpose of this chapter is to enact a statute consistent with the provisions and requirements of the federal Clean Water Act, as those provisions, requirements, and limitations relate to establishment, management, and operation of a state/federal water pollution control revolving fund. It is the intent of the Legislature that the terms of this chapter shall be liberally construed to achieve this purpose.

13476. As used in this chapter, unless the context otherwise requires:

(a) "Board" means the State Water Resources Control Board.

(b) "Federal Clean Water Act" or "federal act" means the federal Water Pollution Control Act (33 U.S.C. Sec. 1251 et seq.) and acts amendatory thereof or supplemental thereto.

(c) "Fund" means the State Water Pollution Control Revolving Fund.

(d) "Municipality" shall have the same meaning and construction as in the federal act and also includes all state, interstate, and intermunicipal agencies.

(e) "Publicly owned" means owned by a municipality.

13477. The State Water Pollution Control Revolving Fund is hereby created in the State Treasury, and, notwithstanding Section 13340 of the Government Code, all moneys in the fund are continuously appropriated without regard to fiscal years to the board for expenditure in accordance with this chapter. The board is the state agency responsible for administering the fund. In order to facilitate compliance with the federal Tax Reform Act of 1986 (Public Law 99-514), there is hereby established in the fund a Federal Revolving Loan Fund Account and a State Revolving Loan Fund Account. From time-to-time thereafter, the board may modify existing accounts in the fund and may establish other accounts in the fund, and in all other funds administered by the board, which the board deems appropriate or necessary for proper administration.

13478. The board may undertake any of the following:

(a) Enter into agreements with the federal government for federal contributions to the fund.

(b) Accept federal contributions to the fund.

(c) Use moneys in the fund for the purposes permitted by the federal act.

(d) Provide for the deposit of available and necessary state moneys into the fund.

(e) Make requests on behalf of the state for deposit into the fund

of available federal moneys under the federal act and determine on behalf of the state appropriate maintenance of progress toward compliance with the enforceable deadlines, goals, and requirements of the federal act.

(f) Determine on behalf of the state that publicly owned treatment works which receive financial assistance from the fund will meet the requirements of, and otherwise be treated as required by, the federal act.

(g) Provide for appropriate audit, accounting, and fiscal management services, plans, and reports relative to the fund.

(h) Take such additional incidental action as may be appropriate for adequate administration and operation of the fund.

13479. (a) The board may enter into an agreement with the federal government for federal contributions to the fund only (1) when the state has appropriated any required state matching funds, and (2) when the board is prepared to commit to expenditure of any minimum amount in the fund in the manner required by the federal act.

(b) Any agreement between the board and the federal government shall contain those provisions, terms, and conditions required by the federal act, and any implementing federal rules, regulations, guidelines, and policies, including, but not limited to, agreement to the following:

(1) Moneys in the fund shall be expended in an expeditious and timely manner.

(2) All moneys in the fund as a result of federal capitalization grants shall be used to assure maintenance of progress toward compliance with the enforceable deadlines, goals, and requirements of the federal act, including any applicable municipal compliance deadlines.

(3) Publicly owned treatment works which will be constructed, in whole or in part, before federal fiscal year 1995 shall meet the requirements of, or otherwise be appropriately treated under the applicable provisions of, the federal act.

13480. (a) Moneys in the fund shall be used only for the permissible purposes allowed by the federal act, including providing financial assistance for the following purposes:

(1) The construction of publicly owned treatment works, as defined by Section 212 of the federal act, by any municipality.

(2) Implementation of a management program pursuant to Section 319 of the federal act.

(3) Development and implementation of a conservation and management plan under Section 320 of the federal act.

(4) Financial assistance, other than a loan, toward the nonfederal share of costs of any grant funded treatment works project, but only if that assistance is necessary to permit the project to proceed.

(b) Consistent with expenditure for authorized purposes, moneys in the fund may be used for the following purposes:

(1) Loans which shall (A) be made at or below market interest rates, (B) require annual payments of principal and any interest, with repayment commencing not later than one year after completion of the project for which the loan is made and full amortization not later than 20 years after project completion, (C) require the loan recipient to establish an acceptable dedicated source of revenue for repayment of any loan, and (D) contain such other terms and conditions as may be required by the board or the federal act or applicable rules, regulations, guidelines, and policies. To the extent permitted by federal law, the interest rate shall be set at a rate equal to 50 percent of the interest rate paid by the state on the most recent sale of state general obligation bonds and the interest rate shall be computed according to the true interest cost method. If the interest rate so determined is not a multiple of one-tenth of 1 percent, the interest rate shall be set at the multiple of one-tenth of 1 percent next above the interest rate so determined. Any loan from the fund used to finance costs of facilities planning, or the preparation of plans, specifications, or estimates for construction of publicly owned treatment works shall require that, if the loan recipient receives a grant under Section 201(g) and an allowance under Section 210(l)(1) of the federal act for nonfederal funds expended for that planning or preparation, the recipient shall promptly repay to the fund any portion of the loan used for the planning or preparation to the extent of that allowance.

(2) To buy or refinance the debt obligations of municipalities within the state at or below market rates if those debt obligations were incurred after March 7, 1985.

(3) To guarantee, or purchase insurance for, local obligations where that action would improve credit market access or reduce interest rates.

(4) As a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the state, if the proceeds of the sale of those bonds will be deposited in the fund.

(5) To establish loan guarantees for similar revolving funds established by municipalities.

(6) To earn interest.

(7) For payment of the reasonable costs of administering the fund and conducting activities under Title VI of the federal act. Those costs shall not exceed 4 percent of all federal contributions to the fund, except that if permitted by federal and state law, interest repayments into the fund and other moneys in the fund may be used to defray additional administrative and activity costs to the extent permitted by the federal government and approved by the Legislature in the Budget Act.

(8) For financial assistance toward the nonfederal share of the costs of grant funded treatment works projects to the extent permitted by the federal act.

13481. The fund shall be used to provide financial assistance only for projects which are (a) consistent with plans, if any, developed under Sections 205 (j), 208, 303 (e), 319, and 320 of the federal act, and (b) on the approved state priority list adopted under Section 216 of the federal act.

13482. (a) In accordance with the Clean Water Bond Law of 1984 (Chapter 13 (commencing with Section 13999)), the board, with the approval of the Clean Water Finance Committee, may transfer funds from the Clean Water Construction Grant Account to the fund for the purpose of meeting federal requirements for state matching moneys in the fund.

(b) Any repayment of fund moneys, including interest payments, and all interest earned on or accruing to any moneys in the fund, shall be deposited in the fund and shall be available, in perpetuity, for expenditure for the purposes and uses permitted by the federal act.

13483. (a) To the extent permitted by federal and state law, moneys in the fund may be used to rebate to the federal government all arbitrage profits required by the federal Tax Reform Act of 1986 (Public Law 99-514), or any amendment thereof or supplement thereto. To the extent that this use of the moneys in the fund is prohibited by federal or state law, any rebates required by federal law shall be paid from the General Fund or other sources, upon appropriation by the Legislature.

(b) Notwithstanding any other provision of law or regulation, the board may enter into contracts, or may procure those services and equipment, which may be necessary to ensure prompt and complete compliance with any provisions relating to the fund imposed by either the federal Tax Reform Act of 1986 (Public Law 99-514) or the federal Clean Water Act.

13485. The board may adopt rules and regulations necessary or convenient to implement this chapter and to meet federal requirements pursuant to the federal act.

SEC. 2. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to assure maximum participation in federal funding sources, provide maximum opportunity for all California municipalities to participate in available financial assistance for construction of treatment works, assist municipalities in meeting statutory deadlines, and provide for continuation of prompt construction of needed treatment works, it is necessary that this act take effect immediately.

O

# JEFFERSON COUNTY, WASHINGTON WATER QUALITY IMPROVEMENT FUND

## SUMMARY

In 1989 the State of Washington established a Water Pollution Control Revolving Fund (SRF) which would provide loans for several purposes, including funding for nonpoint source projects. Jefferson County then entered into an agreement with the State to start a program called the Jefferson County Water Quality Improvement Fund (WQIF). WQIF funds are distributed in the form of loans and are targeted to correct malfunctioning septic systems and abate runoff from agricultural lands. Interest rates for the loans varies from 0 - 8% annually based upon eligibility and ability to pay. To date, the county has received \$200,000 which it will have to repay the state in 10 years. The fund has been used to renovate malfunctioning septic tanks in low income homes which were affecting shellfish beds and salmon spawning areas. Some agricultural uses of the fund are in the planning stage.

The Jefferson County Water Quality Improvement Fund is the finest example in the nation of a program created to address nonpoint source pollution problems.

## INTRODUCTION

Jefferson County, Washington is located in the Olympic Mountains and has both Pacific Ocean and Puget Sound coastlines. The coastal area has very unique oyster beds and is a significant breeding area for Pacific Salmon. Most of the land within the County is part of the Olympic National Forest and Park. Due to shellfish bed closures in 1985 and a concern for salmon, a monitoring program began which showed that nonpoint source pollution from agriculture and failing septic systems was causing water quality problems.

To address high priority water quality problems, the County entered into an agreement with the State to utilize the State Revolving Fund to establish a program called the Jefferson County Water Improvement Fund. Washington's SRF is similar to those in all states. It was capitalized by grants from the Environmental Protection Agency (EPA) and state matching funds and can be used to address several specific types of water pollution problems. The loans from the fund of \$200,000 have been targeted to low income and/or senior citizen households and agriculture. The \$200,000 fund was divided into two subprograms \$100,000 for malfunctioning septic systems and \$100,000 for agricultural conservation practices. The WQIF was established in June of 1990 and so far has been used to make 21 loans.

## **PROVISIONS OF THE WATER QUALITY IMPROVEMENT FUND (WQIF)**

Landowners follow a series of steps to identify a need and to apply and receive funds from the WQIF. The WQIF program steps are as follows:

### **1. PROBLEM IDENTIFICATION**

A water quality problem or potential problem (septic or agricultural) is identified and referred to the appropriate department or agency (County Health Department or County Conservation District) for response.

### **2. REHABILITATION ASSESSMENT**

The department or agency will work with the landowner to develop rehabilitation measures to correct the problem, at which point the applicant is referred to the WQIF program to fund the rehabilitative measures. Application forms are available from the Planning and Building Department's Water Quality Program.

### **3. APPLICATION TO WQIF**

Application to the Jefferson County Planning and Building Department is made, the application processed and the applicant notified that he is accepted or not for a loan. Applications are prioritized by severity of water quality impacts and income level.

### **4. DESIGNS, BIDS AND PERMIT**

Applicants with conventional septic systems will work, in most cases, with the Health Department. Applicants with alternative septic systems work, in most cases, with a private alternative septic system designer (for system design) and a private contractor (for system installation). The applicant must submit bids from both the contractor and the designer to the Planning and Building Department. All septic system projects must apply for and receive a sewage disposal permit from the Health Department before proceeding with Step 5. Applicants with an agricultural project must secure a costs and materials estimate from their chosen building supply business and submit it to the Planning and Building Department before proceeding to step 5.

### **5. LOAN PROCESSING AND WORK AUTHORIZATION**

The loan agreement, promissory note, and deed of trust are completed by the Planning and Building Department. Work on the corrective measures is then authorized.

## 6. APPROVAL AND REIMBURSEMENT

Upon completion, the work is inspected and approved by the appropriate agency or department; the loan agreement, promissory note, deed of trust and maintenance agreement (if any) with the Public Utilities District #1 are executed, and the contractors (septic) or materials supplier (agricultural) are reimbursed by the county.

### INTEREST RATES FOR THE WOIF PROGRAM ARE AS FOLLOWS:

Low Income/Senior Citizen		Other Citizens	
0-5 years	no interest	0-5 years	6% annually
6+ years	4% annually	6+ years	8% annually

Senior citizens and/or low income applicants will have varying repayment schedules based on the ability to pay. In some cases, there is no interest or repayments and the county will receive repayment when the property is sold or becomes part of an estate settlement at the death of a resident. If a person fails to carry out the operation and maintenance of a conservation practice or system the loan can become due on demand.

Land owners have been fortunate that a local lawyer has volunteered one to two hours to work with applicants if they need assistance.

### PROGRAM ADMINISTRATION AND IMPLEMENTATION

In 1989 the State of Washington passed a law to set up a State Revolving Fund. Chapter 173-98 of the Washington code establishes the uses and limitations of the Water Pollution Control Revolving Fund. To utilize the state funds at a substate level, Jefferson County took the following actions.

In 1990 Jefferson County applied to the State and received \$200,000. to establish a revolving fund. The County's application outlined its program and included a commitment to repayment of principal with 4% interest for 10 years. The County Board of Commissioners demonstrated their commitment by passing a resolution entitled "A Resolution Committing To The Repayment of Loan, State of Washington, Washington State Water Pollution."

To carry out the program a memorandum of agreement was entered into with the Jefferson County Soil Conservation District for agricultural practices and the Health Department for septic system repairs. The Public Utility District #1 agreed to municipal oversight inspection of repaired septic systems. The Jefferson County Planning and Building Department handles applications, approves bids, prepares the loan package, disburses funds to bidders and sends a voucher to the state for reimbursement.

The funds received by the County can be used for technical assistance, such as outside engineering services. The cost becomes part of the loan. Administrative costs become indirect costs borne by the county and the installation costs are included as part of the loan. A loan application must have the approval of the County Board of Commissioners.

## COMMENTARY

Jefferson County was faced with the serious issue of shellfish bed closure and the deterioration of spawning beds for salmon. The problems of malfunctioning septic systems and agricultural nonpoint source pollution had been identified as major contributors to the water quality problem. Advocacy groups such as the watermen and fishing organizations were asking for action. So when the Washington State Revolving Fund was established, the county quickly established a program to help resolve some of the identified problems.

In the first year of the program, 17 applicants were serviced for septic system repairs and replacements. A key to working effectively with the senior citizens and/or low income residences was the involvement of staff of county health department. The social workers already were aware of some households which needed help, and they encouraged the residents to apply. Another important support came from the staff of the county prosecuting attorney's office. The resulting septic system repairs and replacements clearly resulted in water quality improvements.

Although an equal amount of funds were set aside for agricultural conservation practices, applicants have been slower in asking for support. The reason may be the current practice of using ASCS cost sharing funds and a reluctance to take loans for volunteer conservation practices.

**RESOLUTION NO. 11-90**

**RESOLUTION NO. 11-90**

**A RESOLUTION COMMITTING TO THE REPAYMENT OF LOAN, STATE OF WASHINGTON, WASHINGTON STATE WATER POLLUTION REVOLVING LOAN FUND (SRF).**

WHEREAS, the State of Washington has established a revolving loan program to address and correct water pollution problem State wide, and

WHEREAS, said fund may be utilized to address identified non-point pollution problems, and

WHEREAS, Jefferson County, over the past three years, has actively been identifying and correcting non-point pollution problem, and

WHEREAS, Jefferson County has secured a grant to continue on with and expand its program of identifying water quality problems, and

WHEREAS, assistance to individuals, particularly the low income, is required if correction of water quality problems is to be accomplished, and

WHEREAS, Jefferson County has applied for and received loan approval from SRF to provide financial assistance in the correction of non-point pollution problems, primarily septic repair and agricultural practices, and

WHEREAS, the SRF loan requires commitment of repayment, and

WHEREAS, There will, in all likelihood be a lag between the time payment is due from SRF and when Jefferson County will receive payment from funds reloaned,

NOW THEREFORE BE IT RESOLVED, that Jefferson County does hereby commit that portion of its current expense budget necessary to repay SRF as per the repayment schedule established in the loan agreement,

BE IT FURTHER RESOLVED, that all SRF loan funds will be paid in full within ten (10) years from the effective date of the final loan agreement.

APPROVED AND ADOPTED this \_\_\_ day of \_\_\_\_\_, 1990.

SEAL:

JEFFERSON COUNTY  
BOARD OF COMMISSIONERS

\_\_\_\_\_  
George Brown, Chairman

\_\_\_\_\_  
Larry W. Dennison, Manager

ATTEST:

\_\_\_\_\_  
Clerk of the Board  
Lorna Delaney

\_\_\_\_\_  
B. G. Brown, Member

**MEMORANDUM OF AGREEMENT  
SEPTIC SYSTEM REPAIR PROGRAM**

**AGREEMENT -- SEPTIC  
SYSTEM REPAIR PROGRAM**

WHEREAS, the Jefferson County Planning and Building Department has been designated lead agency in addressing water quality issues in Jefferson County, and

WHEREAS, the Jefferson County Health Department Environmental Health Division is charged with the responsibility to oversee a number of environmental quality programs including the design and installation of on-site sewage disposal systems, and

WHEREAS, Jefferson County has received a Centennial Clean Water Fund (CCWF) grant to address non-point pollution problems or potential problems within the county, and

WHEREAS, said grant contains specific work elements (see Attachment A) concerning on-site sewage disposal systems as a potential contributor of water quality degradation, and

WHEREAS, Jefferson County has also received loan funds from the Washington State Water Pollution Revolving Loan Fund (SRF) to provide low interest loans to individuals with problem septic systems, and

WHEREAS, the two programs, the CCWF grant and the SRF loan, are intended to work in tandem to address on-site sewage disposal as a contributor or potential contributor to water quality degradation,

NOW THEREFORE IT IS AGREED, the Jefferson County Health Department Environmental Health Division will perform the tasks outlined on Attachment A: including septic repair design or design oversight, public education, promotion of SRF funds availability to assist in system repairs, oversight a repair installation and final approval all systems repaired under this program. The division will keep accurate records of assistance and education provided and transmit the same to the Planning and Building Department as provided for in Appendix A.

BE IT FURTHER AGREED, that the Jefferson County Planning and Building Department will transfer twenty two thousand dollars (\$22,000) annually to the Health Department to fund the work elements outlined in Attachment A. The department shall also act as the loan agent for SRF monies and provide loan assistance to all eligible parties referred by the Health Department.

BE IT FURTHER AGREED, that departments will work in mutual cooperation to accomplish the goals and objectives of the water quality grant and loan programs and perform the necessary tasks to ensure their successful implementation.

AGREED THIS \_\_\_ DAY OF \_\_\_\_\_ 1990

---

Cathy Stafford, Administrator, Health Department

AGREED THIS \_\_\_ DAY OF \_\_\_\_\_ 1990

---

David Goldsmith, Director, Planning and Building Department

MEMORANDUM OF AGREEMENT

AGRICULTURAL WATER QUALITY ASSISTANCE PROGRAM

MEMORANDUM OF AGREEMENT

WHEREAS, the Jefferson County Soil Conservation District has a program to assist land owners with the identification of Best Management Practices (BMPs) for the agricultural use of land; and

WHEREAS, these BMPs may identify where certain practices contribute to water quality degradation; and

WHEREAS, existing programs to assist the land owner in correcting a water quality problem or potential problem are limited and may not be available to all land owners; and

WHEREAS, Jefferson County has secured a loan from the Washington State Water Pollution Revolving Loan Fund (SRF) to provide financial assistance in addressing non-point pollution problems; and

WHEREAS, implementation of BMPs to correct existing or potential water quality problems are eligible for loan monies.

NOW THEREFORE IT IS AGREED, that Jefferson County, through the Planning and Building Department, will make SRF funds available to eligible projects in the implementation of BMPs, and

BE IT FURTHER AGREED, the Conservation District will identify projects eligible for the loan program and notify those land owners of the availability of this program; and

BE IT FURTHER AGREED, the Planning and Building Department and the Soil Conservation District will work in mutual cooperation to accomplish the goals and objectives of the SRF loan program in addressing water quality problems in the community.

AGREED THIS \_\_\_\_ DAY OF \_\_\_\_\_ 1990 \_\_\_\_\_  
Roger Short, Chairman  
Soil Conservation District

AGREED THIS \_\_\_\_ DAY OF \_\_\_\_\_ 1990 \_\_\_\_\_  
David Goldsmith, Director  
Planning and Building Department

# **FUNDING REGIONAL PROGRAMS**

**Maryland Critical Areas Program  
Cherry Creek Basin Water Quality Authority**

**STATE OF MARYLAND:  
MARYLAND CRITICAL AREAS PROGRAM**

**INTRODUCTION**

In 1984, the Maryland General Assembly passed the Critical Area Act. The Act recognized that human activities on the land adjacent to the Bay have the greatest potential for affecting water quality and fish, plant and wildlife habitat in the Bay. The critical area was defined by the Act as a strip of land along the tidal shoreline extending 1,000 ft. landward from the water's edge, or from the landward boundary of any adjacent wetland. The Act called for the formation of a 25-member commission to develop criteria to guide future land use in the critical area. The Maryland Critical Areas Program can be called a growth management program which regulates development densities and locations. It is also very significant that the Critical Area Law identified that human activity not just development can have a particularly immediate and adverse impact on water quality and natural habitats. The commission was given power to adopt regulations and criteria.

**THE BENEFITS OF ESTABLISHING CRITICAL AREA CRITERIA INCLUDE:**

- THE CRITERIA WILL REDUCE the non-point source pollution loads from development in the Critical Area.
- THE CRITERIA WILL ENSURE proper site design and best management practices for all new development occurring in the Critical Area.
- THE CRITERIA WILL PROTECT valuable fish and wildlife habitat in the Critical Area and adjoining wetlands and open waters.
- THE CRITERIA WILL CONSERVE valuable agricultural and forest land within the Critical Area.
- THE CRITERIA WILL ASSIST counties in adequately planning for future growth and development in their shoreline areas.

**LOCAL PROGRAM REQUIREMENTS**

Although the Critical Area Law clearly gives strong state criteria and oversight, local governments were given as much flexibility as possible to develop their own programs.

The Critical Area Law and regulations establish specific criteria which local Programs were required to meet. They generally include:

1. Establishment of an area 1,000 feet inland from the Mean High Water Line or inland edge of tidal wetlands which must be managed to reduce pollutants entering the Bay. New development and redevelopment in Intensely Developed Areas are required to reduce pollutants running off the land by 10%.
2. Establishment of a minimum 100-foot naturally vegetated buffer along the shoreline to protect aquatics, wetlands, shoreline and terrestrial environments from human disturbances.
3. A minimum base of forestry resources which equals or exceeds that which currently exists must be maintained for the general protective land use benefits it provides.
4. Designation of management areas, based on land use existing on December 1, 1985 according to one of three types; Intensely Developed Areas, Limited Development Areas or Resource Conservation Areas.

Each designated category or area is required to meet specific criteria and to follow specific guidelines for future development.

To develop the critical area program at the state level the Chesapeake Bay Critical Area Commission (Commission) was required to address water quality, habitat protection and develop land use policies. The commission accomplished this by separating activities into categories which include Areas of Resource Protection and Resource Utilization Development.

## **DEVELOPMENT ACTIVITIES**

The criteria require local jurisdictions to divide the critical area into three development zones. The criteria provide minimum standards for development in each of the three zones. The characteristics of the three areas and the criteria applying to each are summarized below.

### **1. Intensively Developed Areas (IDA)**

These areas are already in predominately high density residential, industrial or commercial uses.

## Characteristics

These areas have at least one of the following features:

1. Housing density is equal to or greater than 4 dwellings units per acre.
2. Concentration of industrial, institutional or commercial uses.
3. Public sewer and water with greater than 3 dwellings per acre.

## Specific Criteria:

- New and existing development must reduce stormwater runoff and sediment problems.
- Redevelopment must reduce non-point source impacts to streams and tidal waters.
- Local jurisdictions are to develop programs which will conserve fish, plant and wildlife habitats.

## **2. Limited Development Areas (LDA)**

These areas have a mix of development and natural habitat.

## Characteristics

These areas have at least one of the following features:

1. Housing density between 1 dwelling unit per 5 acres and 4 dwelling units per acre.
2. Areas not dominated by agriculture, wetlands, forest, or open space.
3. Areas with public water or sewer, or both.

## Specific Criteria

- Existing forest land cleared must be replaced on at least an acre-for-acre basis.
- Development cannot remove more than 20% of the forest cover without special provision.
- Man-made impervious areas limited to 15% or greater.
- Clustering of dwelling units encouraged in order to conserve fish, plant and wildlife habitats.

### **3. Resource Conservation Areas (RCA)**

In these areas, wetlands, forests and farms predominate.

#### Characteristics

These areas have at least one of the following features:

1. Housing density is less than 1 dwelling unit per 5 acres.
2. Dominant land use is agriculture, wetlands, forest, barren land, surface water or open space.

#### Specific Criteria

- Residential development within this area shall not exceed a density of one dwelling unit per 20 acres.
- Local programs should encourage agriculture and forestry.
- 5% of a jurisdiction's land area classified as RCA can be designated for future growth to accommodate additional intensely developed and limited development areas.

### **GRANDFATHERING**

The criteria provide guidelines for the grandfathering of lots and subdivisions that are already recorded or approved. The guidelines allow construction of a single family home on previously recorded lots, if a house does not already exist.

### **VARIANCE**

The criteria give local jurisdictions the authority to grant exemptions to the criteria in special cases. This provision was included to provide flexibility in cases of hardship.

## RESOURCE UTILIZATION

### **FORESTRY**

- A forest management plan is required for commercial tree harvest operations that affect 1 or more acres and occur within a 1 year interval.
- No commercial harvesting is allowed within 50 ft. of mean high water of the Bay or its' perennial tributary streams, but cutting for personal use for other limited reasons is allowed.
- Only Loblolly Pine or Tulip Poplar may be clear-cut in the areas between 50 and 100 ft. of mean high water. Other species may be selectively cut within the 50-100 ft. area.

### **AGRICULTURE**

- All farms in the critical area must have soil and water management plans within five years.
- Farmers must have a 25 ft. filter strip along tidal waters and streams at least until a soil conservation and water quality management plan is implemented.
- The feeding or watering of livestock cannot occur within 50 ft. of the water's edge. Grazing is allowed in that area.

### **WATER DEPENDENT FACILITIES**

Commercial and recreational activities that require a waterfront location are permitted in the critical area so long as adverse environmental impacts are minimized.

In addition:

- New marinas are allowed in all areas except resource conservation areas.
- Community and private piers are allowed in the critical area, but new developments must choose one or the other.

### **SHORE EROSION PROTECTION**

Although structural erosion control measures may be necessary in areas of severe erosion, they should be limited and non-structural methods should be used. Non-structural measures include vegetative stabilization, grading and alteration of near shore vegetation. Local jurisdiction are to identify areas of low or high erosion rates.

## **SURFACE MINING**

Surface mining operations are regulated under existing State law. Local jurisdictions are required to identify areas of potential mineral resources as well as areas where surface mining would be detrimental.

## **RESOURCE PROTECTION**

### **HABITAT**

- Local jurisdictions will be required to identify and protect special wildlife and plant habitats including fish spawning grounds, non-tidal wetlands, endangered species habitat, colonial bird nesting sites, historic waterfowl staging and concentration areas and riparian forests.
- Development sites must incorporate a wildlife corridor system to provide continuity for existing habitat.

### **BUFFERS**

- A minimum 100 ft. vegetated buffer along tidal waters and streams is required for all new development in all areas.
- Private and community piers are allowed in the buffer.
- Water dependent facilities, such as marinas or highly developed areas may be exempt.
- Certain areas may be exempted from the buffer.
- A 25 ft. buffer must be established around non-tidal wetlands.
- Commercial harvesting is not permitted in the buffers within 50 ft. of tidal waters, wetlands and tributary streams.

## **BACKGROUND**

Although public knowledge was growing that the Chesapeake Bay was deteriorating, the Chesapeake Bay Study carried out by the Environmental Protection Agency started to give a comprehensive assessment of the problem. In 1982 some of the results of the study were released and the State of Maryland began discussions with Virginia on how to clean-up the Bay. It was also recognized that Pennsylvania and the District of Columbia needed to be principal partners in any effort to save the Bay.

To prepare for a Governor's Conference on the Chesapeake Bay a work group was established in Maryland. The group developed the critical areas concept, presented it at the Governors Conference and followed through with legislation. The group was known as the Wye Group and included:

Initially - John Griffin: Governor's Staff

Torrey Brown: Secretary of Maryland Department of Natural Resources

Lee Zeni: Director of the Maryland Tidewater Administration  
William Eichbaum: Assistant Secretary of Department of Health & Mental Hygiene  
Others: Verna Harrison: Governor's Staff  
Ellen Fruites: Governor's Staff  
Wayne Cawley: Secretary of Department of Agriculture  
Constance Linder: Secretary of State Planning  
Ian Morris: Director of University of Maryland

Based upon programs within Maryland and other parts of the United States, such as the Adirondack Preserve and the New Jersey Pinelands, the concept of the Critical Areas Program began to materialize. Lee Epstein lawyer was asked to draft legislation based upon this program review and input from the Wye Group.

At the December 1983 a Bay Conference Governor Harry Hughes of Maryland described the concept of the Critical Area Program. At the conference the Governors of Virginia, Maryland and Pennsylvania and the Mayor of Washington, D. C., officially acknowledged that the Chesapeake Bay was deteriorating, that state and federal programs were inadequate to address the problems and new actions had to be taken. The Critical Areas Program presented by Governor Hughes was one of the boldest proposals to be presented at the Conference.

The passage of the Critical Areas Law in 1984 required extensive involvement of the Wye Group as well as public information activities by the Chesapeake Bay Foundation. Steve Bunker and Ann Swanson of the Foundation worked extensively with the public to increase the understanding of the program and to build public support. Although substantial revisions were made to the draft bill, this core group was essential in building public support, maintaining the strength of the legislation and to provide leadership during the program development. Since the Critical Areas Act was controversial there were 28 different bills introduced to prevent implementation or weaken the Act.

After the law was passed, the newly formed 25 member Critical Area Commission was faced with a deadline to promulgate criteria by December 1, 1985. Administratively the deadline was very tight since the Commission meet for the first time in October 1984, hired staff in January 1985, and had to have the initial criteria proposal for the public hearing process by May of 1985.

To develop the program subcommittees were established on Development, Resource Utilization Activities and Resource Protection.

## **DEVELOPMENT SUBCOMMITTEE**

The Development Subcommittee was faced with the issue of accommodating growth, while addressing the main objectives of the law to improve water quality and protect valuable habitat. A general policy was developed to keep future development to areas of existing development. Recommended uses were non maritime heavy industry and transportation facilities,

landfills and hazardous waste storage and disposal facilities. A significant difference in the Maryland Critical Areas Program from other programs across the country was the charge to consider the number, movement and activities of people which can cause an adverse environmental impact.

The Development Subcommittee developed several concepts which became incorporated into the Critical Areas Criteria.

- Water Quality improvement was required from new development and re-development. A goal of 10% water quality improvement was set. The improvement could be on or off-site, which provided the opportunity for a watershed or regional approach.
- Forest removal limitations were set which require a one-to-one replacement.
- The subcommittee adopted a 1 to 20 acre development density on the Resource Conservation Area based upon other eastern United States Programs.
- Local jurisdiction were given the option to utilize "growth allocations" to accommodate future expansions of development.

#### **RESOURCE UTILIZATION SUBCOMMITTEE**

Discussions by the Resource Utilization Subcommittee focused on forestry, agriculture, surface mining and aquaculture. The general concerns for forestry included carrying out forestry practices in an environmentally sound manner, encouraging reforestation and urban forestry programs and maintaining or establishing forest buffers. The agricultural criteria included requirements for soil conservation and water quality plans and required implementation of Best Management Practices. Surface Mining would have to observe the buffer and habitat protection requirements of the critical areas program, but existing State surface mining regulations seemed adequate. Aquaculture was a new and controversial subject which the subcommittee noted but deferred to future regulations.

#### **RESOURCE PROTECTION SUBCOMMITTEE**

The major concerns of the Resource Protection Subcommittee included tidal wetlands and the extent of their current protection, shoreline buffers, affect of upland development on aquatic resources, identification of unique habitats and habitats which need protection from development.

"After intensive review, the subcommittee decided that existing State and Federal programs governing dredging, waterway construction and the alteration of tidal wetlands were adequate, and that any further regulations by the Commission would be duplication. The same conclusion was reached for direct imports of fish spawning areas and submerged aquatic

vegetative beds." The subcommittee therefore focussed on the affects of upland development and the protection of non-tidal wetlands.

## **DEVELOPING LOCAL PROGRAMS**

The Critical Areas Law requires that the 61 local programs be completed in 270 days after the state wide criteria had been approved. With some of the 270 days being taken up by organization and administrative tasks very little time remained. To facilitate quick action, significant grants were awarded to local jurisdictions and considerable flexibility was permitted for them to develop their programs.

### **Major issues included:**

1. Mapping: The Commission favored Resource Conservation Areas while the local jurisdictions wanted to maximize Intensively Development Areas or Limited Development Areas.
2. Differences occurred when defining areas served by sewer and water or planned to be served and how this affected the definition of Intensively Developed Areas or Limited Developed Areas.
3. Infill or adjacent areas affected the interpretation of certain parcels. A minimum of 20 acres was decided as an indicator of a Resource Conservation Area.
4. Several local jurisdictions proposed the concept of density averaging. Under density averaging, a cluster of homes would be accounted for on a per acre basis and would affect neighboring parcels. The Commission could not accept this concept.
5. The development of the local programs was on a tight schedule. Several local jurisdictions submitted their local programs without the implementing local ordinances. Another difficulty arose because there was no provision for partial approvals. The Commission did have to develop and take over 12 outstanding programs on December 1988. Several of these programs have since been approved.

The accomplishments of the Critical Areas Commissions were summarized in 1988. The accomplishments included:

### Development

- Adopted a comprehensive land-use management strategy based on the intensity of existing uses.

- Focused or contained new development in or adjacent to existing developed areas.
- Limited the extent of new development in areas presently in low intensity uses.
- Recognized variations in water quality protection associated with different land uses; adopted measures to maintain and expand forested areas for their water quality protection benefits.
- Rejected sole reliance on on-site stormwater management and sediment control measures for non-point source pollution abatement; specified other means to accomplish this purpose by limiting impervious surfaces, protecting forest lands, avoid development altogether in sensitive areas, and by encouraging various other programs such as urban forestry.
- Provided for programs and measures to address non-point source pollution in urban areas.
- Limited new development that could occur directly on the shoreline to that which is water-dependent, and mandated setbacks or buffers for other forms of development.
- Generally limited the location of new intense water-dependent facilities to areas already intensely developed.
- Recognized the importance of naturally vegetated buffers in protecting aquatic habitats from the adverse effects of adjacent development.

#### Agriculture

- Adopted growth management policies specifically directed at maintaining lands in agriculture.
- Addressed non-point source pollution problems associated with agriculture by requiring the preparation of Soil Conservation Plans and the adoption of BMPs for all farms in the Critical Area.
- Specified, as a required BMP, that certain setbacks would be required for various agricultural activities.
- Limited disturbances to important habitat areas that may caused by agricultural activities.

## Forestry

- Mandated the preparation of Forest Management Plans for significant timber harvesting activities.
- Required timber harvesting operations to address both water quality and habitat protection measures.
- Specified setback requirements to prevent adverse effect of aquatic habitats from timber harvesting.

## Surface Mining

- Required new mining operations to avoid areas of important habitat, and to observe the minimum 100-foot Buffer.

## Shore Erosion

- Discouraged the installation of erosion control devices where no significant erosion occurs.
- Promoted the use of non-structural erosion control measures where they are practical and effective.

## Habitat Protection

- Provided regulations and other measures whereby local jurisdictions are enabled to identify and protect important habitat areas; incorporated these features into local law ordinances.
- Recognized the importance of natural buffers adjacent to waters and tidal wetlands for maintaining transitional and riparian habitats.
- Enabled protection of non-tidal wetlands from activities would cause direct or indirect impacts to the wetlands.
- Protected the habitats of threatened and endangered species and species in need of conservation, and forest-interior dwelling birds.
- Protected the aquatic staging and concentration areas of waterfowl.
- Protected designated Natural Heritage Areas.
- Enabled jurisdictions to protect habitats of local significance.

- Enabled the designation and protection of 60 specific habitats of threatened or endangered species or species in need of conservation; 23 Natural Heritage Areas, and 11 habitats of local significance.
- Established a means for local jurisdictions to address habitat protection on a broader geographical basis than the individual parcel of land.

### Public Lands

- Required the same degree of water quality and habitat protection and growth management on public lands as that required on private lands.
- Ensured that State and local agency programs are conducted in a manner consistent with the criteria for private actions.

The summary identified several key factors which lead to establishing the Critical Area Program.

1. There was widespread public awareness and support to clean up the Chesapeake Bay.
2. The strong support of Governor Hughes was essential so the legislation was not weakened and financial support was provided.
3. The Commission had good leadership and was supported fully by its members.
4. A key factor was the provision of State funds to the local jurisdictions. "There is little doubt that, about these funds, few of the jurisdictions would have been willing or able to participate in the Program."
5. There was a wealth of information available to the Commission.
6. Other factors:  
 Organization and/or staff support  
 Decision of Baltimore to be included in the Critical Areas Program  
 Support and contributions of the private consulting committee in developing local plans.

After an analysis of the program, the following comments were made:

1. The program should be judged on water quality and habitat protection achievements.

2. Present sources of pollution were not fully addressed.
3. The program will prevent further deterioration.
4. The program will be difficult to evaluate because it may be a reduction in the rate of pollution and may not stop pollution all together.

Since the program is implemented at the local level many incremental decisions and actions will be taken. These will be very difficult to evaluate.

## **PROGRAM RETROSPECT**

By December of 1988 the Critical Areas Program was past the development stage and fully into the implementation phase. A series of interviews were carried out in the spring of 1992 to see how the program was working and what thoughts people involved with the program could share.

### **Chesapeake Bay Foundation: Rubert Friday**

The Foundation played a key role in the development of the Critical Area Program by providing two staff people who extensively participated in Commission meetings and subcommittees, organized and participated in many public information activities and helped prepare background information documents. These full time people gave the necessary support to many of the legislative and agency leaders. This staff support was essential. Steve Bunker and Ann Swanson were the supporting staff. A detailed review of the program would be very difficult and currently it is hard to evaluate the success of the program in the various local jurisdictions.

### **Steve Bunker (formerly of the Chesapeake Bay Foundation)**

The Critical Areas Program is a hard program to judge success. Since the program is evaluated on the basis of slowing down or reducing rates of development or reducing the rate of pollution, successes vary from jurisdiction to jurisdiction and the type of issue. There has not been a formal evaluation of the program. Such an evaluation could be very difficult and a massive effect. It would be hard to be quantitative since the program varies so greatly in local implementation. The overall impression is that development in the critical areas has slowed and the rate of pollution has been reduced.

One of the key factors in getting the program underway was significant grants of up to \$100,000 to each county. Without continued financial support staffing is currently a problem in many counties to carry out the program so there is beginning to be a difference in the implementation due to the local jurisdictions commitment and financial status.

The water quality benefits of the program may be a factor of the degree of activity and regulatory effort. Construction runoff may have been reduced significantly. Agriculture and

Silviculture activities and the resulting water quality benefits of using Best Management Practices in the Critical Areas Program have not been fully established.

**SARAH TAYLOR, Executive Director Chesapeake Critical Area Commission**

The Critical Areas Program is in the fourth year of full implementation. As a state issue, it is receiving less attention as the Act becomes part of business as usual, but continual oversight is necessary to keep the Act strong by defending legal challenges and legislative amendments. The original legislation probably would not have passed if the state did not include local implementation and then \$1.2 million dollars to help local jurisdiction develop the regional plans. Sixteen counties and 42 towns needed to take action. Another key to the success was the technical assistance provided by the Critical Areas Commission Staff, courtesy of science advisors and seven planners, and staff the Chesapeake Bay Foundation who essentially functioned as circuit riders during the planning process. The critical area program produced some significant benefits. A major benefit of the Act is the affect on new subdivisions which now need to clearly consider water quality and habitats. There has been a distinct reduction in the number of subdivisions and the subdivision plans which have been submitted have greatly improved. A benefit which is impossible to quantify is the on-the-ground change of philosophy in doing business. The attitude of the developers and local jurisdictions are reflected in the plans that are submitted for review and show a greater concern for habitat and water quality.

It will be impossible to judge all the spin off activities that were generated by the Critical Areas Program. For example when USDA needed to define the Highly Erodible Lands. By using the critical areas maps the job was made much easier. USDA also used the critical areas to help target areas for cost sharing conservation practices and priority conservation planning. Several local jurisdictions expanded certain concepts of the program. For example Calvert County developed a fee program for timber removal which can fund non point source pollution projects.

The Critical Areas Program may be viewed as part of an evolution in program development. Although it did not pass, a much more comprehensive program outlined in Marylands 2020 Report suggested similar approaches be used throughout Maryland. Fresh water wetlands programs have been developed, a forestry law was passed and several other programs such as the Coastal Zone Management and Non Point Source Pollution Programs have targeted their efforts within the critical areas.

On a national level the Maryland Critical Area Program has been used to help develop programs in Puget Sound in several National Estuary Projects and in many states such as New Jersey or Oregon as they developed wetlands or shoreline protective programs. Although a quantitative evaluation would be very difficult, there are several ways that evaluations are carried out for the Critical Areas Program.

1. Environmental groups and key interested people basically provide an oversight as program watch dogs. The program can expect challenges over the next few years so the program advocates can become part of the review and litigation processes.
2. If a local jurisdiction blatantly ignores the Act, they can be taken to court.
3. If the commission sees a clear mistake in the local programs they can send notification of the mistake and the local jurisdiction will have 90 days to correct it. If they do not correct the mistake, they cannot get any other permits.
4. There is a regional program review every four years.

Since agriculture accounts for 70% of the land use classified as critical areas, the issue of voluntary compliance is a concern. With the USDA requirement on the highly erodible lands is helping with compliance.

### **BILL CLARK, District Manager, Calvert County Conservation District**

In the critical area all farms are required to have a conservation plan. 95% of the farms are under a plan and with 87.5% cost share available for many conservation practices many farmers are implementing the plans. A major problem is staffing to get the work done. In Calvert County 33 farms are signed up for plans but the technical assistance is not available. Due to recent budget cuts two positions provided to the District by the Maryland Department of Agriculture have been lost.

The Critical Area Program gives a clear incentive for farmers to take action. Each landowner was notified that a farm plan was required and it needed to be implemented. Critical areas were given priority for cost share approvals and some cross compliance with Integrated Pest Management and Nutrient Management was required. The response was high and even the absentee landowners, who are usually a difficult group to work with, signed up for new or revised farm plans. There are over 600 parcels which can qualify as farms with about 35 real active full time farmers in the county. Getting the actual on the ground work completed is a real challenge with part time and absentee farmers. With an increased consciousness for the Bay and conservation practices which are getting installed, pollution loading has been reduced.

The Conservation District also assists the county with erosion and sediment reviews. As a result of Critical Areas Program and other programs, erosion and sediment control standards are very high. In Calvert County, the District reviews subdivisions and now finds that plans consider a high quality of Best Management Practices for Water Quality.

**DAVID BROWNLEE, Calvert County Planning Office**

The Maryland Critical Area Program provided funds for an environmental planner. This was critical for getting the job done. From a County perspective the State Board of Appeals is dealing with too many cases. More flexibility in the program would reduce the number of appeals. Over one third of the State's workload on appeals are from Calvert County. Many of these could be taken care of as administrative decisions.

The program has had a clear affect on Forestry activities and clearing is infrequent on the 50 - 100 foot buffer study. Other clear reductions in pollution loadings are a result that:

- People who would have built up to the waterfront are now restricted to a setback, as well as setbacks for septic tanks and other activities. There is also an open space requirement.

As a very active County in terms of development, the staff saw several ways the program could be improved.

1. There should be more local authorities for administrative appeal. This would stop some of the cases going to the Board of Appeals.
2. The breakdown in lot sizes in 1/4 acre to five acres is too wide a variation. Two acres is a more significant cut off in terms of lot grading etc., and environmental concerns.
3. The public consciousness needs to be raised further. There is now a perception that the 1,000 foot buffer is all that is needed for water quality protection. An overall standard for water quality needs to be meet.
4. To fully accomplish the goals of the critical areas program, there needs to be more land purchases and/or easements which can help reduce the taking issue.
5. Since non point source pollution is a watershed problem, the buffer needs to extend up the tributary and take more of a complete watershed approach.
6. Performance standards would be preferred over the current criteria, but they would be very difficult to implement and interpret.
7. The state needs to have more confidence in the County Programs. There is currently too much paper work required.

## **EFFECTIVENESS ASSESSMENT - MARYLAND CRITICAL AREAS PROGRAM**

In establishing the Critical Areas Program there were five targeted benefits. Although there has not been a comprehensive review of the program by interviewing a variety of people, the success of the program has been significant. Without the comprehensive review and a documentation of results the Critical Areas Program is not being fully credited.

1. The State, the Chesapeake Bay Foundation, the county government and the conservation district people all had a perception that non point source pollution from development has been reduced. Standards and overall concern about water quality affects from pollution have increased.
2. With increased standards and specifications site design and best management practices for development have improved.
3. By the required set backs, conservation practices and reduction of the impacts of development and resource utilization activities, valuable fish and wildlife habitat has been protected.
4. Agriculture and Forest Lands are being conserved through restoration or Resource Conservation Areas.
5. As a result of the critical areas program, many counties became much more active with environmental issues. Although the level of concern may vary between land jurisdictions, where there is a pro-active local government the critical areas program may have been a significant catalyst and successful example exists.
6. The Critical Area Program requires urban best management practices to help mitigate potential water quality impacts associated with stormwater. The 10% Rule targets a 10% reduction in pre and post development from the entire development site. The 10% Rule has been successful but it still remains unclear as to what pollutants, how are they calculated, how effective are the BMP's and how are offsets handled.

The water quality benefits are hard to quantify, but based upon comments which showed evidence of change, the Critical Area Program will have a very significant affect in reducing the rate of pollution that would have occurred without the program.

The implementation of the Critical Areas Program is based upon local implementation. Calvert County was recommended as a good example of successful implementation. The successes included:

1. The Critical Areas Criteria is incorporated into the County Codes. There are resource people to assist with project reviews and the planning office can verify that development patterns have changed with the critical areas program in place.

In addition, the use of Best Management Practices associated with development have become stricter.

2. The Conservation District verified that the farmers got the clear message that conservation plans and the implementation of the plans were required in the critical area. Over 95% of the farms are signed up for conservation planning.

With the county being so active a major concern is the number of cases that have to go to the Board of Appeals. It was recommended that the County begin more administrative authority for these decisions with a periodic review by the Commissioner. The Conservation District has the basic problem of follow through. Without funding for technical assistance, the farmers signed up for conservation planning, but the implementation has been severely delayed.

### **COMMENTARY**

The passage of the Critical Areas Act and implementation of the program was based upon strong political leadership, a good understanding by the public of the need to take action to save the Bay, a good base of factual information and then additional resource people to follow through.

The State was able to provide substantial resources to local jurisdictions for them to develop local critical area plans and begin to implement the program. Both strong political and public support was necessary to keep the program moving and to complete the local requirements.

A sense of need and high energy were essential in developing a successful program. As time has passed, the Critical Areas Program is becoming business as usual. Where resources are lacking (ie conservation technical assistance) or there has not been development pressures the program's effectiveness has been reduced.

## CHERRY CREEK BASIN, COLORADO CHERRY CREEK BASIN WATER QUALITY AUTHORITY

### SUMMARY

The Cherry Creek Basin Water Quality Authority (Authority), formed in 1988, is the result of long term cooperative efforts by different levels of government to improve water quality in the Cherry Creek Basin. Cherry Creek is located in the Denver, Colorado metropolitan area and is used extensively for recreation including swimming and fishing. Due to high phosphorous loadings, the reservoir was becoming eutrophic. The formation of the Authority provided a forum to discuss and implement basinwide actions, provided a mechanism to fund pollution control activities, including nonpoint source pollution control, and has successfully achieved water quality improvements.

The key goal of the 1989 Cherry Creek Basin Water Quality Management Master Plan is to reduce phosphorous loadings in the basin. Efforts are underway to reduce nonpoint loadings of phosphorous by fifty percent in the next five years and to control point loadings as population and land use changes occur in the future. The principle strategies being utilized to reduce phosphorous include erosion and sediment control, wetland construction and management, dredging, wastewater plant regulations, reduction in stormwater runoff and best management practices.

Funding of the Cherry Creek Basin Water Quality Authority is derived from recreational fees, development fees and property assessments. The local funding is then used to stimulate state and federal funding. The Cherry Creek Basin Water Quality Authority has a financial capacity in 1992 to generate over four million dollars in revenues, with an operating surplus of over four hundred thousand dollars.

### INTRODUCTION

The Cherry Creek Reservoir is located in the Denver Metropolitan area. The reservoir was built in 1960 by the Army Corps of Engineers and the Colorado Division of Parks and Outdoor Recreation operates a 3,500 acre state park adjacent to the reservoir which records over 1.2 million visitor days per year. The watershed for the reservoir is 384 square miles. A unique feature of the reservoir is that its water outfall is based upon ground water recharge. Relief wells are only utilized in high flow situations. The reservoir provides 2,000 acre-feet of groundwater recharge annually.

Through a series of studies, which identified that the eutrophic conditions of the reservoir were caused by phosphorous loadings, and that the local governments in the watershed were willing to work cooperatively, an agreement was signed in 1985 to form the Cherry Creek Basin Authority.

In 1988, the state legislature passed an act to create the Cherry Creek Basin Water Quality Authority.

Studies determined that 14,270 pounds of phosphorous entered the reservoir on an annual basis. Of this amount 10,290 pounds of phosphorous were identified as the result of nonpoint source pollution. The goal of the Authority is to achieve the 0.035 milligram per Liter of total phosphorous standard set by the Colorado Water Quality Control Commission to protect the water quality of the reservoir as population and development increase. The Authority has developed both point and nonpoint source pollution control strategies to meet these goals.

## **PROVISIONS OF THE ACT**

The Cherry Creek Basin Water Quality Authority was created by House Bill No. 1029. The Act clearly defines the role of the Authority in the area of water quality and specifically states the boundaries of the basin. Members of the Authority include representatives from every county, municipality and appropriate special district within the basin. Ex-officio members include the soil conservation districts and others, such as state and federal agencies, as appointed by the authority members.

### **Powers of the Authority include:**

- To develop and implement water quality plans
- To conduct water quality studies
- To provide incentives, credits and rewards for pollution control benefits
- To recommend maximum loads of pollutants
- To recommend standards for erosion control, stormwater management and septic systems
- To incur debit, issue contracts, enter agreements, own and manage property
- To establish rates, tolls, fees, charges and penalties for services, facilities and programs
- To establish recreational fees
- To levy and collect taxes
- To issue bonds

The Authority may cooperate with drainage and flood control activities through coordination with local urban drainage and flood control districts.

## FINANCES

The Cherry Creek Basin Water Quality Authority generates funds in several ways.

- A .5 mill levy property tax is collected by two counties
- A fee of 3 cents per square foot on commercial building permits and impermeable surfaces
- A fee of 5 cents per 1,000 gallon discharge flows for sewage treatment facilities
- A fee of \$3.00/yr for vehicles using the state park
- A building permit fee of \$50.00 per residential unit.
- A fee for grading of \$280.00 per acre

The fees are collected by the local governments and the state park as appropriate and then paid to the Authority. These fees are expected to generate the following revenue for 1992:

Wastewater surcharge	\$32,000
Building Permits	\$33,250
Property Tax	\$406,000
Special Ownership Tax	\$21,000
Recreation Fees	\$131,000
Interest Income	\$20,000

It is expected that the Authority will use these local funds to match other state and federal dollars. In 1992 total activities in the basin could be over four million dollars.

## WATER QUALITY ACTIVITIES

For point source pollution, the Authority has given priority to reduction of discharges from waste treatment facilities. Each facility is given a limit for phosphorous discharge of a specific number of pounds per year. Water reuse is given a high priority since the basin is highly dependent upon ground water aquifers which can be recharged. Septic systems are being evaluated to establish phosphorous performance standards. For example, certain soil types used in septic systems can effectively remove 95% of the phosphorous.

Nonpoint source pollution control activities to reduce phosphorous have included erosion and sediment control, wetlands development and management and storm water management. The Authority will focus primarily on urban activities, while agricultural activities are being addressed by state agencies, the soil conservation districts and various USDA agencies.

Ongoing activities include water quality monitoring, dredging of the reservoir, building a sediment pond/wetlands area, evaluation of an alum treatment program and technical assistance for coordination with local governments for water quality activities.

## COMMENTARY

The Cherry Creek Basin Water Quality Authority is the result of a well documented water quality problem, high public support and the willingness of local governments to work together. The local governments and various state and federal agencies had been working for many years, beginning with an EPA section 208 grant in the seventies. The first formal organization and later the Authority have advocated strong controls at the local level. The operation of the Authority is accomplished through various contracted services. Both of these philosophies prevent a new bureaucracy from building which competes with or overshadows the local governments. The initial guidance for organizing a basinwide effort came from the Denver Regional Council of Governments. In addition, the Authority has greatly benefitted from the involvement of the Corps of Engineers, which owns the dam, and the Colorado Division of Parks and Outdoor Recreation which operates the state park. In forming the Authority, key advocates included sportsman and environmental groups as well as the citizens of the surrounding area.

The Cherry Creek Basin Water Quality Authority represents a good example of nonpoint source pollution control. Through local initiatives, which resulted in the creation of the Authority in a time of tight budgets, it has generated a significant resource base to implement its water quality plan, and has carried out activities and projects which have clearly resulted in improved water quality.

# **SPECIAL FEES AND TAXES TO FUND NPS PROGRAMS**

**Iowa's Fee System: Pesticide/Fertilizer Dealers**

# IOWA'S GROUNDWATER PROTECTION ACT

## SUMMARY

The State of Iowa has initiated several unique conservation programs which, when combined with traditional approaches, provide significant levels of funding to accomplish a broad spectrum of nonpoint source pollution projects and programs. The Ground Water Protection Act of 1987 sets up various funding mechanisms to address pollution from agricultural activities, solid waste disposal, household hazardous wastes, storage tanks, fertilizers, pesticides and landfills. The Act is expected to generate \$38-\$46 million over a five year period and also utilizes \$17.5 million of oil-overcharge funds. The Act establishes five accounts:

ACCOUNT PURPOSE	FUNDING SOURCES	EXPECTED ANNUAL REVENUE
Solid Waste Account	Tipping Fees	\$4.41 million
Agricultural Management	Pesticide/Fertilizer	\$3.59 million
Household Hazardous Waste	Retail Permit Fee	\$0.93 million
Storage Tank Mgmt.	Registration Fee	\$0.45 million
Oil Overcharge Account	Funds available 5 years	\$17.5 million

Iowa has a well documented ground water pollution problem and demonstration projects, such as the Big Spring Demonstration Project, have been able to show both environmental and economic benefits of water quality abatement activities. Therefore, when the Act was proposed, there was public and political support to establish fees in controversial areas such as agricultural pesticides and fertilizers. In addition at the same time the various fees were established, an extensive information and education program was initiated to promote integrated pest management and nutrient management programs.

The Iowa Groundwater Protection Act of 1987 is only one program that is being used to abate nonpoint source pollution. At least nine other programs can be identified that work in combination with the Act. These programs include the Publicly Owned Lakes Program (cost shares soil conservation practices), the Resource Enhancement and Protection Account (REAP) which carries out soil and water enhancement programs, an Integrated Farm Management Demonstration Program, the Model Farms Demonstration Project and various existing EPA and USDA water quality programs.

The Iowa Ground Water Protection Act provides significant local funding to match federal funding for water quality programs.

## **INTRODUCTION**

The Big Spring Basin Demonstration Project, located in northeast Iowa, gave State agency and resource people the base data to clearly identify ground water pollution problems associated with agricultural pesticides and fertilizers. Big Spring has been monitored for water quality from the 1950s and the monitoring results portray the trends of fertilizer and chemical use in the basin over time. Iowa citizens who depend heavily on ground water resources have become concerned with the potential health risks of ground water pollution. Based on the specific information developed through the Big Spring Project and a growing public concern about ground water contamination, there was strong support to enact and implement the Iowa Groundwater Protection Strategy of 1987.

## **PROVISIONS OF THE ACT**

The goal of the Iowa Groundwater Protection Act of 1987 is to "prevent the contamination of ground water from point and nonpoint sources of contamination to the maximum extent practical, and if necessary to restore the groundwater to a potable state, regardless of present condition, use or characteristics." Through the Iowa Groundwater Protection Strategy of 1987, thirteen potential sources of ground water contamination were evaluated for legislative action and are addressed by the Act in various ways. The Department of Natural Resources was designated as the coordination and administrative agency.

Duties of the Department of Natural Resources include water quality monitoring, establishing standards for ground water quality, mapping of groundwater hazards, maintaining and disseminating groundwater data, developing a geographic information system, developing rules, taking enforcement actions and developing a comprehensive education program. The Act specifically puts a strong emphasis on information and education.

The legislation authorizes the establishment of a Ground Water Protection Fund. Revenues collected for the Fund are received by the state treasury and the funds are deposited in five accounts which are dedicated to specific purposes. Funds from one year can be carried over to future years. Both point and nonpoint source pollution activities are eligible for funding through any of the accounts. A summary of the accounts is as follows:

### **SOLID WASTE ACCOUNT**

A \$3.50/ton tipping fee is collected. Uses of the money include funding for the Waste Management Authority, University of Northern Iowa Small Business Assistance Center, Department of Health, development of monitoring guidelines, implementation of demonstration projects such as recycling, assistance for local

landfill agencies, planning and abatement. The Solid Waste Account could generate \$4.41 million/annually.

## **AGRICULTURAL MANAGEMENT ACCOUNT**

Registration and license fees are assessed on pesticide dealers. The pesticide dealer fee is based on 0.1% of gross annual sales; a pesticide product registration on manufacturers ranging from \$250 to \$3,000 per year, based on 0.2% of gross annual sales in Iowa. In addition there is a nitrogen fertilizer tax of \$0.75/ton based on an 82%-N solution. Funds are used by the Department of Health, the Leopold Center for Sustainable Agriculture, rural water supply testing, to close old wells, to establish the Center for Health Effects of Environmental Contamination, and to the Department of Agriculture and Land Stewardship for incentive programs involving sinkholes and agricultural drainage wells. A total of \$3.59 million may be available annually in this account.

## **HOUSEHOLD HAZARDOUS WASTE ACCOUNT**

Retailers selling household hazardous materials will pay a yearly fee of \$10-\$100 based on gross sales. The money in this account is used by the Department of Public Health, for grants to local organizations for recycling/reclamation projects, for Department of Transportation oil collection pilot projects, for toxic cleanup days, for education programs and for administration. About \$0.93 million annually should be available to this account.

## **STORAGE TANK MANAGEMENT ACCOUNT**

Fees for storage tank registration are \$10 with an annual fee of \$15 per year for tanks over 1,100 gallons. These funds will be used by the Department of Public Health, for a regulatory program by the Department of Natural Resources, by the Division of Insurance and to assist with remedial cleanup efforts. About \$0.45 million per year are the estimated revenues for this account.

## **OIL OVERCHARGE ACCOUNT**

These funds are a result of legal settlements of overcharges for petroleum products. A total of \$17.5 million may be available over 5 years and may be used for agricultural energy management, waste to energy/solid waste management and energy resource development. Specifically the Integrated Farm Management Demonstration Program and the Big Spring Basin Demonstration Program have utilized these funds.

Specific duties are assigned by the Act to the Department of Natural Resources, to the Department of Agriculture and Land Stewardship, the Department of Public Health, the State University and the Iowa Cooperative Extension Service.

## COMMENTARY

The passage of the Iowa Ground Water Protection Act of 1987 was the result of several factors. There was first a clear definition of the water quality problem which had been documented for years. The general public was aware that ground water contamination could pose a health hazard to everyone. Demonstration projects had shown that successful actions could be taken that were economically and environmentally feasible. These factors were important since the Act included provision for a very controversial fees for pesticides and fertilizers which affected the agricultural community. A successful commitment was made to help balance these fees through savings resulting from pest management and nutrient management programs.

In looking at the relationship between this specific piece of legislation and abatement of nonpoint source pollution, it is evident that the Ground Water Protection Act is a one very useful tool in a comprehensive set of water quality programs which have produced water quality benefits for Iowa.

### OTHER PROGRAMS INCLUDE:

#### 1. EPA Section 319 Funding:

The Iowa Department of Natural Resources has been granted about \$850,000 in FY 92. Funded projects include public information and education, animal waste management, riparian zone demonstrations, dead livestock disposal, lake and watershed projects, groundwater protection and an Integrated Pest Management Program.

#### 2. Publicly-owned Lakes Program:

This program is used to cost share soil conservation practices installed in priority watersheds. About \$592,000 may be available in FY92 for this program, and one emphasis is to utilize these local and state dollars as match for addition federal conservation funding.

#### 3. REAP WATER PROTECTION FUND:

This unique fund called the Resource Enhancement and Protection Act is targeted for a general fund appropriation of \$20 million per year with additional dollars being received from the state lottery and state credit card receipts. Projects include conservation education, open space acquisition, funding of county conservation boards, soil and water conservation, city parks, etc. Although the

## **COMMENTARY Continued...**

funding for REAP has not been as high as originally proposed, Soil and Water Conservation Districts received \$942,941 in 1990 and \$1,049,107 in 1991 through the Soil and Water Enhancement Account which represented 20% of the REAP funds for each year, which are devoted to nonpoint source pollution control efforts.

### **4. IOWA WETLAND PROTECTION PLAN:**

As a result of this plan, cost sharing can be directed to wetland acquisition, which can contribute to riparian area management for nonpoint source pollution control.

### **5. OTHER STATE PROGRAMS:**

Include: Iowa Soil 2000, Soil and Water Conservation District programs, Model Farms Demonstration Projects, State Soil Loss Limit Regulations, Iowa's Financial Incentive Program and the No-interest Soil Conservation Loan Program.

### **6. USDA PROGRAMS:**

Include: Hydrologic Unit Areas; PL 566 Small Watershed Projects; the Agricultural Conservation Program (ACP); the Resources Conservation Act (RCA); Water Quality Demonstration Projects; and the Conservation Reserve Program.

### **7. EPA PROGRAMS:**

Include: The Clean Lakes Program, pollution prevention projects and both point and nonpoint programs administered at the state level.

Iowa places a high value on coordination among agencies at both the state and federal level. To encourage local participation in various programs, a grant application has been developed which can be used to apply for multiple programs and then a state level committee decides what type of funding is appropriate. Through the Ground Water Protection Act and all of these cooperating programs, Iowa has been able to fund a significant nonpoint source pollution program.

# **APPENDIX ONE**

## **Primary Contact People**

## APPENDIX ONE

### PRIMARY CONTACT PEOPLE

#### MARYLAND CRITICAL AREAS PROGRAM

Dr. Sarah Taylor, Executive Director  
Chesapeake Bay Critical Area Commission  
275 West Street, Suite 320  
Annapolis, Maryland 21401  
(410) 974-2418

#### CITY OF BELLEVUE, WASHINGTON STORM AND SURFACE WATER UTILITY

Nancy Hanson, Storm and Surface Water Utility  
301 116th Avenue, SE  
P.O. Box 90012  
Bellevue, WA 98009-9012  
(206) 451-4476

#### JEFFERSON COUNTY, WASHINGTON SUBSTATE REVOLVING FUND

Teresa Barron, Water Quality Planner  
Jefferson County Planning & Building Department  
P.O. Box 1220  
Port Townsend, WA 98368  
(206) 385-9149

#### CALIFORNIA STATE REVOLVING FUND

William R. Campbell, Chief  
Nonpoint Source Loan Unit  
Division of Water Quality  
State Water Resources Control Board  
901 P Street  
P.O. Box 100  
Sacramento, California 95801  
(916) 657-1043

## **CHERRY CREEK RESERVOIR PROJECT, COLORADO**

Lou Short  
Cherry Creek Basin Water Quality Authority  
6200 South Syracuse Way  
Suite 150, Carrara Place  
Englewood, CO 80111  
(303) 779-4525

## **IOWA'S GROUND WATER PROTECTION ACT**

James B. Gulliford, Director  
Division of Soil Conservation  
Iowa Department of Agriculture and Land Stewardship  
Wallace State Office Building  
Des Moines, Iowa 50319  
(515) 281-6146

# **APPENDIX TWO**

## **Supplemental Materials**

**Iowa Ground Water Protection Act  
Maryland Critical Area Program Act  
Cherry Creek Basin Authority:  
Enabling Legislation**

HOUSE FILE 631

AN ACT

RELATING TO PUBLIC HEALTH AND SAFETY BY ESTABLISHING MEASURES TO IMPROVE AND PROTECT GROUNDWATER QUALITY AND TO MANAGE SUBSTANCES WHICH POSE HEALTH AND SAFETY HAZARDS, BY ESTABLISHING GOALS, POLICIES, FUNDING MECHANISMS, INCLUDING TAXES AND FEES, AND ADMINISTRATIVE PROVISIONS FOR THE MEASURES, BY ESTABLISHING PROGRAMS RELATING TO THE MANAGEMENT OF AGRICULTURAL ACTIVITIES, SOLID WASTE DISPOSAL, HOUSEHOLD HAZARDOUS WASTES, STORAGE TANKS, FERTILIZERS, PESTICIDES, LANDFILLS, AND WATERSHEDS, BY PROVIDING PENALTIES, ESTABLISHING EFFECTIVE DATES, MAKING APPROPRIATIONS, AND BY PROVIDING FOR OTHER PROPERLY RELATED MATTERS.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

PART ONE -- GENERAL PROVISIONS

Chapter 455E

GROUNDWATER PROTECTION

Section 101. NEW SECTION. 455E.1 TITLE.

This chapter shall be known and may be cited as the "Groundwater Protection Act".

Sec. 102. NEW SECTION. 455E.2 DEFINITIONS.

As used in this chapter, unless the context otherwise requires:

1. "Groundwater" means any water of the state, as defined in section 455B.171, which occurs beneath the surface of the earth in a saturated geological formation of rock or soil.

2. "Department" means the department of natural resources created under section 455A.2.

3. "Director" means the director of the department.

4. "Commission" means the environmental protection commission created under section 455A.6.

5. "Contamination" means the direct or indirect introduction into groundwater of any contaminant caused in whole or in part by human activities.

6. "Contaminant" means any chemical, ion, radionuclide, synthetic organic compound, microorganism, waste, or other substance which does not occur naturally in groundwater or which naturally occurs at a lower concentration.

7. "Active cleanup" means removal, treatment, or isolation of a contaminant from groundwater through the directed efforts of humans.

8. "Passive cleanup" means the removal or treatment of a contaminant in groundwater through management practices or the construction of barriers, trenches, and other similar facilities for prevention of contamination, as well as the use of natural processes such as groundwater recharge, natural decay, and chemical or biological decomposition.

Sec. 103. NEW SECTION. 455E.3 FINDINGS.

The general assembly finds that:

1. Groundwater is a precious and vulnerable natural resource. The vast majority of persons in the state depend on groundwater as a drinking water source. Agriculture, commerce, and industry also depend heavily on groundwater. Historically, the majority of Iowa's groundwater has been usable for these purposes without treatment. Protection of groundwater is essential to the health, welfare, and economic prosperity of all citizens of the state.

2. Many activities of humans, including the manufacturing, storing, handling, and application to land of pesticides and fertilizers; the disposal of solid and hazardous wastes; the

storing and handling of hazardous substances; and the improper construction and the abandonment of wells and septic systems have resulted in groundwater contamination throughout the state.

3. Knowledge of the health effects of contaminants varies greatly. The long-term detriment to human health from synthetic organic compounds in particular is largely unknown but is of concern.

4. Any detectable quantity of a synthetic organic compound in groundwater is unnatural and undesirable.

5. The movement of groundwater, and the movement of contaminants in groundwater, is often difficult to ascertain or control. Decontamination is difficult and expensive to accomplish. Therefore, preventing contamination of groundwater is of paramount importance.

Sec. 104. NEW SECTION. 455E.4 GROUNDWATER PROTECTION GOAL.

The intent of the state is to prevent contamination of groundwater from point and nonpoint sources of contamination to the maximum extent practical, and if necessary to restore the groundwater to a potable state, regardless of present condition, use, or characteristics.

Sec. 105. NEW SECTION. 455E.5 GROUNDWATER PROTECTION POLICIES.

1. It is the policy of the state to prevent further contamination of groundwater from any source to the maximum extent practical.

2. The discovery of any groundwater contamination shall require appropriate actions to prevent further contamination. These actions may consist of investigation and evaluation or enforcement actions if necessary to stop further contamination as required under chapter 455B.

3. All persons in the state have the right to have their lawful use of groundwater unimpaired by the activities of any person which render the water unsafe or unpotable.

4. All persons in the state have the duty to conduct their activities so as to prevent the release of contaminants into groundwater.

5. Documentation of any contaminant which presents a significant risk to human health, the environment, or the quality of life shall result in either passive or active cleanup. In both cases, the best technology available or best management practices shall be utilized. The department shall adopt rules which specify the general guidelines for determining the cleanup actions necessary to meet the goals of the state and the general procedures for determining the parties responsible by July 1, 1989. Until the rules are adopted, the absence of rules shall not be raised as a defense to an order to clean up a source of contamination.

6. Adopting health-related groundwater standards may be of benefit in the overall groundwater protection or other regulatory efforts of the state. However, the existence of such standards, or lack of them, shall not be construed or utilized in derogation of the groundwater protection goal and protection policies of the state.

7. The department shall take actions necessary to promote and assure public confidence and public awareness. In pursuing this goal, the department shall make public the results of groundwater investigations.

8. Education of the people of the state is necessary to preserve and restore groundwater quality. The content of this groundwater protection education must assign obligations, call for sacrifice, and change some current values. Educational efforts should strive to establish a conservation ethic among Iowans and should encourage each Iowan to go beyond enlightened self-interest in the protection of groundwater quality.

Sec. 106. NEW SECTION. 455E.6 LEGAL EFFECTS.

This chapter supplements other legal authority and shall not enlarge, restrict, or abrogate any remedy which any person or class of persons may have under other statutory or common law and which serves the purpose of groundwater protection. An activity that does not violate chapter 455B does not violate this chapter. In the event of a conflict between this section and another provision of this chapter, it is the intent of the general assembly that this section prevails.

Liability shall not be imposed upon an agricultural producer for the costs of active cleanup, or for any damages associated with or resulting from the detection in the groundwater of any quantity of nitrates provided that application has been in compliance with soil test results and that the applicator has properly complied with label instructions for application of the fertilizer. Compliance with the above provisions may be raised as an affirmative defense by an agricultural producer.

Liability shall not be imposed upon an agricultural producer for costs of active cleanup, or for any damages associated with or resulting from the detection in the groundwater of pesticide provided that the applicator has properly complied with label instructions for application of the pesticide and that the applicator has a valid appropriate applicator's license. Compliance with the above provisions may be raised as an affirmative defense by an agricultural producer.

Sec. 107. NEW SECTION. 455E.7 PRIMARY ADMINISTRATIVE AGENCY.

The department is designated as the agency to coordinate and administer groundwater protection programs for the state.

Sec. 108. NEW SECTION. 455E.8 POWERS AND DUTIES OF THE DIRECTOR.

In addition to other groundwater protection duties, the director, in cooperation with soil district commissioners and with other state and local agencies, shall:

1. Develop and administer a comprehensive groundwater monitoring network, including point of use, point of contamination, and problem assessment monitoring sites across the state, and the assessment of ambient groundwater quality.

2. Include in the annual report required by section 455A.4, the number and concentration of contaminants detected in groundwater. This information shall also be provided to the director of public health and the secretary of agriculture.

3. Report any data concerning the contamination of groundwater by a contaminant not regulated under the federal Safe Drinking Water Act, 42 U.S.C. § 300(f) et seq. to the United States environmental protection agency along with a request to establish a maximum contaminant level and to conduct a risk assessment for the contaminant.

4. Complete groundwater hazard mapping of the state and make the results available to state and local planning organizations by July 1, 1991.

5. Establish a system or systems within the department for collecting, evaluating, and disseminating groundwater quality data and information.

6. Develop and maintain a natural resource geographic information system and comprehensive water resource data system. The system shall be accessible to the public.

7. Develop and adopt by administrative rule, criteria for evaluating groundwater protection programs by July 1, 1988.

8. Take any action authorized by law, including the investigatory and enforcement actions authorized by chapter 455B, to implement the provisions of this chapter and the rules adopted pursuant to this chapter.

9. Disseminate data and information, relative to this chapter, to the public to the greatest extent practical.

10. Develop a program, in consultation with the department of education and the department of environmental education of

the University of Northern Iowa, regarding water quality issues which shall be included in the minimum program required in grades seven and eight pursuant to section 256.11, subsection 4.

Sec. 109. NEW SECTION. 455E.9 POWERS AND DUTIES OF THE COMMISSION.

1. The commission shall adopt rules to implement this chapter.

2. When groundwater standards are proposed by the commission, all available information to develop the standards shall be considered, including federal regulations and all relevant information gathered from other sources. A public hearing shall be held in each congressional district prior to the submittal of a report on standards to the general assembly. This report on how groundwater standards may be a part of a groundwater protection program shall be submitted by the department to the general assembly for its consideration by January 1, 1989.

Sec. 110. NEW SECTION. 455E.10 JOINT DUTIES -- LOCAL AUTHORITY.

1. All state agencies shall consider groundwater protection policies in the administration of their programs. Local agencies shall consider groundwater protection policies in their programs. All agencies shall cooperate with the department in disseminating public information and education materials concerning the use and protection of groundwater, in collecting groundwater management data, and in conducting research on technologies to prevent or remedy contamination of groundwater.

2. Political subdivisions are authorized and encouraged to implement groundwater protection policies within their respective jurisdictions, provided that implementation is at least as stringent but consistent with the rules of the department.

Sec. 111. NEW SECTION. 455E.11 GROUNDWATER PROTECTION FUND ESTABLISHED.

1. A groundwater protection fund is created in the state treasury. Moneys received from sources designated for purposes related to groundwater monitoring and groundwater quality standards shall be deposited in the fund. Notwithstanding section 8.33, any unexpended balances in the groundwater protection fund and in any of the accounts within the groundwater protection fund at the end of each fiscal year shall be retained in the fund and the respective accounts within the fund. The fund may be used for the purposes established for each account within the fund.

The director shall include in the departmental budget prepared pursuant to section 455A.4, subsection 1, paragraph "c", a proposal for the use of groundwater protection fund moneys, and a report of the uses of the groundwater protection fund moneys appropriated in the previous fiscal year.

The secretary of agriculture shall submit with the report prepared pursuant to section 17.3 a proposal for the use of groundwater protection fund moneys, and a report of the uses of the groundwater protection fund moneys appropriated in the previous fiscal year.

2. The following accounts are created within the groundwater protection fund:

a. A solid waste account. Moneys received from the tonnage fee imposed under section 455B.310 and from other sources designated for environmental protection purposes in relation to sanitary disposal projects shall be deposited in the solid waste account.

The department shall use the funds in the account for the following purposes:

(1) The first fifty cents per ton of funds received from the tonnage fee imposed under section 455B.310 for the fiscal year beginning July 1, 1988 and ending June 30, 1989, shall be used for the following:

(a) Six cents per ton of the amount allocated under this subparagraph is appropriated to the waste management authority within the department of natural resources.

(b) Fourteen cents per ton of the amount allocated under this subparagraph is appropriated to the University of Northern Iowa to develop and maintain the small business assistance center for the safe and economic management of solid waste and hazardous substances established at the University of Northern Iowa.

(c) Eight thousand dollars of the amount allocated under this subparagraph is appropriated to the Iowa department of public health for carrying out the departmental duties pursuant to section 135.11, subsections 20 and 21, and section 139.35.

(d) The remainder of the amount allocated under this subparagraph is appropriated to the department of natural resources for the following purposes:

(i) The development of guidelines for groundwater monitoring at sanitary disposal projects as defined in section 455B.301, subsection 3.

(ii) Abatement and cleanup of threats to the public health, safety, and the environment resulting from a sanitary landfill if an owner or operator of the landfill is unable to facilitate the abatement or cleanup. However, not more than ten percent of the total funds allocated under this subparagraph may be used for this purpose without legislative authorization.

(2) An additional fifty cents per ton from the fees imposed under section 455B.310 for the fiscal year beginning July 1, 1988 and ending June 30, 1989 shall be used by the department to develop and implement demonstration projects for landfill alternatives to solid waste disposal including recycling programs.

(3) The additional fifty cents per ton collected from the fee imposed under section 455B.310 for the fiscal year beginning July 1, 1988 and ending June 30, 1989 may be retained by the agency making the payments to the state provided that a separate account is established for these funds and that they are used in accordance with the requirements of section 455B.306.

(4) The first fifty cents per ton of funds received from the tonnage fee imposed under section 455B.310 for the fiscal year beginning July 1, 1989 and ending June 30, 1990, shall be used for the following:

(a) Six cents per ton of the amount allocated under this subparagraph is appropriated to the waste management authority within the department of natural resources.

(b) Fourteen cents per ton of the amount allocated under this subparagraph is appropriated to the University of Northern Iowa to develop and maintain the small business assistance center for the safe and economic management of solid waste and hazardous substances established at the University of Northern Iowa.

(c) Eight thousand dollars of the amount allocated under this subparagraph is appropriated to the Iowa department of public health for carrying out the departmental duties pursuant to section 135.11, subsections 20 and 21, and section 139.35.

(d) The remainder of the amount allocated under this subparagraph is appropriated to the department of natural resources for the following purposes:

(i) The development of guidelines for groundwater monitoring at sanitary disposal projects as defined in section 455B.301, subsection 3.

(ii) Abatement and cleanup of threats to the public health, safety, and the environment resulting from a sanitary landfill if an owner or operator of the landfill is unable to

facilitate the abatement or cleanup. However, not more than ten percent of the total funds allocated under this subparagraph may be used for this purpose without legislative authorization.

(5) One dollar per ton from the fees imposed under section 455B.310 for the fiscal year beginning July 1, 1989 and ending June 30, 1990 shall be used by the department to develop and implement demonstration projects for landfill alternatives to solid waste disposal including recycling programs.

(6) The additional fifty cents per ton collected from the fee imposed under section 455B.310 for the fiscal year beginning July 1, 1989 and ending June 30, 1990 may be retained by the agency making the payments to the state provided that a separate account is established for these funds and that they are used in accordance with the requirements of section 455B.306.

(7) The first fifty cents per ton of funds received from the tonnage fee imposed for the fiscal year beginning July 1, 1990 and thereafter shall be used for the following:

(a) Fourteen cents per ton of the amount allocated under this subparagraph is appropriated to the University of Northern Iowa to develop and maintain the small business assistance center for the safe and economic management of solid waste and hazardous substances established at the University of Northern Iowa.

(b) Eight thousand dollars of the amount allocated under this subparagraph is appropriated to the Iowa department of public health for carrying out the departmental duties pursuant to section 135.11, subsections 20 and 21, and section 139.35.

(c) The administration and enforcement of a groundwater monitoring program and other required programs which are related to solid waste management.

(d) The development of guidelines for groundwater monitoring at sanitary disposal projects as defined in section 455B.301, subsection 3.

(e) Abatement and cleanup of threats to the public health, safety, and the environment resulting from a sanitary landfill if an owner or operator of the landfill is unable to facilitate the abatement or cleanup. However, not more than ten percent of the total funds allocated under this subparagraph may be used for this purpose without legislative authorization.

(8) One dollar per ton from the fees imposed under section 455B.310 for the fiscal year beginning July 1, 1990 and thereafter shall be used by the department to develop and implement demonstration projects for landfill alternatives to solid waste disposal including recycling programs.

(9) Each additional fifty cents per ton per year of funds received from the tonnage fee for the fiscal period beginning July 1, 1990 and thereafter is allocated for the following purposes:

(a) Thirty-five cents per ton per year shall be allocated to the department of natural resources for the following purposes:

(i) Twenty-five cents per ton per year shall be used to develop and implement demonstration projects for landfill alternatives to solid waste disposal including recycling programs.

(ii) No more than ten cents of the thirty-five cents per year may be used for the administration of a groundwater monitoring program and other required programs which are related to solid waste management, if the amount of funds generated for administrative costs in this fiscal period is less than the amount generated for the costs in the fiscal year beginning July 1, 1988.

(b) Fifteen cents per ton per year shall be allocated to local agencies for use as provided by law.

(10) Cities, counties, and private agencies subject to fees imposed under section 455B.310 may use the funds collected in accordance with the provisions of this section and the conditions of this subsection. The funds used from the account may only be used for any of the following purposes:

- (a) Development and implementation of an approved comprehensive plan.
- (b) Development of a closure or postclosure plan.
- (c) Development of a plan for the control and treatment of leachate which may include a facility plan or detailed plans and specifications.
- (d) Preparation of a financial plan, but these funds may not be used to actually contribute to any fund created to satisfy financial requirements, or to contribute to the purchase of any instrument to meet this need.

On January 1 of the year following the first year in which the funds from the account are used, and annually thereafter, the agency shall report to the department as to the amount of the funds used, the exact nature of the use of the funds, and the projects completed. The report shall include an audit report which states that the funds were, in fact, used entirely for purposes authorized under this subsection.

(11) If moneys appropriated to the portion of the solid waste account to be used for the administration of groundwater monitoring programs and other required programs that are related to solid waste management remain unused at the end of any fiscal year, the moneys remaining shall be allocated to the portion of the account used for abatement and cleanup of threats to the public health, safety, and the environment, resulting from sanitary landfills. If the balance of the moneys in the portion of the account used for abatement and

cleanup exceeds three million dollars, the moneys in excess shall be used to fund the development and implementation of demonstration projects for landfill alternatives to solid waste disposal including recycling.

The agriculture management account shall be used for the following purposes:

(1) Nine thousand dollars of the account is appropriated to the Iowa department of public health for carrying out the departmental duties under section 135.11, subsections 20 and 21, and section 139.35.

(2) Of the remaining moneys in the account:

(a) Thirty-five percent is appropriated annually for the Leopold center for sustainable agriculture at Iowa State University of science and technology.

(b) Two percent is appropriated annually to the department of natural resources for the purpose of administering grants to counties and conducting oversight of county-based programs relative to the testing of private water supply wells and the proper closure of private abandoned wells. Not more than twenty-three percent of the moneys is appropriated annually to the department of natural resources for grants to counties for the purpose of conducting programs of private, rural water supply testing, not more than six percent of the moneys is appropriated annually to the state hygienic laboratory to assist in well testing, and not more than twelve percent of the moneys is appropriated annually to the department of natural resources for grants to counties for the purpose of conducting programs for properly closing abandoned, rural water supply wells.

(c) The department shall allocate a sum not to exceed seventy-nine thousand dollars of the moneys appropriated for the fiscal year beginning July 1, 1987, and ending June 30, 1988 for the preparation of a detailed report and plan for the establishment on July 1, 1988 of the center for health effects

of environmental contamination. The plan for establishing the center shall be presented to the general assembly on or before January 15, 1988. The report shall include the assemblage of all existing data relating to Iowa drinking water supplies, including characteristics of source, treatment, presence of contaminants, precise location, and usage patterns to facilitate data retrieval and use in research; and detailed organizational plans, research objectives, and budget projections for the anticipated functions of the center in subsequent years. The department may allocate annually a sum not to exceed nine percent of the moneys appropriated to the center, beginning July 1, 1988.

(d) Thirteen percent of the moneys is appropriated annually to the department of agriculture and land stewardship for financial incentive programs related to agricultural drainage wells and sinkholes, for studies and administrative costs relating to sinkholes and agricultural drainage wells programs, and not more than two hundred thousand dollars of the moneys is appropriated for the demonstration projects regarding agricultural drainage wells and sinkholes. Of the thirteen percent allocated for financial incentive programs, not more than fifty thousand dollars is appropriated for the fiscal year beginning July 1, 1987 and ending June 30, 1988, to the department of natural resources for grants to county conservation boards for the development and implementation of projects regarding alternative practices in the remediation of noxious weed or other vegetation within highway rights-of-way.

(e) A household hazardous waste account. The moneys collected pursuant to section 455F.7 shall be deposited in the household hazardous waste account. Two thousand dollars is appropriated annually to the Iowa department of public health to carry out departmental duties under section 135.11, subsections 20 and 21, and section 139.35, eighty thousand dollars is appropriated to the department of natural resources

for city, county, or service organization project grants relative to recycling and reclamation events, and eight thousand dollars is appropriated to the department of transportation for the period of October 1, 1987 through June 30, 1989 for the purpose of conducting the used oil collection pilot project. The remainder of the account shall be used to fund Toxic Cleanup Days programs, education programs, and other activities pursuant to chapter 455F, including the administration of the household hazardous materials permit program by the department of revenue and finance.

(f) A storage tank management account. All fees collected pursuant to section 455B.473, subsection 4, and section 455B.479, shall be deposited in the storage tank management account. Funds shall be expended for the following purposes:

(1) One thousand dollars is appropriated annually to the Iowa department of public health to carry out departmental duties under section 135.11, subsections 20 and 21, and section 139.35.

(2) Seventy percent of the moneys deposited in the account annually are appropriated to the department of natural resources for the administration of a state storage tank program pursuant to chapter 455B, division IV, part 8, and for programs which reduce the potential for harm to the environment and the public health from storage tanks.

(3) For the fiscal year beginning July 1, 1987, and ending June 30, 1988, twenty-five thousand dollars is appropriated from the account to the division of insurance for payment of costs incurred in the establishment of the plan of operations program regarding the financial responsibility of owners and operators of underground storage tanks which store petroleum.

(4) The remaining funds in the account are appropriated annually to the department of natural resources for the funding of state remedial cleanup efforts.

(g) An oil overcharge account. The oil overcharge moneys distributed by the United States department of energy, and approved for the energy related components of the groundwater protection strategy available through the energy conservation trust fund created in section 93.11, shall be deposited in the oil overcharge account as appropriated by the general assembly. The oil overcharge account shall be used for the following purposes:

(1) The following amounts are appropriated to the department of natural resources to implement its responsibilities pursuant to section 455E.8:

(a) For the fiscal year beginning July 1, 1987 and ending June 30, 1988, eight hundred sixty thousand dollars is appropriated.

(b) For the fiscal year beginning July 1, 1988 and ending June 30, 1989, six hundred fifty thousand dollars is appropriated.

(c) For the fiscal year beginning July 1, 1989 and ending June 30, 1990, six hundred thousand dollars is appropriated.

(d) For the fiscal year beginning July 1, 1990 and ending June 30, 1991, five hundred thousand dollars is appropriated.

(e) For the fiscal year beginning July 1, 1991 and ending June 30, 1992, five hundred thousand dollars is appropriated.

(2) For the fiscal year beginning July 1, 1987 and ending June 30, 1988, five hundred sixty thousand dollars is appropriated to the department of natural resources for assessing rural, private water supply quality.

(3) For the fiscal period beginning July 1, 1987 and ending June 30, 1989, one hundred thousand dollars is appropriated annually to the department of natural resources for the administration of a groundwater monitoring program at sanitary landfills.

(4) The following amounts are appropriated to the Iowa state water resources research institute to provide

competitive grants to colleges, universities, and private institutions within the state for the development of research and education programs regarding alternative disposal methods and groundwater protection:

(a) For the fiscal year beginning July 1, 1987 and ending June 30, 1988, one hundred twenty thousand dollars is appropriated.

(b) For the fiscal year beginning July 1, 1988 and ending June 30, 1989, one hundred thousand dollars is appropriated.

(c) For the fiscal year beginning July 1, 1989 and ending June 30, 1990, one hundred thousand dollars is appropriated.

(5) The following amounts are appropriated to the department of natural resources to develop and implement demonstration projects for landfill alternatives to solid waste disposal, including recycling programs:

(a) For the fiscal year beginning July 1, 1987 and ending June 30, 1988, seven hundred sixty thousand dollars is appropriated.

(b) For the fiscal year beginning July 1, 1988 and ending June 30, 1989, eight hundred fifty thousand dollars is appropriated.

(6) For the fiscal period beginning July 1, 1987 and ending June 30, 1988, eight hundred thousand dollars is appropriated to the Leopold center for sustainable agriculture.

(7) Seven million five hundred thousand dollars is appropriated to the agriculture energy management fund created under chapter 467E for the fiscal period beginning July 1, 1987 and ending June 30, 1992, to develop nonregulatory programs to implement integrated farm management of farm chemicals for environmental protection, energy conservation, and farm profitability; interactive public and farmer education; and applied studies on best management practices and best appropriate technology for chemical use efficiency and reduction.

(8) The following amounts are appropriated to the department of natural resources to continue the Big Spring demonstration project in Clayton county.

(a) For the fiscal period beginning July 1, 1987 and ending June 30, 1990, seven hundred thousand dollars is appropriated annually.

(b) For the fiscal period beginning July 1, 1990 and ending June 30, 1992, five hundred thousand dollars is appropriated annually.

(9) For the fiscal period beginning July 1, 1987 and ending June 30, 1990, one hundred thousand dollars is appropriated annually to the department of agriculture and land stewardship to implement a targeted education program on best management practices and technologies for the mitigation of groundwater contamination from or closure of agricultural drainage wells, abandoned wells, and sinkholes.

Sec. 112. Section 455B.172, subsection 2, Code 1987, is amended by striking the subsection and inserting in lieu thereof the following:

2. The department shall carry out the responsibilities of the state related to private water supplies and private sewage disposal systems for the protection of the environment and the public health and safety of the citizens of the state.

Sec. 113. Section 455B.172, Code 1987, is amended by adding the following new subsections after subsection 2 and renumbering the subsequent subsections:

NEW SUBSECTION. 3. Each county board of health shall adopt standards for private water supplies and private sewage disposal facilities. These standards shall be at least as stringent but consistent with the standards adopted by the commission. If a county board of health has not adopted standards for private water supplies and private sewage disposal facilities, the standards adopted by the commission shall be applied and enforced within the county by the county board of health.

NEW SUBSECTION. 4. Each county board of health shall regulate the private water supply and private sewage disposal facilities located within the county board's jurisdiction, including the enforcement of standards adopted pursuant to this section.

NEW SUBSECTION. 5. The department shall maintain jurisdiction over and regulate the direct discharge to a water of the state. The department shall retain concurrent authority to enforce state standards for private water supply and private sewage disposal facilities within a county, and exercise departmental authority if the county board of health fails to fulfill board responsibilities pursuant to this section.

The commission shall make grants to counties for the purpose of conducting programs for the testing of private, rural water supply wells and for the proper closing of abandoned, rural, private water supply wells within the jurisdiction of the county. Grants shall be funded through allocation of the agriculture management account of the groundwater protection fund. Grants awarded, continued, or renewed shall be subject to the following conditions:

a. An application for a grant shall be in a form and shall contain information as prescribed by rule of the commission.

b. Nothing in this section shall be construed to prohibit the department from making grants to one or more counties to carry out the purpose of the grant on a joint, multicounty basis.

c. A grant shall be awarded on an annual basis to cover a fiscal year from July 1 to June 30 of the following calendar year.

d. The continuation or renewal of a grant shall be contingent upon the county's acceptable performance in carrying out its responsibilities, as determined by the director. The director, subject to approval by the commission, may deny the

awarding of a grant or withdraw a grant awarded if, by determination of the director, the county has not carried out the responsibilities for which the grant was awarded, or cannot reasonably be expected to carry out the responsibilities for which the grant would be awarded.

Sec. 114. Section 455B.173, Code 1987, is amended by adding the following new subsection:

NEW SUBSECTION. 10. Adopt, modify, or repeal rules relating to the awarding of grants to counties for the purpose of carrying out responsibilities pursuant to section 455B.172 relative to private water supplies and private sewage disposal facilities.

Sec. 115. Section 455B.311, unnumbered paragraph 1, Code 1987, is amended to read as follows:

The director, with the approval of the commission, may make grants to cities, counties, or central planning agencies representing cities and counties or combinations of cities, counties, or central planning agencies from funds reserved under and for the purposes specified in section 455B.309, subsection-4 455E.11, subsection 2, paragraph "a", subject to all of the following conditions:

Sec. 116. Section 455B.309, Code 1987, is repealed.

PART TWO -- PESTICIDES AND FERTILIZER

Sec. 201. Section 89B.4, subsection 1, Code 1987, is amended to read as follows:

1. Except for section 89B.9, this chapter does not apply to a person engaged in farming as defined in this section; or a pesticide, as defined in section 206.2, subsection 1, used, stored, or available for sale by a ~~commercial-applicator-as defined in section-206-27-subsection-127-a-certified applicator-as-defined-in-section-206-27-subsection-177-a~~ certified private applicator as defined in section 206.2, subsection 187; ~~a-certified-commercial-applicator-as-defined in-section-206-27-subsection-197-a-pesticide-dealer-as-defined~~

~~in-section-206-27-subsection-247~~ or to activities which are covered under the federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 135 et seq.; ~~provided, however, that~~ However, such persons shall comply with the requirements of the regulations for the federal Insecticide, Fungicide, and Rodenticide Act, 40 C.F.R. § 170, and the requirements of and rules adopted under chapter 206 where applicable to such the persons. As used in this section, "farming" means the cultivation of land for the production of agricultural crops, the raising of poultry, the production of eggs, the production of milk, the production of fruit or other horticultural crops, grazing or the production of livestock, spraying, or harvesting. The department of agriculture and land stewardship shall cooperate with the division in an investigation of an agricultural employee's complaint filed pursuant to section 89B.9.

Sec. 202. Section 135.11, Code 1987, is amended by adding the following new subsections:

NEW SUBSECTION. 20. Establish, publish, and enforce rules requiring prompt reporting of methemoglobinemia, pesticide poisoning, and the reportable poisonings and illnesses established pursuant to section 139.35.

NEW SUBSECTION. 21. Collect and maintain reports of pesticide poisonings and other poisonings, illnesses, or injuries caused by selected chemical or physical agents, including methemoglobinemia and pesticide and fertilizer hypersensitivity; and compile and publish, annually, a statewide and county-by-county profile based on the reports.

Sec. 203. NEW SECTION. 139.35 REPORTABLE POISONINGS AND ILLNESSES.

1. If the results of an examination by a public, private, or hospital clinical laboratory of a specimen from a person in Iowa yield evidence of or are reactive for a reportable poisoning or a reportable illness from a toxic agent,

including methemoglobinemia, the results shall be reported to the Iowa department of public health on forms prescribed by the department. If the laboratory is located in Iowa, the person in charge of the laboratory shall report the results. If the laboratory is not in Iowa, the health care provider submitting the specimen shall report the results.

2. The physician or other health practitioner attending a person infected with a reportable poisoning or a reportable illness from a toxic agent, including methemoglobinemia, shall immediately report the case to the Iowa department of public health. The Iowa department of public health shall publish and distribute instructions concerning the method of reporting. Reports shall be made in accordance with rules adopted by the Iowa department of public health.

3. A person in charge of a poison control or poison information center shall report cases of reportable poisoning, including methemoglobinemia, about which they receive inquiries to the Iowa department of public health.

4. The Iowa department of public health shall adopt rules designating reportable poisonings, including methemoglobinemia, and illnesses which must be reported under this section.

5. The Iowa department of public health shall establish and maintain a central registry to collect and store data reported pursuant to this section.

Sec. 204. Section 177.2, subsection 1, Code 1987, is amended to read as follows:

1. To encourage the use of good agricultural practices in crop production, including best management practices for applying fertilizer and pesticide, and to conserve, maintain, and improve soil productivity.

Sec. 205. Section 200.4, Code 1987, is amended to read as follows:

200.4 LICENSES.

1. Any person who manufactures, mixes, blends, or mixes to customers order, offers for sale, sells, or distributes any fertilizer or soil conditioner ~~offered-for-sale-sold, or distributed~~ in Iowa must first obtain a license from the secretary of agriculture and shall pay a ten-dollar license fee for each plant or place of manufacture or distribution from which fertilizer or soil conditioner products are sold or distributed in Iowa. Such license fee shall be paid annually on July 1 of each year and ~~the manufacturer, blender or mixer shall at the same time, list the name and address of each such plant or place of manufacture from which sale or distribution is made.~~

~~This subsection shall not apply to a manufacturer who manufactures "specialty fertilizer" only, as defined in section 200.3, subsection 5, in packages of twenty-five pounds or less.~~

2. Said licensee shall at all times produce an intimate and uniform mixture of fertilizers or soil conditioners. When two or more fertilizer materials are delivered in the same load, they shall be thoroughly and uniformly mixed unless they are in separate compartments.

Sec. 206. Section 200.8, Code 1987, is amended to read as follows:

200.8 INSPECTION FEES.

1. There shall be paid by the licensee to the secretary for all commercial fertilizers and soil conditioners sold, or distributed in this state, an inspection fee to be fixed annually by the secretary of agriculture at not more than twenty cents per ton: ~~Except sales.~~ Sales for manufacturing purposes only are hereby exempted from fees but must still be reported showing manufacturer who purchased same. Payment of said inspection fee by any licensee shall exempt all other persons, firms or corporations from the payment thereof.

On individual packages of specialty fertilizer containing twenty-five pounds or less, there shall be paid by the manufacturer in lieu of the ~~annual license fee and the~~ semiannual inspection fee as set forth in this chapter, an annual registration and inspection fee of twenty-five one hundred dollars for each brand and grade sold or distributed in the state. In the event that any person manufacturer sells specialty fertilizer in packages of twenty-five pounds or less and also in packages of more than twenty-five pounds, this annual registration and inspection fee shall apply only to that portion sold in packages of twenty-five pounds or less, and that portion sold in packages of more than twenty-five pounds shall be subject to the same inspection fee as fixed by the secretary of agriculture as provided in this chapter.

Any person other than a manufacturer who offers for sale, sells, or distributes specialty fertilizer in packages of twenty-five pounds or less or applies specialty fertilizer for compensation shall be required to pay an annual inspection fee of fifty dollars in lieu of the semiannual inspection fee as set forth in this chapter.

2. Every licensee and any person required to pay an annual registration and inspection fee under this chapter in this state shall:

a. File not later than the last day of January and July of each year, on forms furnished by secretary, a semiannual statement setting forth the number of net tons of commercial fertilizer or soil conditioners distributed in this state by grade for each county during the preceding six months' period; and upon filing such statement shall pay the inspection fee at the rate stated in subsection 1 of this section. However, in lieu of the semiannual statement by grade for each county, as hereinabove provided for, the registrant, on individual packages of commercial specialty fertilizer containing twenty-five pounds or less, shall file not later than the last day of

July of each year, on forms furnished by the secretary, an annual statement setting forth the number of net tons of commercial specialty fertilizer distributed in this state by grade during the preceding twelve-month period; ~~but no inspection fee shall be due thereon.~~

b. If the tonnage report is not filed or the payment of inspection fees, or both, is not made within ten days after the last day of January and July of each year as required in paragraph "a" of this subsection, a penalty amounting to ten percent of the amount due, if any, shall be assessed against the licensee. In any case, the penalty shall be no less than fifty dollars. The amount of fees due, if any, and penalty shall constitute a debt and become the basis of a judgment against the licensee.

3. If there is an unencumbered balance of funds in the fertilizer fund on June 30 of any fiscal year equal to or exceeding three hundred fifty thousand dollars, the secretary of agriculture shall reduce the per ton fee provided for in subsection 1 and the annual license fee established pursuant to section 201.3 for the next fiscal year in such amount as will result in an ending estimated balance for the June 30 of the next fiscal year of three hundred fifty thousand dollars.

Sec. 207. Section 200.8, Code 1987, is amended by adding the following new subsection:

NEW SUBSECTION. 4. In addition to the fees imposed under subsection 1, a groundwater protection fee shall be imposed upon nitrogen-based fertilizer. The fee shall be based upon the percentage of actual nitrogen contained in the product. An eighty-two percent nitrogen solution shall be taxed at a rate of seventy-five cents per ton. Other nitrogen-based product formulations shall be taxed on the percentage of actual nitrogen contained in the formulations with the eighty-two percent nitrogen solution serving as the base. The fee shall be paid by each licensee registering to sell fertilizer

to the secretary of agriculture. The fees collected shall be deposited in the agriculture management account of the groundwater protection fund. The secretary of agriculture shall adopt rules for the payment, filing, and collection of groundwater protection fees from licensees in conjunction with the collection of registration and inspection fees. The secretary shall, by rule allow an exemption to the payment of this fee for fertilizers which contain trace amounts of nitrogen.

Sec. 208. Section 200.9, Code 1987, is amended to read as follows:

**200.9 FERTILIZER FUND.**

Fees collected for licenses and inspection fees under sections 200.4 and 200.8, with the exception of those fees collected for deposit in the agriculture management account of the groundwater protection fund, shall be deposited in the treasury to the credit of the fertilizer fund to be used only by the department for the purpose of inspection, sampling, analysis, preparation, and publishing of reports and other expenses necessary for administration of this chapter. The secretary may assign moneys to the Iowa agricultural experiment station for research, work projects, and investigations as may be needed for the specific purpose of improving the regulatory functions for enforcement of this chapter.

Sec. 209. Section 206.2, subsection 12, Code 1987, is amended to read as follows:

12. The term "commercial applicator" shall mean any person, or corporation, or employee of a person or corporation who enters into a contract or an agreement for the sake of monetary payment and agrees to perform a service by applying any pesticide or servicing any device but shall not include a farmer trading work with another, a person employed by a farmer not solely as a pesticide applicator who

applies pesticide as an incidental part of the person's general duties, or a person who applies pesticide as an incidental part of a custom farming operation.

Sec. 210. Section 206.2, subsection 17, Code 1987, is amended to read as follows:

17. "Certified applicator" means any individual who is certified under this chapter as authorized to use or supervise ~~the use of~~ any pesticide which ~~is classified for restricted use.~~

Sec. 211. Section 206.2, subsection 18, Code 1987, is amended to read as follows:

18. "Certified private applicator" means a certified applicator who uses or supervises ~~the use of~~ any pesticide which is classified for restricted use ~~for purposes of~~ producing any agricultural commodity on property owned or rented by the applicator or the applicator's employer or, if applied without compensation other than trading of personal services between producers of agricultural commodities, on the property of another person.

Sec. 212. Section 206.2, subsection 19, Code 1987, is amended to read as follows:

19. "Certified commercial applicator" means a pesticide applicator or individual who applies or uses a restricted-use pesticide or device ~~for the purpose of producing any agricultural commodity or~~ on any property of another for compensation.

Sec. 213. Section 206.2, subsection 24, Code 1987, is amended to read as follows:

24. The term "pesticide dealer" means any person who distributes any restricted use pesticides which ~~by regulation are restricted to application only by certified applicators;~~ pesticide for use by commercial or public pesticide applicators; or general use pesticides labeled for agricultural or lawn and garden use with the exception of

dealers whose gross annual pesticide sales are less than ten thousand dollars for each business location owned or operated by the dealer.

Sec. 214. Section 206.5, Code 1987, is amended to read as follows:

206.5 CERTIFICATION REQUIREMENTS.

No person shall apply any pesticide and a person shall not apply any restricted use pesticide without first complying with the certification requirements of this chapter and such other restrictions as determined by the secretary or being under the direct supervision of a certified applicator.

The secretary shall adopt, by rule, requirements for the examination, re-examination and certification of applicants and set a fee of not more than ten dollars for the certification program of commercial applicators and not more than five dollars for the certification program of private applicators.

The secretary may adopt rules for the training of applicators in co-operation with the co-operative extension service at Iowa State University of science and technology.

The secretary shall not require applicants for certification as private applicators to take and pass a written test, if the applicant instead shows proof that the applicant has attended an informational course of instruction approved by the secretary. The secretary shall provide for temporary certification for emergency purchases of restricted use products by requiring the purchaser to sign an affidavit at the point of purchase, that the purchaser has read and understands the information on the label of the restricted use product being purchased.

Commercial and public applicators shall choose between one-year certification for which the applicator shall pay a twenty-five dollar fee or three-year certification for which

the applicator shall pay a seventy-five dollar fee. Public applicators who are employed by a state agency shall be exempt from the twenty-five and seventy-five dollar certification fees and instead be subject to a five-dollar annual certification fee or a fifteen dollar fee for a three-year certification. The commercial or public applicator shall be tested prior to certification annually, if the applicator chooses a one-year certification or each three years if the applicator chooses three-year certification. A private applicator shall be tested prior to initial certification. The test shall include, but is not limited to, the area of safe handling of agricultural chemicals and the effects of these chemicals on groundwater. A person employed by a farmer not solely as a pesticide applicator who applies restricted use pesticides as an incidental part of the person's general duties or a person who applies restricted use pesticides as an incidental part of a custom farming operation is required to meet the certification requirements of a private applicator.

The secretary may adopt rules to provide for license and certification adjustments, including fees, which may be necessary to provide for an equitable transition for licenses and certifications issued prior to January 1, 1989. The rules shall also include a provision for renewal of certification through the administering of an approved exam, and a provision for a thirty-day renewal grace period.

Sec. 215. Section 206.6, subsection 3, Code 1987, is amended to read as follows:

3. EXAMINATION FOR COMMERCIAL APPLICATOR LICENSE. The secretary of agriculture shall not issue a commercial applicator license until the individual engaged in or managing the pesticide application business and employed by the business to apply pesticides is qualified certified by passing an examination to demonstrate to the secretary the individual's knowledge of how to apply pesticides under the

classifications the individual has applied for, and the individual's knowledge of the nature and effect of pesticides the individual may apply under such classifications. The applicant successfully completing this examination the certification requirement shall be a licensed commercial applicator.

Sec. 216. Section 206.6, subsection 4, Code 1987, is amended to read as follows:

4. RENEWAL OF APPLICANT'S LICENSE. The secretary of agriculture shall renew any applicant's license under the classifications for which such applicant is licensed, provided that ~~a program of training of all of the applicant's personnel who apply pesticides has been established and maintained by the licensee are certified commercial applicators.~~ Such a ~~program may include attending training sessions such as cooperative extension short courses or industry trade association training seminars.~~

Sec. 217. Section 206.6, subsection 6, paragraph b, Code 1987, is amended to read as follows:

b. Public applicators for agencies listed in this subsection shall be subject to examinations certification requirements as provided for in this section, ~~however, the secretary shall issue a limited license without a fee to such public applicator who has qualified for such license.~~ The public applicator license shall be valid only when such applicator is acting as an applicator applying or supervising the application of pesticides used by such entities. Government research personnel shall be exempt from this licensing requirement when applying pesticides only to experimental plots. Individuals Public agencies or municipal corporations licensed pursuant to this section shall be licensed public applicators.

Sec. 218. Section 206.7, subsection 1, Code 1987, is amended to read as follows:

1. REQUIREMENT FOR CERTIFICATION. No A commercial or public applicator shall not apply any restricted-use pesticide without first complying with the certification standards or ~~being under the direct supervision of a certified applicator.~~

Sec. 219. Section 206.8, subsections 2 and 3, Code 1987, are amended to read as follows:

2. ~~Application for a license shall be accompanied by a twenty-five dollar~~ A pesticide dealer shall pay a minimum annual license fee of twenty-five dollars or an annual license fee for the primary business location and an additional five dollar annual license fee for each other location or outlet within the state, and shall be on a form prescribed by the secretary and shall include the full name of the person applying for such license based on one-tenth of one percent of the gross retail sales of all pesticides sold by the pesticide dealer in the previous year. The annual license fee shall be paid to the department of agriculture and land stewardship, beginning July 1, 1988, and July 1 of each year thereafter. A licensee shall pay a fee of twenty-five dollars for the period July 1, 1987 through June 30, 1988.

The initial twenty-five dollars of each annual license fee shall be retained by the department for administration of the program, and the remaining moneys collected shall be deposited in the agriculture management account of the groundwater protection fund.

3. Provisions of this section shall not apply to a pesticide applicator who sells pesticides as an integral part of the applicator's pesticide application service, or any federal, state, county, or municipal agency which provides pesticides only for its own programs.

Sec. 220. Section 206.8, Code 1987, is amended by adding the following new subsection:

NEW SUBSECTION. 4. Application for a license required for manufacturers and distributors who are not engaged in the

retail sale of pesticides shall be accompanied by a twenty-five dollar fee for each business location within the state required to be licensed, and shall be on a form prescribed by the secretary.

Sec. 221. Section 206.9, Code 1987, is amended to read as follows:

**206.9 CO-OPERATIVE AGREEMENTS.**

The secretary may co-operate, receive grants-in-aid and enter into agreements with any agency of the federal government, of this state or its subdivisions, or with any agency of another state, or trade associations to obtain assistance in the implementation of this chapter and to do all of the following:

1. Secure uniformity of regulations;
  2. Co-operate in the enforcement of the federal pesticide control laws through the use of state or federal personnel and facilities and to implement co-operative enforcement programs;
  - ~~3. Develop and administer state programs for training and certification of certified applicators consistent with federal standards;~~
  - ~~4. Contract for training with other agencies including federal agencies for the purpose of training certified applicators;~~
  5. Contract for monitoring pesticides for the national plan;
  6. Prepare and submit state plans to meet federal certification standards; and
  7. Regulate certified applicators.
6. Develop, in conjunction with the Iowa cooperative extension service in agriculture and home economics, courses available to the public regarding pesticide best management practices.

Sec. 222. Section 206.12, subsection 3, Code 1987, is amended to read as follows:

3. The registrant, before selling or offering for sale any pesticide in this state, shall register each brand and grade of such pesticide with the secretary upon forms furnished by the secretary, and ~~for the purpose of defraying expenses connected with the enforcement of this chapter,~~ the secretary shall set the registration fee annually at no more than twenty one-fifth of one percent of gross sales within this state with a minimum fee of two hundred fifty dollars and a maximum fee of three thousand dollars for each and every brand and grade to be offered for sale in this state. The secretary shall adopt by rule exemptions to the minimum fee. The fees Fifty dollars of each fee collected shall be deposited in the treasury to the credit of the pesticide fund to be used only for the purpose of enforcing the provisions of this chapter and the remainder of each fee collected shall be placed in the agriculture management account of the groundwater protection fund.

Sec. 223. Section 206.12, Code 1987, is amended by adding the following new subsection:

NEW SUBSECTION. 7. Each licensee under section 206.6 or 206.8 shall file an annual report with the secretary of agriculture listing the amount and type of all pesticides sold, offered for sale, or distributed at retail for use in this state, or applied in this state during each month of the previous year. This report shall be filed at the time of payment for licensure or annually on or before July 1. The secretary, by rule, may specify the form of the report and require additional information deemed necessary to determine pesticide use within the state. The information required shall include the brand names and amounts of pesticides sold, offered for sale, or distributed at retail for use in this state for each business location owned or operated by the

retailer, but the information collected, if made public, shall be reported in a manner which does not identify a specific brand name in the report.

Sec. 224. Section 206.19, Code 1987, is amended by adding the following new subsections:

**NEW SUBSECTION.** 3. Determine in cooperation with municipalities, the proper notice to be given by a commercial or public applicator to occupants of adjoining properties in urban areas prior to or after the exterior application of pesticides, establish a schedule to determine the periods of application least harmful to living beings, and adopt rules to implement these provisions. Municipalities shall cooperate with the department by reporting infractions and in implementing this subsection.

**NEW SUBSECTION.** 3A. Adopt rules providing guidelines for public bodies to notify adjacent property occupants regarding the application of herbicides to noxious weeds or other undesirable vegetation within highway rights-of-way.

**NEW SUBSECTION.** 4. Establish civil penalties for violations by commercial applicators.

Sec. 225. Section 206.21, Code 1987, is amended by adding the following new subsection:

**NEW SUBSECTION.** 3. The secretary of agriculture, in cooperation with the advisory committee created pursuant to section 206.23, shall designate areas with a history of concerns regarding nearby pesticide applications as pesticide management areas. The secretary shall adopt rules for designating pesticide management areas.

Sec. 226. **NEW SECTION.** 206.24 AGRICULTURAL INITIATIVE.

A program of education and demonstration in the area of the agricultural use of fertilizers and pesticides shall be initiated by the secretary of agriculture on July 1, 1987. The secretary shall coordinate the activities of the state regarding this program.

Education and demonstration programs shall promote the widespread adoption of management practices which protect groundwater. The programs may include but are not limited to programs targeted toward the individual farm owner or operator, high school and college students, and groundwater users, in the areas of best management practices, current research findings, and health impacts. Emphasis shall be given to programs which enable these persons to demonstrate best management practices to their peers.

Sec. 227. **NEW SECTION.** 206.25 PESTICIDE CONTAINERS DISPOSAL.

The department of agriculture and land stewardship, in cooperation with the environmental protection division of the department of natural resources, shall develop a program for handling used pesticide containers which reflects the state solid waste management policy hierarchy, and shall present the program developed to the general assembly by February 1, 1988.

Sec. 228. **NEW SECTION.** 263.14 CENTER FOR HEALTH EFFECTS OF ENVIRONMENTAL CONTAMINATION.

1. The state board of regents shall establish and maintain at Iowa City as an integral part of the State University of Iowa the center for health effects of environmental contamination, having as its object the determination of the levels of environmental contamination which can be specifically associated with human health effects.

2. a. The center shall be a cooperative effort of representatives of the following organizations:

- (1) The State University of Iowa department of preventative medicine and environmental health.
- (2) The State University of Iowa department of pediatrics of the college of medicine.
- (3) The state hygienic laboratory.
- (4) The institute of agricultural medicine.
- (5) The Iowa cancer center.

- (6) The department of civil and environmental engineering.
- (7) Appropriate clinical and basic science departments.
- (8) The college of law.
- (9) The college of liberal arts and sciences.
- (10) The Iowa department of public health.
- (11) The department of natural resources.
- (12) The department of agriculture and land stewardship.

b. The active participation of the national cancer institute, the agency for toxic substances and disease registries, the national center for disease control, the United States environmental protection agency, and the United States geological survey, shall also be sought and encouraged.

3. The center may:

- a. Assemble all pertinent laboratory data on the presence and concentration of contaminants in soil, air, water, and food, and develop a data retrieval system to allow the findings to be easily accessed by exposed populations.
- b. Make use of data from the existing cancer and birth defect statewide recording systems and develop similar recording systems for specific organ diseases which are suspected to be caused by exposure to environmental toxins.
- c. Develop registries of persons known to be exposed to environmental hazards so that the health status of these persons may be examined over time.
- d. Develop highly sensitive biomedical assays which may be used in exposed persons to determine early evidence of adverse health effects.
- e. Perform epidemiologic studies to relate occurrence of a disease to contaminant exposure and to ensure that other factors known to cause the disease in question can be ruled out.
- f. Foster relationships and ensure the exchange of information with other teaching institutions or laboratories in the state which are concerned with the many forms of environmental contamination.

g. Implement programs of professional education and training of medical students, physicians, nurses, scientists, and technicians in the causes and prevention of environmentally induced disease.

h. Implement public education programs to inform persons of research results and the significance of the studies.

i. Respond as requested to any branch of government for consultation in the drafting of laws and regulations to reduce contamination of the environment.

4. An advisory committee consisting of one representative of each of the organizations enumerated in subsection 2, paragraph "a", a representative of the Iowa department of public health, and a representative of the department of natural resources is established. The advisory committee shall:

a. Employ, as a state employee, a full-time director to operate the center. The director shall coordinate the efforts of the heads of each of the major divisions of laboratory analysis, epidemiology and biostatistics, biomedical assays, and exposure modeling and shall also coordinate the efforts of professional and support staff in the operation of the center.

b. Submit an annual report of the activities of the center to the legislative council of the general assembly by January 15 of each year.

5. The center shall maintain the confidentiality of any information obtained from existing registries and from participants in research programs. Specific research projects involving human subjects shall be approved by the State University of Iowa institutional review board.

6. The center may solicit, accept, and administer moneys appropriated to the center by a public or private agency.

Sec. 229. NEW SECTION. 266.37 SOIL TEST INTERPRETATION.

The Iowa cooperative extension service in agriculture and home economics shall develop and publish material on the

interpretation of the results of soil tests. The material shall also feature the danger to groundwater quality from the overuse of fertilizers and pesticides. The material shall be available from the service at cost and any person providing soil tests for agricultural or horticultural purposes shall provide the material to the customer with the soil test results.

**Sec. 230. NEW SECTION. 266.38 LEOPOLD CENTER FOR SUSTAINABLE AGRICULTURE.**

1. For the purposes of this section, "sustainable agriculture" means the appropriate use of crop and livestock systems and agricultural inputs supporting those activities which maintain economic and social viability while preserving the high productivity and quality of Iowa's land.

2. The Leopold center for sustainable agriculture is established in the Iowa agricultural and home economics experiment station at Iowa State University of science and technology. The center shall conduct and sponsor research to identify and reduce negative environmental and socio-economic impacts of agricultural practices. The center also shall research and assist in developing emerging alternative practices that are consistent with a sustainable agriculture. The center shall develop in association with the Iowa cooperative extension service in agriculture and home economics an educational framework to inform the agricultural community and the general public of its findings.

3. An advisory board is established consisting of the following members:

- a. Three persons from Iowa State University of science and technology, appointed by its president.
- b. Two persons from the State University of Iowa, appointed by its president.
- c. Two persons from the University of Northern Iowa, appointed by its president.

d. Two representatives of private colleges and universities within the state, to be nominated by the Iowa association of independent colleges and universities, and appointed by the Iowa coordinating council for post-high school education.

e. One representative of the department of agriculture and land stewardship, appointed by the secretary of agriculture.

f. One representative of the department of natural resources, appointed by the director.

g. One man and one woman, actively engaged in agricultural production, appointed by the state soil conservation committee.

The terms of the members shall begin and end as provided in section 69.19 and any vacancy shall be filled by the original appointing authority. The terms shall be for four years and shall be staggered as determined by the president of Iowa State University of science and technology.

4. The Iowa agricultural and home economics experiment station shall employ a director for the center, who shall be appointed by the president of Iowa State University of science and technology. The director of the center shall employ the necessary research and support staff. The director and staff shall be employees of Iowa State University of science and technology. No more than five hundred thousand dollars of the funds received from the agriculture management account annually shall be expended by the center for the salaries and benefits of the employees of the center, including the salary and benefits of the director. The remainder of the funds received from the agriculture management account shall be used to sponsor research grants and projects on a competitive basis from Iowa colleges and universities and private nonprofit agencies and foundations. The center may also solicit additional grants and funding from public and private nonprofit agencies and foundations.

The director shall prepare an annual report.

5. The board shall provide the president of Iowa State University of science and technology with a list of three candidates from which the director shall be selected. The board shall provide an additional list of three candidates if requested by the president. The board shall advise the director in the development of a budget, on the policies and procedures of the center, in the funding of research grant proposals, and regarding program planning and review.

Sec. 231. NEW SECTION. 317.26 ALTERNATIVE REMEDIATION PRACTICES.

The director of the department of natural resources, in cooperation with the secretary of agriculture and county conservation boards or the board of supervisors, shall develop and implement projects which utilize alternative practices in the remediation of noxious weeds and other vegetation within highway rights-of-way.

Sec. 232. Section 467E.1, subsection 2, Code 1987, is amended to read as follows:

2. An agricultural energy management advisory council is established which shall consist of the secretary of agriculture and the chief administrator of each of the following organizations or the administrator's designee:

- a. The energy and geological resources division of the department of natural resources.
- b. The environmental protection division of the department of natural resources.
- c. Iowa state university of science and technology college of agriculture.
- d. Iowa state university of science and technology college of engineering.
- e. Iowa state water resource research institute.
- f. State university of Iowa department of preventative medicine and environmental health.

g. Division of soil conservation of the department of agriculture and land stewardship.

h. Iowa cooperative extension service in agriculture and home economics.

i. The university of northern Iowa.

j. The state hygienic laboratory.

The secretary of agriculture shall coordinate the appointment process for compliance with section 69.16A.

The secretary of agriculture shall be the chairperson of the council. The presiding officers of the senate and house shall each appoint two nonvoting members, not more than one of any one political party, to serve on the advisory council for a term of two years. The council may invite the administrators of the United States geological survey and the federal environmental protection agency to each appoint a person to meet with the council in an advisory capacity. The council shall meet quarterly or upon the call of the chairperson. The council shall review possible uses of the funds fund and the effectiveness of current and past expenditures of the fund. The council shall make recommendations to the department of agriculture and land stewardship on the uses of the fund.

Sec. 233. PESTICIDE DEALER EXEMPTION. The secretary may adopt rules to provide for license and certification fee adjustments that may be necessary to provide an equitable transition from fees required prior to July 1, 1988.

Sec. 234. APPROPRIATION. For the fiscal year beginning July 1, 1987, and ending June 30, 1988, the increased fee revenues resulting to the fertilizer fund and to the pesticide fund from the increases in fees and expansion of coverage of fee requirements provided in this Act are appropriated to the department of agriculture and land stewardship for the administration and implementation of chapters 200 and 206, as amended by this Act.

PART THREE -- WELLS, SINKHOLES, WATERSHEDS,  
AND WETLANDS

Sec. 301. NEW SECTION. 108.11 AGRICULTURAL DRAINAGE  
WELLS -- WETLANDS -- CONSERVATION EASEMENTS.

The department shall develop and implement a program for the acquisition of wetlands and conservation easements on and around wetlands that result from the closure or change in use of agricultural drainage wells upon implementation of the programs specified in section 159.29 to eliminate groundwater contamination caused by the use of agricultural drainage wells. The program shall be coordinated with the department of agriculture and land stewardship. The department may use moneys appropriated for this purpose from the agriculture management account of the groundwater protection fund in addition to other moneys available for wetland acquisition, protection, development, and management.

Sec. 302. NEW SECTION. 159.28 SINKHOLES -- CONSERVATION  
EASEMENT PROGRAMS.

The department shall develop and implement a program for the prevention of groundwater contamination through sinkholes. The program shall provide for education of landowners and encourage responsible chemical and land management practices in areas of the state prone to the formation of sinkholes.

The program may provide financial incentives for land management practices and the acquisition of conservation easements around sinkholes. The program may also provide financial assistance for the cleanup of wastes dumped into sinkholes.

The program shall be coordinated with the groundwater protection programs of the department of natural resources and other local, state, or federal government agencies which could compensate landowners for resource protection measures. The department shall use moneys appropriated for this purpose from the agriculture management account of the groundwater protection fund.

Sec. 303. NEW SECTION. 159.29 AGRICULTURAL DRAINAGE  
WELLS.

1. An owner of an agricultural drainage well shall register the well with the department of natural resources by January 1, 1988.

2. An owner of an agriculture drainage well and a landholder whose land is drained by the well or wells of another person shall develop, in consultation with the department of agriculture and land stewardship and the department of natural resources, a plan which proposes alternatives to the use of agricultural drainage wells by July 1, 1991.

a. Financial incentive moneys may be allocated from the financial incentive portion of the agriculture management account of the groundwater protection fund to implement alternatives to agricultural drainage wells.

b. An owner of an agricultural drainage well and a landholder whose land is drained by the well or wells of another person shall not be eligible for financial incentive moneys pursuant to paragraph "a" if the owner fails to register the well with the department of natural resources by January 1, 1988 or if the owner fails to develop a plan for alternatives in cooperation with the department of agriculture and land stewardship and the department of natural resources.

3. The department shall:

a. On July 1, 1987 initiate a pilot demonstration and research project concerning elimination of groundwater contamination attributed to the use of agricultural chemicals and agricultural drainage wells. The project shall be established in a location in North Central Iowa determined by the department to be the most appropriate. A demonstration project shall also be established in Northeast Iowa to study techniques for the cleanup of sinkholes.

The agricultural drainage well pilot project shall be designed to identify the environmental, economic, and social problems presented by continued use or closure of agricultural drainage wells and to monitor possible contamination caused by agriculture land management practices and agricultural chemical use relative to agricultural drainage wells.

b. Develop alternative management practices based upon the findings from the demonstration projects to reduce the infiltration of synthetic organic compounds into the groundwater through agricultural drainage wells and sinkholes.

c. Examine alternatives and the costs of implementation of alternatives to the use of agricultural drainage wells, and examine the legal, technical, and hydrological constraints for integrating alternative drainage systems into existing drainage districts.

4. Financial incentive moneys expended through the use of the financial incentive portion of the agriculture management account may be provided by the department to landowners in the project areas for employing reduced chemical farming practices and land management techniques.

5. The secretary may appoint interagency committees and groups as needed to coordinate the involvement of agencies participating in department sponsored projects. The interagency committees and groups may accept grants and funds from public and private organizations.

6. The department shall publish a report on the status and findings of the pilot demonstration projects on or before July 1, 1989, and each subsequent year of the projects. The department of agriculture and land stewardship shall develop a priority system for the elimination of chemical contamination from agricultural drainage wells and sinkholes. The priority system shall incorporate available information regarding the significance of contamination, the number of registered wells in the area, and the information derived from the report

prepared pursuant to this subsection. The highest priority shall be given to agricultural drainage wells for which the above criteria are best met, and the costs of necessary action are at the minimum level.

7. Beginning July 1, 1990, the department shall initiate an ongoing program to meet the goal of eliminating chemical contamination caused by the use of agricultural drainage wells by January 1, 1995 based upon the findings of the report published pursuant to subsection 6.

8. Notwithstanding the prohibitions of section 455B.267, subsection 4, an owner of an agricultural drainage well may make emergency repairs necessitated by damage to the drainage well to minimize surface runoff into the agricultural drainage well, upon the approval of the county board of supervisors or the board's designee of the county in which the agricultural drainage well is located. The approval shall be based upon the following conditions:

a. The well has been registered in accordance with both state and federal law.

b. The applicant will institute management practices including alternative crops, reduced application of chemicals, or other actions which will reduce the level of chemical contamination of the water which drains into the well.

c. The owner submits a written statement that approved emergency repairs are necessary and do not constitute a basis to avoid the eventual closure of the well if closure is later determined to be required. If a county board of supervisors or the board's designee approves the emergency repair of an agricultural drainage well, the county board of supervisors or the board's designee shall notify the department of the approval within thirty days of the approval.

Sec. 304. Section 455B.187, Code 1987, is amended by adding the following new unnumbered paragraphs:

**NEW UNNUMBERED PARAGRAPH.** A landowner or the landowner's agent shall not drill for or construct a new water well without first obtaining a permit for this activity from the department. The department shall not issue a permit to any person for this activity unless the person first registers with the department all wells, including abandoned wells, on the property. The department may delegate the authority to issue a permit to a county board of supervisors or the board's designee. In the event of such delegation, the department shall retain concurrent authority. The commission shall adopt rules pursuant to chapter 17A to implement this paragraph.

**NEW UNNUMBERED PARAGRAPH.** Notwithstanding the provisions of this section, a county board of supervisors or the board's designee may grant an exemption from the permit requirements to a landowner or the landowner's agent if an emergency drilling is necessary to meet an immediate need for water. The exemption shall be effective immediately upon approval of the county board of supervisors or the board's designee. The board of supervisors or the board's designee shall notify the director within thirty days of the granting of an exemption.

**NEW UNNUMBERED PARAGRAPH.** In the case of property owned by a state agency, a person shall not drill for or construct a new water well without first registering with the department the existence of any abandoned wells on the property. The department shall develop a prioritized closure program and time frame for the completion of the program, and shall adopt rules to implement the program.

Sec. 305. **NEW SECTION.** 455B.190 ABANDONED WELLS PROPERLY PLUGGED.

All abandoned wells, as defined in section 455B.171, shall be properly plugged in accordance with the schedule established by the department. The department shall develop a prioritized closure program and a time frame for the completion of the program and shall adopt rules to implement

the program. A person who fails to properly plug an abandoned well on property the person owns, in accordance with the program established by the department, is subject to a civil penalty of up to one hundred dollars per day that the well remains unplugged or improperly plugged. The moneys collected shall be deposited in the financial incentive portion of the agriculture management account. The department of agriculture and land stewardship may provide by rule for financial incentive moneys, through expenditure of the moneys allocated to the financial-incentive-program portion of the agriculture management account, to reduce a person's cost in properly plugging wells abandoned prior to July 1, 1987.

Sec. 306. Section 465.22, Code 1987, is amended to read as follows:

465.22 DRAINAGE IN COURSE OF NATURAL DRAINAGE -- RECONSTRUCTION -- DAMAGES.

Owners of land may drain the same land in the general course of natural drainage by constructing or reconstructing open or covered drains, discharging the same drains in any natural watercourse or depression whereby so the water will be carried into some other natural watercourse, and when such if the drainage is wholly upon the owner's land the owner shall is not be liable in damages therefor, nor shall any such for the drainage unless it increases the quantity of water or changes the manner of discharge on the land of another. An owner in constructing a replacement drain, wholly on the owner's own land, and in the exercise of due care be, is not liable in damages to another in-case if a previously constructed drain on the owner's own land is rendered inoperative or less efficient by such the new drain, unless in violation of the terms of a written contract. Nothing-in-this This section shall-in-any-manner-be-constructed-to does not affect the rights or liabilities of proprietors in respect to running streams.

Sec. 307. NEW SECTION. 558.69 EXISTENCE AND LOCATION OF WELLS, DISPOSAL SITES, UNDERGROUND STORAGE TANKS, AND HAZARDOUS WASTE.

With each declaration of value submitted to the county recorder under chapter 428A, there shall also be submitted a statement that no known wells are situated on the property, or if known wells are situated on the property, the statement must state the approximate location of each known well and its status with respect to section 159.29 or 455B.190. The statement shall also state that no disposal site for solid waste, as defined in section 455B.301, which has been deemed to be potentially hazardous by the department of natural resources, exists on the property, or if such a disposal site does exist, the location of the site on the property. The statement shall additionally state that no underground storage tank, as defined in section 455B.471, subsection 6, exists on the property, or if an underground storage tank does exist, the type and size of the tank, and the substance in the tank. The statement shall also state that no hazardous waste as defined in section 455B.411, subsection 4, or listed by the department pursuant to section 455B.412, subsection 2, or section 455B.464, exists on the property, or if hazardous waste does exist, that the waste is being managed in accordance with rules adopted by the department of natural resources. The statement shall be signed by the grantors or the transferors of the property. The county recorder shall refuse to record any deed, instrument, or writing for which a declaration of value is required under chapter 428A unless the statement required by this section has been submitted to the county recorder.

If a declaration of value is not required, the above information shall be submitted on a separate form. The director of the department of natural resources shall prescribe the form of the statement and the separate form to

be supplied by each county recorder in the state. The county recorder shall transmit the statements to the department of natural resources at times directed by the director of the department.

PART FOUR -- SOLID WASTE MANAGEMENT AND LANDFILLS

Sec. 401. Section 18.3, Code 1987, is amended by adding the following new subsection:

NEW SUBSECTION. 9. Administering the provisions of section 18.18.

Sec. 402. Section 28F.1, unnumbered paragraph 1, Code 1987, is amended to read as follows:

This chapter provides a means for the joint financing by public agencies of works or facilities useful and necessary for the collection, treatment, purification, and disposal in a sanitary manner of liquid and solid waste, sewage, and industrial waste, facilities used for the conversion of solid waste to energy, and also electric power facilities constructed within the state of Iowa except that hydroelectric power facilities may also be located in the waters and on the dams of or on land adjacent to either side of the Mississippi or Missouri river bordering the state of Iowa, water supply systems, swimming pools or golf courses. This chapter applies to the acquisition, construction, reconstruction, ownership, operation, repair, extension, or improvement of such works or facilities, by a separate administrative or legal entity created pursuant to chapter 28E. When the legal entity created under this chapter is comprised solely of cities, counties, and sanitary districts established under chapter 358, or any combination thereof or any combination of the foregoing with other public agencies, the entity shall be both a corporation and a political subdivision with the name under which it was organized. The legal entity may sue and be sued, contract, acquire and hold real and personal property necessary for corporate purposes, adopt a corporate seal and

alter the seal at pleasure, and execute all the powers conferred in this chapter.

**Sec. 403. NEW SECTION. 268.4 SMALL BUSINESS ASSISTANCE CENTER FOR THE SAFE AND ECONOMIC MANAGEMENT OF SOLID WASTE AND HAZARDOUS SUBSTANCES.**

1. The small business assistance center for the safe and economic management of solid waste and hazardous substances is established at the University of Northern Iowa. The University of Northern Iowa, in cooperation with the department of natural resources, shall develop and implement a program which provides the following:

- a. Information regarding the safe use and economic management of solid waste and hazardous substances to small businesses which generate the substances.
- b. Dissemination of information to public and private agencies regarding state and federal solid waste and hazardous substances regulations, and assistance in achieving compliance with the regulations.
- c. Advice and consultation in the proper storage, handling, treatment, reuse, recycling, and disposal methods of solid waste and hazardous substances.
- d. Identification of the advantages of proper substance management relative to liability and operational costs of a particular small business.

e. Assistance in the providing of capital formation in order to comply with state and federal regulations.

2. a. An advisory committee to the center is established, consisting of a representative of each of the following organizations:

- (1) The Iowa department of economic development.
- (2) The small business development commission.
- (3) The University of Northern Iowa.
- (4) The State University of Iowa.
- (5) Iowa State University of science and technology.

(6) The department of natural resources.

b. The active participation of representatives of small businesses in the state shall also be sought and encouraged.

3. Information obtained or compiled by the center shall be disseminated directly to the Iowa department of economic development, the small business development centers, and other public and private agencies with interest in the safe and economic management of solid waste and hazardous substances.

4. The center may solicit, accept, and administer moneys appropriated to the center by a public or private agency.

Sec. 404. Section 455B.301, Code 1987, is amended by adding the following new subsections:

NEW SUBSECTION. 7. "Closure" means actions that will prevent, mitigate, or minimize the threat to public health and the environment posed by a closed sanitary landfill, including, but not limited to, application of final cover, grading and seeding of final cover, installation of an adequate monitoring system, and construction of ground and surface water diversion structures, if necessary.

NEW SUBSECTION. 8. "Closure plan" means the plan which specifies the methods and schedule by which an operator will complete or cease disposal operations of a sanitary disposal project, prepare the area for long-term care, and make the area suitable for other uses.

NEW SUBSECTION. 9. "Lifetime of the project" means the projected period of years that a landfill will receive waste, from the time of opening until closure, based on the volume of waste to be received projected at the time of submittal of the initial project plan and the calculated refuse capacity of the landfill based upon the design of the project.

NEW SUBSECTION. 10. "Financial assurance instrument" means an instrument submitted by an applicant to ensure the operator's financial capability to provide reasonable and necessary response during the lifetime of the project and for

the thirty years following closure, and to provide for the closure of the facility and postclosure care required by rules adopted by the commission in the event that the operator fails to correctly perform closure and postclosure care requirements. The form may include the establishment of a secured trust fund, use of a cash or surety bond, or the obtaining of an irrevocable letter of credit.

**NEW SUBSECTION.** 11. "Postclosure" and "postclosure care" mean the time and actions taken for the care, maintenance, and monitoring of a sanitary disposal project after closure that will prevent, mitigate, or minimize the threat to public health, safety, and welfare and the threat to the environment posed by the closed facility.

**NEW SUBSECTION.** 12. "Postclosure plan" means the plan which specifies the methods and schedule by which the operator will perform the necessary monitoring and care for the area after closure of a sanitary disposal project.

**NEW SUBSECTION.** 13. "Manufacturer" means a person who by labor, art, or skill transforms raw material into a finished product or article of trade.

**NEW SUBSECTION.** 14. "Leachate" means fluid that has percolated through solid waste and which contains contaminants consisting of dissolved or suspended materials, chemicals, or microbial waste products from the solid waste.

**NEW SUBSECTION.** 15. "Actual cost" means the operational, remedial and emergency action, closure, postclosure, and monitoring costs of a sanitary disposal project for the lifetime of the project.

Sec. 405. **NEW SECTION.** 455B.301A DECLARATION OF POLICY.

1. The protection of the health, safety, and welfare of Iowans and the protection of the environment require the safe and sanitary disposal of solid wastes. An effective and efficient solid waste disposal program, protects the environment and the public, and provides the most practical

and beneficial use of the material and energy values of solid waste. While recognizing the continuing necessity for the existence of landfills, alternative methods of managing solid waste and a reduction in the reliance upon land disposal of solid waste are encouraged. In the promotion of these goals, the following waste management hierarchy in descending order of preference, is established as the solid waste management policy of the state:

- a. Volume reduction at the source.
- b. Recycling and reuse.
- c. Combustion with energy recovery and refuse-derived fuel.
- d. Combustion for volume reduction.
- e. Disposal in sanitary landfills.

2. In the implementation of the solid waste management policy, the state shall:

- a. Establish and maintain a cooperative state and local program of project planning, and technical and financial assistance to encourage comprehensive solid waste management.
- b. Utilize the capabilities of private enterprise as well as the services of public agencies to accomplish the desired objectives of an effective solid waste management program.

Sec. 406. Section 455B.304, unnumbered paragraph 3, Code 1987, is amended to read as follows:

The commission shall adopt rules prohibiting the disposal of uncontained liquid waste in a sanitary landfill. The rules shall prohibit land burial or disposal by land application of wet sewer sludge at a sanitary landfill.

Sec. 407. Section 455B.304, unnumbered paragraph 6, Code 1987, is amended to read as follows:

The commission shall, by rule, require continued monitoring of groundwater pursuant to this section for a period of twenty thirty years after the sanitary disposal project is closed. The commission may prescribe a lesser period of monitoring

duration and frequency in consideration of the potential or lack thereof for groundwater contamination from the sanitary disposal project. The commission may extend the twenty-year thirty-year monitoring period on a site-specific basis by adopting rules specifically addressing additional monitoring requirements for each sanitary disposal project for which the monitoring period is to be extended.

Sec. 408. Section 455B.304, Code 1987, is amended by adding the following new unnumbered paragraphs:

NEW UNNUMBERED PARAGRAPH. The commission shall adopt rules which establish closure, postclosure, leachate control and treatment, and financial assurance standards and requirements and which establish minimum levels of financial responsibility for sanitary disposal projects.

NEW UNNUMBERED PARAGRAPH. The commission shall adopt rules which establish the minimum distance between tiling lines and a sanitary landfill in order to assure no adverse effect on the groundwater.

NEW UNNUMBERED PARAGRAPH. The commission shall adopt rules for the distribution of grants to cities, counties, central planning agencies, and public or private agencies working in cooperation with cities or counties, for the purpose of solid waste management. The rules shall base the awarding of grants on a project's reflection of the solid waste management policy and hierarchy established in section 455B.301A, the proposed amount of local matching funds, and community need.

NEW UNNUMBERED PARAGRAPH. By July 1, 1990, a sanitary landfill disposal project operating with a permit shall have a trained, tested, and certified operator. A certification program shall be devised or approved by rule of the department.

Sec. 409. Section 455B.305, subsection 5, Code 1987, is amended by adding the following new unnumbered paragraph:

NEW UNNUMBERED PARAGRAPH. After July 1, 1997, however, no new landfill permits shall be issued unless the applicant certifies that the landfill is needed as a part of an alternative disposal method, or unless the applicant provides documentation which satisfies the director that alternatives have been studied and are not either technically or economically feasible. The decision of the director is subject to review by the commission at its next meeting.

Sec. 410. Section 455B.305, Code 1987, is amended by adding the following new subsection:

NEW SUBSECTION. 6. Beginning July 1, 1992, the director shall not issue, renew, or reissue a permit for a sanitary landfill unless the sanitary landfill is equipped with a leachate control system. The director may exempt a permit applicant from this requirement if the director determines that certain conditions regarding, but not limited to, existing physical conditions, topography, soil, geology, and climate, are such that a leachate control system is unnecessary.

Sec. 411. Section 455B.306, subsection 1, Code 1987, is amended to read as follows:

1. A city, county, and a private agency operating or planning to operate a sanitary disposal project shall file with the director a comprehensive plan detailing the method by which the city, county, or private agency will comply with this part 1. The director shall review each comprehensive plan submitted and may reject, suggest modification, or approve the proposed plan. The director shall aid in the development of comprehensive plans for compliance with this part. The director shall make available to a city, county, and private agency appropriate forms for the submission of comprehensive plans and may hold hearings for the purpose of implementing this part. The director and governmental agencies with primary responsibility for the development and

conservation of energy resources shall provide research and assistance, when cities and counties operating or planning to operate sanitary disposal projects request aid in planning and implementing resource recovery systems. A comprehensive plan filed by a private agency operating or planning to operate a sanitary disposal project required pursuant to section 455B.302 shall be developed in cooperation and consultation with the city or county responsible to provide for the establishment and operation of a sanitary disposal project.

Sec. 412. Section 455B.306, subsection 2, Code 1987, is amended to read as follows:

2. The plan required by subsection 1 shall be filed with the department at the time of initial application for the construction and operation of a sanitary landfill disposal project and shall be updated and refiled with the department at the time of each subsequent application for renewal or reissuance of a previously issued permit.

Sec. 413. Section 455B.306, subsection 3, Code 1987, is amended to read as follows:

3. A comprehensive plan filed pursuant to this section in conjunction with an application for issuance, renewal, or reissuance of a permit for a sanitary disposal project shall incorporate and reflect the waste management hierarchy of the state solid waste management policy and shall at a minimum address the following general topics to the extent appropriate to the technology employed by the applicant at the sanitary disposal project:

- a. The extent to which solid waste is or can be recycled.
- b. The economic and technical feasibility of using other existing sanitary disposal project facilities in lieu of initiating or continuing the sanitary landfill for which the permit is being sought.
- c. The expected environmental impact of alternative solid waste disposal methods, including the use of sanitary landfills.

d. A specific plan and schedule for implementing technically and economically feasible solid waste disposal methods that will result in minimal environmental impact.

4. In addition to the above requirements, the following specific areas must be addressed in detail in the comprehensive plan:

a. A closure and postclosure plan detailing the schedule for and the methods by which the operator will meet the conditions for proper closure and postclosure adopted by rule by the commission. The plan shall include, but is not limited to, the proposed frequency and types of actions to be implemented prior to and following closure of an operation, the proposed postclosure actions to be taken to return the area to a condition suitable for other uses, and an estimate of the costs of closure and postclosure and the proposed method of meeting these costs. The postclosure plan shall reflect the thirty-year time period requirement for postclosure responsibility.

b. A plan for the control and treatment of leachate, including financial considerations proposed in meeting the costs of control and treatment in order to meet the requirements of section 455B.305, subsection 6.

c. A financial plan detailing the actual cost of the sanitary disposal project and including the funding sources of the project. In addition to the submittal of the financial plan filed pursuant to this subsection, the operator of an existing sanitary landfill shall submit an annual financial statement to the department.

d. An emergency response and remedial action plan including established provisions to minimize the possibility of fire, explosion, or any release to air, land, or water of pollutants that could threaten human health and the environment, and the identification of possible occurrences that may endanger human health and environment.

Sec. 414. Section 455B.306, Code 1987, is amended by adding the following new subsection:

**NEW SUBSECTION.** 4. In addition to the comprehensive plan filed pursuant to subsection 1, a person operating or proposing to operate a sanitary disposal project shall provide a financial assurance instrument to the department prior to the initial approval of a permit or prior to the renewal of a permit for an existing or expanding facility beginning July 1, 1988.

a. The financial assurance instrument shall meet all requirements adopted by rule by the commission, and shall not be canceled, revoked, disbursed, released, or allowed to terminate without the approval of the department. Following the cessation of operation or closure of a sanitary disposal project, neither the guarantor nor the operator shall cancel, revoke, or disburse the financial assurance instrument or allow the instrument to terminate until the operator is released from closure, postclosure, and monitoring responsibilities.

b. The operator shall maintain closure, and postclosure accounts. The commission shall adopt by rule the amounts to be contributed to the accounts based upon the amount of solid waste received by the facility. The accounts established shall be specific to the facility.

(1) Money in the accounts shall not be assigned for the benefit of creditors with the exception of the state.

(2) Money in an account shall not be used to pay any final judgment against a licensee arising out of the ownership or operation of the site during its active life or after closure.

(3) Conditions under which the department may gain access to the accounts and circumstances under which the accounts may be released to the operator after closure and postclosure responsibilities have been met, shall be established by the commission.

c. The commission shall adopt by rule the minimum amounts of financial responsibility for sanitary disposal projects.

d. Financial assurance instruments may include instruments such as cash or surety bond, a letter of credit, a secured trust fund, or a corporate guarantee.

e. The annual financial statement submitted to the department pursuant to section 455B.306, subsection 3, paragraph "d", shall include the current amounts established in each of the accounts and the projected amounts to be deposited in the accounts in the following year.

Sec. 415. Section 455B.307, Code 1987, is amended to read as follows:

**455B.307 DUMPING -- WHERE PROHIBITED.**

1. ~~It shall be unlawful for any~~ A private agency or public agency to shall not dump or deposit or permit the dumping or depositing of any solid waste resulting from its own residential, farming, manufacturing, mining, or commercial activities at any place other than a sanitary disposal project approved by the director unless the agency has been granted a permit by the department which allows the dumping or depositing of solid waste on land owned or leased by the agency. The department shall adopt rules regarding the permitting of this activity which shall provide that the public interest is best served, but which may be based upon criteria less stringent than those regulating a public sanitary disposal project provided that the rules adopted meet the groundwater nondegradation goal specified in section 455E.4. The comprehensive plans for these facilities may be varied in consideration of the types of sanitary disposal practices, hydrologic and geologic conditions, construction and operations characteristics, and volumes and types of waste handled at the disposal site. This section shall not prohibit a private agency or public agency from dumping or depositing solid waste resulting from its own residential, farming,

~~manufacturing-mining-or-commercial-activities-on-land-owned or-leased-by-it-if-the-action-does-not-violate-any-statute-of this-state-or-rules-promulgated-by-the-commission-or-local boards-of-health-or-local-ordinances.~~ The director may issue temporary permits for dumping or disposal of solid waste at disposal sites for which an application for a permit to operate a sanitary disposal project has been made and which have not met all of the requirements of part 1 of this division and the rules adopted by the commission if a compliance schedule has been submitted by the applicant specifying how and when the applicant will meet the requirements for an operational sanitary disposal project and the director determines the public interest will be best served by granting such temporary permit.

2 7. The director may issue any order necessary to secure compliance with or prevent a violation of the provisions of this part 1 of division IV or the rules promulgated adopted pursuant thereto to the part. The attorney general shall, on request of the department, institute any legal proceedings necessary in obtaining compliance with an order of the commission or the director or prosecuting any person for a violation of the provisions of said the part or rules issued pursuant thereto to the part.

3 8. Any person who violates any provision of part 1 of this division or any rule or any order promulgated adopted or the conditions of any permit or order issued pursuant to part 1 of this division shall be subject to a civil penalty. The amount of the civil penalty shall be based upon the toxicity and severity of the solid waste as determined by rule, but not to exceed five hundred dollars for each day of such violation.

Sec. 416. Section 455B.310, subsection 2, Code 1987, is amended to read as follows:

2. The tonnage fee is twenty-five-cents one dollar and fifty cents per ton of solid waste for the year beginning July

1, 1988 and shall increase annually in the amount of fifty cents per ton through July 1, 1992. The city or county providing for the establishment and operation of the sanitary landfill may charge an additional tonnage fee for the disposal of solid waste at the sanitary landfill, to be used exclusively for the development and implementation of alternatives to sanitary landfills.

Sec. 417. Section 455B.310, subsections 4 and 5, Code 1987, are amended to read as follows:

4. All tonnage fees received by the department under this section shall be paid-to-a-groundwater-fund-created-under section-455B-309 deposited in the solid waste account of the groundwater protection fund created under section 455E.11.

5. Fees imposed by this section beginning July 1, 1988 shall be paid to the department on an-annual a quarterly basis. Fees-are-due-on-April-15-for-the-previous-calendar year The initial payment of fees collected beginning July 1, 1988 shall be paid to the department on January 1, 1989 and on a quarterly basis thereafter. The payment shall be accompanied by a return in the form prescribed by the department.

Sec. 418. Section 455B.310, Code 1987, is amended by adding the following new subsections:

NEW SUBSECTION. 7. The department shall grant exemptions from the fee requirements of subsection 2 for receipt of solid waste meeting all of the following criteria:

- a. Receipt of the solid waste is pursuant to a written contract between the owner or operator of the sanitary landfill and another person.
- b. The contract was lawfully executed prior to January 1, 1987.
- c. The contract expressly prohibits an increase in the compensation or fee payable to the owner or operator of the landfill and does not allow voluntary cancellation or

renegotiation of the compensation or fee during the term of the contract.

d. The contract has not been amended at any time after January 1, 1987.

e. The owner or operator of the sanitary landfill applying for exemption demonstrates to the satisfaction of the department that good faith efforts were made to renegotiate the contract notwithstanding its terms, and has been unable to agree on an amendment allowing the fee provided in subsection 2 to be added to the compensation or fee provisions of the contract.

f. Applications for exemption must be submitted on forms provided by the department with proof of satisfaction of all criteria.

g. Notwithstanding the time specified within the contract, an exemption from payment of the fee increase requirements for a multiyear contract shall terminate by January 1, 1989.

**NEW SUBSECTION.** 8. In the case of a sanitary disposal project other than a sanitary landfill, no tonnage fee shall apply for five years beginning July 1, 1987 or for five years from the commencement of operation, whichever is later. By July 1, 1992, the department shall provide the general assembly with a recommendation regarding appropriate fees for alternative sanitary disposal projects.

Sec. 419. Section 455B.311, subsection 2, Code 1987, is amended to read as follows:

2. Grants shall only be awarded to a city or a county; however, a grant may be made to a central planning agency representing more than one city or county or combination of cities or counties for the purpose of planning and implementing regional solid waste management facilities or may be made to private or public agencies working in cooperation with a city or county. The department shall award grants, in accordance with the rules adopted by the commission, based

upon a proposal's reflection of the solid waste management policy and hierarchy established in section 455B.301A. Grants shall be awarded only for an amount determined by the department to be reasonable and necessary to conduct the work as set forth in the grant application. Grants may be awarded at a maximum cost-share level of ninety percent with a preference given for regional or shared projects and a preference given to projects involving environmentally fragile areas which are particularly subject to groundwater contamination. Grants shall be awarded in a manner which will distribute the grants geographically throughout the state.

Sec. 420. **NEW SECTION.** 455B.312 WASTE ABATEMENT PROGRAM.

1. If the department receives a complaint that certain products or packaging which when disposed of are incompatible with an alternative method of managing solid waste and with the solid waste management policy, the director shall investigate the complaint. If the director determines that the complaint is well-founded, the department shall inform the manufacturer of the product or packaging and attempt to resolve the matter by informal negotiations.

2. If informal procedures fail to result in resolution of the matter, the director shall hold a hearing between the affected parties. Following the hearing, if it is determined that removal of the product or packaging is critical to the utilization of the alternative method of disposing of solid waste, the director shall issue an order setting out the requirements for an abatement plan to be prepared by the manufacturer within the time frame established in the order.

If an acceptable plan is not prepared, the plan is not implemented, or the problem otherwise continues unabated, the attorney general shall take actions authorized by law to secure compliance.

Sec. 421. **NEW SECTION.** 18.18 STATE PURCHASES -- RECYCLED PRODUCTS.

1. When purchasing paper products, the department of general services shall, wherever the price is reasonably competitive and the quality intended, purchase the recycled product.

2. The department of general services, in conjunction with the department of natural resources, shall review the procurement specifications currently used by the state to eliminate, wherever possible, discrimination against the procurement of products manufactured with recovered materials.

3. The department of natural resources shall assist the department of general services in locating suppliers of recycled products and collecting data on recycled content purchases.

4. Information on recycled content shall be requested on all bids for paper products issued by the state and on other bids for products which could have recycled content such as oil, plastic products, compost materials, aggregate, solvents, and rubber products.

5. The department of general services, in conjunction with the department of natural resources, shall adopt rules and regulations to carry out the provisions of this section.

6. All state agencies shall fully cooperate with the departments of general services and natural resources in all phases of implementing this section.

**Sec. 422. GROUNDWATER FUND EXISTING FEES.**

All tonnage fees received by the department of natural resources pursuant to section 455B.310 and deposited in the groundwater fund and existing in the groundwater fund prior to December 31, 1987, shall be used for the following purposes:

1. Six cents of the twenty-five cents per ton deposited in the fund is appropriated to the waste management authority of the department of natural resources.

2. Fifty thousand dollars of the moneys in the fund is appropriated to the University of Northern Iowa for the fiscal

year beginning July 1, 1987, and ending June 30, 1988, for the establishment of the small business assistance center for the safe and economic management of solid waste and hazardous substances at the University of Northern Iowa.

3. The remainder of the moneys in the account are appropriated to the department of natural resources for the development of guidelines for groundwater monitoring at sanitary disposal projects as defined in section 455B.301, subsection 3.

**PART FIVE -- HOUSEHOLD HAZARDOUS WASTE**

**Sec. 501. NEW SECTION. 455P.1 DEFINITIONS.**

As used in this chapter unless the context otherwise requires:

1. "Department" means the department of natural resources.

2. "Commission" means the state environmental protection commission.

3. "Manufacturer" means a person who manufactures or produces a household hazardous material for resale in this state.

4. "Wholesaler" or "distributor" means a person other than a manufacturer or manufacturer's agent who engages in the business of selling or distributing a household hazardous material within the state, for the purpose of resale.

5. "Retailer" means a person offering for sale or selling a household hazardous material to the ultimate consumer, within the state.

6. "Display area label" means the signage used by a retailer to mark a household hazardous material display area as prescribed by the department of natural resources.

7. "Residential" means a permanent place of abode, which is a person's home as opposed to a person's place of business.

8. "Household hazardous material" means a product used for residential purposes and designated by rule of the department of natural resources and may include any hazardous substance

as defined in section 455B.411, subsection 3; and any hazardous waste as defined in section 455B.411, subsection 4; and shall include but is not limited to the following materials: motor oils, motor oil filters, gasoline and diesel additives, degreasers, waxes, polishes, solvents, paints, with the exception of latex-based paints, lacquers, thinners, caustic household cleaners, spot and stain remover with petroleum base, and petroleum-based fertilizers. However, "household hazardous material" does not include laundry detergents or soaps, dishwashing compounds, chlorine bleach, personal care products, personal care soaps, cosmetics, and medications.

Sec. 502. NEW SECTION. 455F.2 POLICY STATEMENT.

It is the policy of this state to educate Iowans regarding the hazardous nature of certain household products, proper use of the products, and the proper methods of disposal of residual product and containers in order to protect the public health, safety, and the environment.

Sec. 503. NEW SECTION. 455F.3 LABELS REQUIRED.

1. A retailer shall affix a display area label, as prescribed by rule of the commission, in a prominent location upon or near the display area of a household hazardous material. If the display area is a shelf, and the price of the product is affixed to the shelf, the label shall be affixed adjacent to the price information.

2. The department shall develop, in cooperation with distributors, wholesalers, and retailer associations, and shall distribute to retailers a household hazardous products list to be utilized in the labeling of a display area containing products which are household hazardous materials.

3. A person found in violation of this section is guilty of a simple misdemeanor.

Sec. 504. NEW SECTION. 455F.4 CONSUMER INFORMATION BOOKLETS.

A retailer shall maintain and prominently display a booklet, developed by the department, in cooperation with manufacturers, distributors, wholesalers, and retailer associations and provided to retailers at departmental expense, which provides information regarding the proper use of household hazardous materials and specific instructions for the proper disposal of certain substance categories. The department shall also develop and provide to a retailer, at departmental expense, bulletins regarding household hazardous materials which provide information designated by rule of the commission. The retailer shall distribute the bulletins without charge to customers.

A manufacturer or distributor of household hazardous materials who authorizes independent contractor retailers to sell the products of the manufacturer or distributor on a person-to-person basis primarily in the customer's home, shall print informational lists of its products which are designated by the department as household hazardous materials. These lists of products and the consumer information booklets prepared in accordance with this section shall be provided by the manufacturer or distributor in sufficient quantities to each contractor retailer for dissemination to customers. During the course of a sale of a household hazardous material by a contractor retailer, the customer shall in the first instance be provided with a copy of both the list and the consumer information booklet. In subsequent sales to the same customer, the list and booklet shall be noted as being available if desired.

Sec. 505. NEW SECTION. 455F.5 DUTIES OF THE COMMISSION.

The commission shall:

1. Adopt rules which establish a uniform label to be supplied and used by retailers.
2. Adopt rules which designate the type and amount of information to be included in the consumer information booklets and bulletins.

Sec. 506. NEW SECTION. 455F.6 DUTIES OF THE DEPARTMENT.

The department shall:

1. Designate products which are household hazardous materials and, based upon the designations and in consultation with manufacturers, distributors, wholesalers, and retailer associations, develop a household hazardous product list for the use of retailers in identifying the products.

2. Enforce the provisions of this chapter and implement the penalties established.

3. Identify, after consulting with departmental staff and the listing of other states, no more than fifty commonly used household products which, due to level of toxicity, extent of use, nondegradability, or other relevant characteristic, constitute the greatest danger of contamination of the groundwater when placed in a landfill. The department may identify additional products by rule.

4. Submit recommendations to the general assembly regarding the products specified in subsection 1 which include but are not limited to the following:

a. Education of consumers regarding the danger incurred in disposal of the products, the proper disposal of the products, and the use of alternative products which do not present as great a disposal danger as the products specified.

b. Dissemination of information regarding the products specified.

c. Special labeling or stamping of the products.

d. A means for proper disposal of the products.

e. Proposed legislative action regarding implementation of recommendations concerning the products.

Sec. 507. NEW SECTION. 455F.7 HOUSEHOLD HAZARDOUS MATERIALS PERMIT.

1. A retailer offering for sale or selling a household hazardous material shall have a valid permit for each place of business owned or operated by the retailer for this activity.

All permits provided for in this division shall expire on June 30 of each year. Every retailer shall submit an annual application by July 1 of each year and a fee of ten dollars based upon gross retail sales of up to fifty thousand dollars, twenty-five dollars based upon gross retail sales of fifty thousand dollars to three million dollars, and one hundred dollars based upon gross retail sales of three million dollars or more to the department of revenue and finance for a permit upon a form prescribed by the director of revenue and finance. Permits are nonrefundable, are based upon an annual operating period, and are not prorated. A person in violation of this section shall be subject to permit revocation upon notice and hearing. The department shall remit the fees collected to the household hazardous waste account of the groundwater protection fund. A person distributing general use pesticides labeled for agricultural or lawn and garden use with gross annual pesticide sales of less than ten thousand dollars is subject to the requirements and fee payment prescribed by this section.

2. A manufacturer or distributor of household hazardous materials, which authorizes retailers as independent contractors to sell the products of the manufacturer or distributor on a person-to-person basis primarily in the customer's home, may obtain a single household hazardous materials permit on behalf of its authorized retailers in the state, in lieu of individual permits for each retailer, and pay a fee based upon the manufacturer's or distributor's gross retail sales in the state according to the fee schedule and requirements of subsection 1. However, a manufacturer or distributor which has gross retail sales of three million dollars or more in the state shall pay an additional permit fee of one hundred dollars for each subsequent increment of three million dollars of gross retail sales in the state, up to a maximum permit fee of three thousand dollars.

Sec. 508. NEW SECTION. 455F.8 HOUSEHOLD HAZARDOUS WASTE CLEANUP PROGRAM CREATED.

The department shall conduct programs to collect and dispose of small amounts of hazardous wastes which are being stored in residences or on farms. The program shall be known as "Toxic Cleanup Days". The department shall promote and conduct the program and shall by contract with a qualified and bonded waste handling company, collect and properly dispose of wastes believed by the person disposing of the waste to be hazardous. The department shall establish maximum amounts of hazardous wastes to be accepted from a person during the "Toxic Cleanup Days" program. Amounts accepted from a person above the maximum shall be limited by the department and may be subject to a fee set by the department, but the department shall not assess a fee for amounts accepted below the maximum amount. The department shall designate the times and dates for the collection of wastes. The department shall have as a goal twelve "Toxic Cleanup Days" during the period beginning July 1, 1987, and ending October 31, 1988. In any event, the department shall offer the number of days that can be properly and reasonably conducted with funds deposited in the household hazardous waste account. In order to achieve the maximum benefit from the program, the department shall offer "Toxic Cleanup Days" on a statewide basis and provide at least one "Toxic Cleanup Day" in each departmental region. "Toxic Cleanup Days" shall be offered in both rural and urban areas to provide a comparison of response levels and to test the viability of multicounty "Toxic Cleanup Days". The department may also offer at least one "Toxic Cleanup Day" at a previously serviced location to test the level of residual demand for the event and the effect of the existing public awareness on the program. The department shall prepare an annual report citing the results and costs of the program for submittal to the general assembly.

Sec. 509. NEW SECTION. 455F.9 EDUCATION PROGRAM.

In addition to the "Toxic Cleanup Days" program the department shall implement a public information and education program regarding the use and disposal of household hazardous materials. The program shall provide appropriate information concerning the reduction in use of the materials, including the purchase of smaller quantities and selection of alternative products. The department shall cooperate with existing educational institutions, distributors, wholesalers, and retailers, and other agencies of government and shall enlist the support of service organizations, whenever possible, in promoting and conducting the programs in order to effectuate the household hazardous materials policy of the state.

Sec. 510. NEW SECTION. 455F.10 PENALTIES.

Any person violating a provision of this chapter or a rule adopted pursuant to this chapter is guilty of a simple misdemeanor.

Sec. 511. COLLECTION OF USED MOTOR OIL -- PILOT PROJECT.

The state department of transportation, in cooperation with the department of natural resources and the Iowa State University of science and technology center for industrial research and service, shall institute a pilot project to collect and dispose of used motor oil from residences and farms in one urban county and one rural county by October 1, 1987.

The state department of transportation shall promote community participation; provide collection sites and facilities; prescribe procedures for each collection site, including the amount of used motor oil to be accepted from a household or farm, and measures necessary to assure maintenance of a sanitary collection site environment; arrange for proper used oil disposal; and report to the general assembly by March 1, 1988, regarding the progress on the pilot project. The report shall include the cost of the project.

the amount of used motor oil collected, and any other relevant data gathered by the participating agencies. The state department of transportation shall recommend in the report to the general assembly whether the program should be continued, expanded, modified, or discontinued.

The department of natural resources shall assist the state department of transportation in promoting the pilot project and in applying any state or federal environmental regulations to the pilot project. The Iowa State University of science and technology center for industrial research and service shall coordinate research on establishing the waste stream for used motor oil, investigate alternative disposal methods, and coordinate research with other states' research projects on used motor oil collection and disposal.

This section is repealed July 1, 1989.

**Sec. 512. NEW SECTION. 455P.12 RECYCLING AND RECLAMATION PROGRAMS.**

Up to eighty thousand dollars of the moneys deposited in the household hazardous waste account shall be allocated to the department of natural resources for city, county, or service organization projects relative to recycling and reclamation events. A city, county, or service organization shall submit a competitive grant to the department of natural resources by April 1 for approval by the department no later than May 15.

**PART SIX -- STORAGE TANK MANAGEMENT**

**Sec. 601.** Section 507D.3, Code 1987, is amended by adding the following new subsection:

**NEW SUBSECTION. 6.** An assistance program for the facilitation of insurance and financial responsibility coverage for owners and operators of underground storage tanks which store petroleum shall not be affected by the prohibitions of subsections 2 and 3.

**Sec. 602. PLAN OF OPERATIONS PROGRAM.** The division of insurance of the department of commerce, in conjunction with the department of natural resources and private industry, shall, no later than September 15, 1987, create a plan of operations program for the development of state or private funds to satisfy the requirements of the federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., regarding the financial responsibility of an owner or operator of an underground storage tank which stores petroleum.

The program shall include, but is not limited to, the following elements:

1. The establishment of a pool of insurers sufficient to manage all anticipated participants required to obtain and maintain evidence of financial responsibility in the amounts of one million dollars for corrective action and one million dollars for the compensation of third parties for property damage and bodily injury.
2. The establishment of the mechanism for election of the pool administrator by the participating industry.
3. The establishment of a plan of operations, through the administrator, including but not limited to the following items:
  - a. Collection of administrative expenses.
  - b. A claims process and defense system.
  - c. An actuarial review.
  - d. A determination of rate classifications which reflect the tank standards and monitoring devices maintained by an individual owner or operator, which in addition to a daily inventory system include but are not limited to the following:
    - (1) Secondary containment consisting of double wall construction and provided with a device to monitor the interstitial space between the secondary and primary containment structures.

(2) Secondary containment consisting of single wall construction and a man-made liner, and groundwater monitoring wells.

(3) Single wall construction and groundwater monitoring wells.

(4) Any type of tank construction and sniffer wells and an additional monitoring system.

e. A policyholder service system.

f. The billing, collecting, and investment of premiums.

4. The mechanism by which owners or operators who can demonstrate financial responsibility pursuant to the federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., may establish exempt status from participation in the program.

Sec. 603. COMMITTEE CREATED -- DUTIES. The legislative council shall create a legislative committee which shall meet within thirty days following the issuance of the plan of operations program. The committee shall be composed of two senators, one appointed by the majority leader of the senate and one appointed by the minority leader of the senate; two representatives, one appointed by the speaker of the house of representatives and one appointed by the minority leader of the house of representatives; one representative of petroleum storage tank owners and operators; and one representative of the petroleum industry.

The committee shall, on or before January 1, 1988, prepare proposed legislation for the implementation of the program to be enacted and implemented on or before May 1, 1988. The proposed legislation shall include:

1. The cost of participation of an individual owner or operator based upon the following:

a. The base premium rate determined by the actuarial data.

b. The amount of subsidization of the premium by the state, based on daily inventory and upon the storage tank

standards and inventory monitoring systems maintained by an individual owner or operator. The state subsidization of the premium shall be based upon a sliding fee schedule which may reflect the following criteria:

(1) Tanks with secondary containment consisting of double wall construction and provided with a device to monitor the interstitial space between the secondary and primary containment structures.

(2) Tanks with secondary containment consisting of single wall construction and a man-made liner, and provided with groundwater monitoring wells.

(3) Tanks with single wall construction and groundwater monitoring wells.

(4) Tanks with any type of construction and sniffer wells and an additional monitoring system.

2. The funding source for subsidization, which may be, but is not limited to, the following:

a. An increase in the annual storage tank fee.

b. An annual tank assessment fee.

c. A pump inspection fee, paid by fuel dealers.

d. Federal environmental protection agency grants.

3. The management of the plan and the funds, whether the plan is profitable or operates at a loss.

4. The mechanism by which owners or operators who can demonstrate financial responsibility pursuant to the federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., may establish exempt status from participation in the program.

Sec. 604. Section 455B.473, Code 1987, is amended by adding the following new subsections:

NEW SUBSECTION. 3A. An owner or operator of a storage tank described in section 455B.471, subsection 6, paragraph "a", which brings the tank into use after July 1, 1987, shall notify the department of the existence of the tank within

thirty days. The registration of the tank shall be accompanied by a fee of ten dollars to be deposited in the storage tank management account. A tank which is existing before July 1, 1987, shall be reported to the department by July 1, 1989. Tanks under this section installed on or following July 1, 1987, shall comply with underground storage tank regulations adopted by rule by the department.

**NEW SUBSECTION.** 8. It shall be unlawful to deposit a regulated substance in an underground storage tank which has not been registered pursuant to subsections 1 through 5.

The department shall furnish the owner or operator of an underground storage tank with a registration tag for each underground storage tank registered with the department. The owner or operator shall affix the tag to the fill pipe of each registered underground storage tank. A person who conveys or deposits a regulated substance shall inspect the underground storage tank to determine the existence or absence of the registration tag. If a registration tag is not affixed to the underground storage tank fill pipe, the person conveying or depositing the regulated substance may deposit the regulated substance in the unregistered tank provided that the deposit is allowed only in the single instance, that the person reports the unregistered tank to the department of natural resources, and that the person provides the owner or operator with an underground storage tank registration form and informs the owner or operator of the underground storage tank registration requirements. The owner or operator is allowed fifteen days following the report to the department of the owner's or operator's unregistered tank to comply with the registration requirements. If an owner or operator fails to register the reported underground storage tank during the fifteen-day period, the owner or operator shall pay a fee of twenty-five dollars upon registration of the tank.

Sec. 605. Section 455B.473, subsection 4, Code 1987, is amended to read as follows:

4. The notice of the owner or operator to the department under subsections 1 through 3 shall be accompanied by a fee of five ten dollars for each tank included in the notice. A ~~separate fund is created in the state treasury; the receipts of which are appropriated to pay the administrative expenses of the department incurred under this part; All fees collected by the department under this subsection shall be credited to the fund; The unobligated or unencumbered balance in the fund as of June 30 of each year shall be transferred to the hazardous waste remedial fund; All moneys collected shall be deposited in the storage tank management account of the groundwater protection fund created in section 455E.11. All moneys collected pursuant to this section prior to July 1, 1987, which have not been expended, shall be deposited in the storage tank management account.~~

Sec. 606. Section 455B.474, subsection 2, Code 1987, is amended by adding the following new paragraph:

**NEW PARAGRAPH.** e. If an owner or operator is required to uncover or remove an underground storage tank based upon a determination of the department that the underground storage tank presents a hazard to the public health, safety, or the environment, and if upon inspection of the tank the determination is unfounded, the state may reimburse reasonable costs incurred in the inspection of the tank. Claims for reimbursement shall be filed on forms provided by the commission. The commission shall adopt rules pursuant to chapter 17A relating to determinations of reasonableness in approval or rejection of claims in cases of dispute. Claims shall be paid from the general fund of the state. When any one of the tanks or the related pumps and piping at a multiple tank facility are found to be leaking, the state shall not reimburse costs for uncovering or removing any of the other tanks, piping, or pumps that are not found to be leaking.

Sec. 607. NEW SECTION. 455B.479 STORAGE TANK MANAGEMENT FEE.

An owner or operator of an underground storage tank shall pay an annual storage tank management fee of fifteen dollars per tank of over one thousand one hundred gallons capacity. The fees collected shall be deposited in the storage tank management account of the groundwater protection fund.

---

DONALD D. AVENSON  
Speaker of the House

---

JO ANN ZIMMERMAN  
President of the Senate

I hereby certify that this bill originated in the House and is known as House File 631, Seventy-second General Assembly.

---

JOSEPH O'HERN  
Chief Clerk of the House

Approved \_\_\_\_\_, 1987

---

TERRY E. BRANSTAD  
Governor

## Critical Area Law -

### §-1801, Declaration of public policy.

(a) *Findings.*- The General Assembly finds and declares that:

(1) The Chesapeake Bay and its tributaries are natural resources of great significance to the State and the nation;

(2) The shoreline and adjacent lands constitute a valuable, fragile, and sensitive part of this estuarine system, where human activity can have a particularly immediate and adverse impact on water quality and natural habitats;

(3) The capacity of these shoreline and adjacent lands to withstand the continuing demands upon them, without further degradation to water quality and natural habitats is limited;

(4) National studies have documented that the quality and productivity of the waters of the Chesapeake Bay and its tributaries have declined due to the cumulative effects of human activity that have caused increased levels of pollutants, nutrients, and toxics in the Bay System and declines in more protective land uses such as forestland and agricultural land in the Bay region;

(5) Those portions of the Chesapeake Bay and its tributaries within Maryland are particularly stressed by the continuing population growth and development activity concentrated in the Baltimore-Washington metropolitan corridor;

(6) The quality of life for the citizens of Maryland is enhanced through the restoration of the quality and productivity of the waters of the Chesapeake Bay and its tributaries;

(7) The restoration of the Chesapeake Bay and its tributaries is dependent, in

## Subtitle 18

part, on minimizing further adverse impacts to the water quality and natural habitats of the shoreline and adjacent lands;

(8) The cumulative impact of current development is inimical to these purposes; and

(9) There is a critical and substantial State interest for the benefit of current and future generations in fostering more sensitive development activity in a consistent and uniform manner along shoreline areas of the Chesapeake Bay and its tributaries so as to minimize damage to water quality and natural habitats.

(b) *Purposes.*- It is therefore the purpose of the General Assembly in enacting this subtitle to:

(1) Establish a Resource Protection Program on a cooperative basis between the State and affected local governments, with local governments establishing and implementing their programs in a consistent and uniform manner subject to State criteria and oversight. (1984, ch. 794.)

Editor's note.-Section 2, ch. 794, Acts 1984, provides that "of the initial members of the Chesapeake Bay Critical Area Commission, the member from Anne Arundel County, 2 members at large, and the members from Kent, Queen Ann's Talbot, and Dorchester counties serve for terms of 4 years; the members from Baltimore City and Wicomico, Somerset, Calvert, Charles, and St. Mary's counties serve for terms of 3 years; and the members from Baltimore, Prince George's, Harford, Cecil, Caroline, and Worcester counties serve for terms of 2 years."

Section 3 of ch. 794 provides that "the criteria

promulgated by the Commission under Natural Resources Article, §8-1806 and §8-1808 may not be implemented unless the General Assembly at the 1986 Session affirms by joint resolution that the criteria are reasonable and acceptable to accomplish the goals of this subtitle. If a joint resolution of affirmation is not enacted by the General Assembly at the 1986 Session, the criteria shall be revised by the Commission and resubmitted to the General Assembly on the first day of the 1987 Session and the effective date of the criteria shall be delayed until June 1, 1987."

### §8-1802. Definitions; obligation imposed by subtitle on Prince George's County and Commission.

(a) *In general.*- (1) In this subtitl the following words have the meanings indicated.

(2) "Commission" means the Chesapeake Bay Critical Area Commission established in this subtitle.

(3) "Development" means any activity that materially affects the condition or use of dry land, land under water, or any structure.

(4) "Includes" means includes or including by way of illustration and not by way of limitation.

(5) "Local Jurisdiction" means a county, or a municipal corporation with planning and zoning powers, in which any part of the Chesapeake Bay Critical Area as defined in this subtitle, is located.

(6) "Program" means the critical area protection program of a local jurisdiction including any amendments to it.

(7) "Project approval" means the approval of development, other than development by a state or local government agency, in the Chesapeake Bay Critical Area by the appropriate local approval authority. The term includes approval of subdivision plats and site plans; inclusion of areas within floating zones; issuance of variances, special exceptions, and conditional use permits; and issuance of zoning permits. The term does not include building permits.

(b) *Maryland-National Capital Park and Planning Commission.*- Wherever this subtitle requires Prince George's County to exercise any power or authority it shares with the Maryland-National Capital Park and Planning Commission, the obligation imposed by the subtitle rests on both the county and the Maryland-National Capital Park and Planning Commission in accordance with their respective powers and authorities. (1984, ch. 794.)

### §8-1803. Chesapeake Bay Critical Area Commission created; authority of Secretary and Board of Review.

(a) *Commission created.*- There is a Chesapeake Bay Critical Area Commission in the Department.

(b) *Authority of Secretary.*- The Secretary has no authority under Title I of this article to approve, alter, or amend the policies or programs of the Commission; to transfer, assign, or reassign statutory functions or activities to or from the Commission; or to

adopt, approve or revise rules and regulations of the Commission.

(c) *Authority of Board of Review.*- The Board of Review has no authority to hear or determine appeals from decisions of the Commission. (1984, ch. 794.)

## §8-1804. Composition of Commission.

(a) *In general.*- The Commission consists of 25 voting members who are appointed by the Governor, as follows:

(1) A full-time chairman, appointed with the advice and consent of the Senate, who shall serve at the pleasure of the Governor;

(2) 11 individuals, appointed with the advice and consent of the Senate, each of whom is a resident and an elected or appointed official of a local jurisdiction. At least 1 of these 11 individuals must be an elected or appointed official of a municipality. These individuals shall serve on the Commission only while they hold local office. Each shall be selected from certain counties, or from municipalities within said counties, as follows, and only after the Governor has consulted with elected county and municipal officials:

(i) 1 from each of Baltimore City, and Anne Arundel, Baltimore, and Prince George's counties;

(ii) 1 from Harford or Cecil County;

(iii) 1 from Kent or Queen Anne's County;

(iv) 1 from Caroline or Worcester County;

(v) 1 from Talbot or Dorchester County;

(vi) 1 from Wicomico or Somerset County; and

(vii) 2 from Calvert, Charles or St. Mary's County, both of whom shall not be from the same county;

(3) 8 individuals appointed with the advice and consent of the Senate, who shall represent diverse interests, and among whom shall be a resident from each of the 6 counties that are listed and from which an appointment has not been made under paragraph (2) of this subsection and 2 of the 8 members appointed under this item shall be at large members; and

(4) The Secretaries of Agriculture, Economic and Community Development, Health and Mental Hygiene, Natural Resources, and State Planning, ex officio, or, instead of any of the Secretaries, another representative of that Secretary's department appointed at the request of the Secretary.

(b) *Compensation.*- A member of the Commission who does not hold another office of profit at the State or local level shall be entitled to compensation as provided in the budget. Members of the Commission shall be entitled to reimbursement for expenses as provided in the budget.

(c) *Length of terms; removal of members; filling vacancies.*- Except for the chairman and ex officio State officers or their representatives:

(1) The term of a member is 4 years;

(2) The terms of members are staggered as required by the terms provided for members of the Commission on July 1, 1984;

(3) At the end of a term, a member continues to serve until a successor is appointed and qualifies;

(4) A member who is appointed after a term is begun serves for the rest of the term and until a successor is appointed and qualifies;

(5) A member may serve no more than 2 terms; and

(6) Any member of the Commission appointed by the Governor who shall fail to attend at least 60 percent of the meetings of the Commission during any period of 12 consecutive months shall be considered to have resigned, and the chairman shall forward the member's name to the Governor, not later than January 15 of the year following the non-attendance with the statement of non-attendance, and the Governor shall there-upon appoint a successor for the remainder of the term. If the member has been unable to attend meetings as required by this subtitle for reasons satisfactory to the Governor, the Governor may waive the regulation if the reasons are made public.

(d) *Vacancies other than by expiration of term.*- If a vacancy arises other than by the expiration of a term, the Governor shall appoint within 30 days, with the advice and consent of the Senate, a successor of like qualifications to serve the remainder of the term. (1984, ch. 794.)

## §8-1805. Commission staff.

(a) *In general.*- The Commission shall have the staff provided for in the State budget.

(1) The staff assigned to the Coastal Zone Management Program in the Department shall assist the Commission in the development of regulations and the review of programs.

(2) The State departments represented on the Commission may lend staff or other assistance to the Commission.

(b) *Executive Director.*- The chairman with the approval of the Commission

shall appoint an executive director for the Commission.

(1) The Executive Director serves at the pleasure of the chairman and is entitled to the salary provided in the State budget.

(2) The Executive Director shall direct the staff of the Commission.

(c) *Assistant attorney general.*- The Attorney General shall designate an assistant attorney general to advise and represent the chairman and the Commission. (1984, ch. 794.)

## §8-1806. Powers of the Commission.

The Commission has all powers necessary for carrying out the purposes of this subtitle, including the following:

(1) To adopt regulations and criteria in accordance with Title 2, Subtitle 5 (Joint Committee on Administrative, Executive and Legislative Review) and Title 10, Subtitle 1 (Administrative Procedure Act) of the State Government Article;

(2) To conduct hearings in connection with policies, proposed programs, and proposed regulations or amendments to regulations; and

(3) To contract for consultant or other services. (1984, ch. 794.)

## §8-1807. Chesapeake Bay Critical Area.

(a) *Initial planning area.*- The initial planning area for determination of the Chesapeake Bay Critical Area consists of:

(1) All waters of and lands under the Chesapeake Bay and its tributaries to the head of tide as indicated on the State wetlands maps, and all

State and private wetlands designated under Title 9 of this article; and

(2) All land and water areas within 1,000 feet beyond the landward boundaries of State or private wetlands and the heads of tides designated under Title 9 of this article.

(b) *Areas local jurisdictions may exclude.*- (1)(i) In determining the Chesapeake Bay Critical Area within its boundaries, a local jurisdiction may exclude those portions of the planning area designated in subsection (a) of this section which the local jurisdiction finds to be:

1. Part of a developed, urban area in which, in view of available public facilities and applicable laws and restrictions, the imposition of a program would not substantially improve protection of tidal water quality or conservation of fish, wildlife, or plant habitats; or

2. Located at least 1,000 feet from open water and separated from open water by an area of wetlands which it is found will serve to protect tidal water quality and fish, wildlife, or plant habitats from adverse impacts of development in the excluded area.

(ii) A portion of urban area to be excluded shall be at least 50 percent developed and may not be less than 2,640,000 square feet in contiguous area or the entire initial planning area located within the boundaries of a municipality, whichever is less.

(2) A local jurisdiction shall include in any program submitted to the Commission under §8-1809 a designation of those portions of the Chesapeake Bay Critical Area proposed for exclusion under paragraph (1) of this subsection, together with all factual information and expert opinion supporting its findings under this subsection.

(2) The Commission shall ap a local jurisdiction's

designation of portions to be excluded unless the Commission finds, based on stated reasons, that the decision of the local jurisdiction was:

(i) Not supported by competent and material evidence; or

(ii) Arbitrary or capricious.

(4) If the Commission develops the program to be applied in a local jurisdiction, it shall exclude areas as appropriate to meet the intent of paragraph (1) of this subsection.

(c) *Area designated as critical area.*- The Chesapeake Bay Critical Area shall consist of:

(1) Those areas designated in subsection (a) of this section, except any areas excluded in accordance with subsection (b) of this section, and

(2) Additional areas proposed for inclusion by local jurisdictions and approved by the Commission. (1984, ch. 794.)

## §8-1808. Program development.

(a) *Local jurisdictions to implement: grants.*- (1) It is the intent of this subtitle that each local jurisdiction shall have primary responsibility for developing and implementing a program, subject to review and approval by the Commission.

(2) The Governor shall include in the budget a sum of money to be used for grants to reimburse local jurisdictions for the reasonable cost of developing a program under this section. Each local jurisdiction shall submit to the Governor by October 31, 1984, a detailed request for funds that are equivalent to the additional costs incurred in developing the program under this section.

(b) *Goals of program.*- A program shall consist of those elements which are necessary or appropriate to:

(1) Minimize adverse impacts on water quality that result from pollutants that are discharged from structures or conveyances that have run off from surrounding lands;

(2) Conserve fish, wildlife, and plant habitat; and

(3) Establish land use policies for development in the Chesapeake Bay Critical Area which accommodate growth and also address the fact that, even if pollution is controlled, the number, movement, and activities of persons in that area can create adverse environmental impacts.

(c) *Elements of program.*- At a minimum, a program sufficient to meet the goals stated in subsection (b) includes:

(1) A map designating the critical area in a local jurisdiction;

(2) A comprehensive zoning map for the critical area;

(3) As necessary, new or amended provisions of the jurisdiction's:

(i) Subdivision regulations;

(ii) Comprehensive or master plan;

(iii) Zoning ordinances or regulations;

(iv) Provisions relating to enforcement; and

(v) Provisions as appropriate relating to grandfathering of development at the time the program is adopted or approved by the Commission;

(4) Provisions requiring that project approvals shall be based on findings that projects are consistent with the standards stated in subsection (b) of this section;

(5) Provisions to limit the amount of land covered by buildings, roads, parking lots, or other impervious surfaces, and to require to encourage

cluster development, where necessary or appropriate;

(6) Establishment of buffer areas along shorelines within which agriculture will be permitted only if best management practices are used, provided that structures or any other use of land which is necessary for adjacent agriculture shall also be permitted in any buffer area;

(7) Requirements for minimum setbacks for structures and septic fields along shorelines;

(8) Designation of shoreline areas if any that are suitable for parks, hiking, biking, wildlife refuges, scenic drives, public access or assembly, and water-related recreation such as boat slips, piers, and beaches;

(9) Designation of shoreline areas, if any, that are suitable for ports, marinas, and industries that use water for transportation or derive economic benefits from shore access;

(10) Provisions requiring that all harvesting of timber in the Chesapeake Bay Critical Area be in accordance with plans approved by the district forestry board; and

(11) Provisions establishing that the controls in a program which are designed to prevent runoff of pollutants will not be required on sites where the topography prevents runoff from directly or indirectly reaching tidal waters.

(d) *Criteria for program development.*- (1) The Commission shall promulgate by regulation on or before December 1, 1985, criteria for program development and approval, which are necessary or appropriate to achieve the standards stated in subsection (b) of this section. Prior to developing its criteria and also prior to adopting its criteria, the Commission shall hold at least 6 regional public hearings, one in each of the following areas:

(i) Harford, Cecil, and Kent counties

(ii) Queen Anne's, Talbot, and Caroline counties,

(iii) Dorchester, Somerset, and Wicomico counties;

(iv) Baltimore City and Baltimore County;

(v) Charles, Calvert, and St. Mary's counties; and

(vi) Anne Arundel and Prince George's counties.

During the hearing process, the Commission shall consult with each affected local jurisdiction.

(2) The President of the Senate and the Speaker of the House shall appoint 5 senators and 5 delegates respectively to serve as the Joint Committee on Chesapeake Bay Critical Areas. The Joint Committee shall be staffed by the Department of Legislative Reference. The Commission shall meet with the Joint Committee on Chesapeake Bay Critical Areas periodically as the Committee requests to review development and implementation of the criteria for program development.

(c) *Dredging not prevented.*- Nothing in this section shall impede or prevent the dredging of any waterway in a critical area. However, dredging in a critical area is subject to other applicable federal and State laws, rules, and regulations. (1984, ch. 794.)

### §8-1809. Approval and adoption of program.

(a) *Statement of intent.*- Within 45 days after the criteria adopted by the Commission under 8-1808 of this subtitle become effective, each local jurisdiction shall submit to the Commission a written statement of its intent either:

(1) To develop a critical area protection program to control the use and development of that part of the

Chesapeake Bay Critical Area located within its territorial limits; or

(2) Not to develop such a program.

(b) *Commission may adopt program.*- If a local jurisdiction states its intent not to develop a program or fails to submit a timely statement of intent, the Commission shall prepare and adopt a program for the part of the Chesapeake Bay Critical Area in that local jurisdiction.

(c) *Submission of locally developed program.*- If a local jurisdiction states its intent to develop a program, it shall prepare a proposal program and submit it to the Commission within 270 days after the effective date of the criteria adopted under §8-1808 of this subtitle. However, if the local jurisdiction submits evidence satisfactory to the Commission that it is making reasonable progress in the development of a program, the Commission may extend this period for up to an additional 180 days. Before submission of a program to the Commission within the time allowed by this subsection, a local jurisdiction shall hold at least one public hearing on the proposed program, for which 2-weeks notice shall be published in a newspaper of general circulation in the local jurisdiction..

(d) *Public hearing; approval by Commission.*- (1) Within 30 days after a program is submitted, the Commission shall appoint a panel of 3 of its members to conduct in the affected jurisdiction a public hearing on the proposed program.

(2) Within 90 days after the Commission receives a proposed program from a local jurisdiction, it shall either approve the proposal or notify the local jurisdiction of specific changes that must be made in order for the proposal to be approved. If the Commission

does neither the proposal shall be deemed approved.

(3) A changed proposal shall be submitted to the Commission in the same manner as the original proposal, within 40 days after the Commission's notice. Unless the Commission approves a changed proposal or disapproves a changed proposal and states in writing the reason for its disapproval within 40 days, the changed proposal shall be deemed approved.

(c) *Adoption of program.*- Within 90 days after the Commission approves a proposed program, the local jurisdiction shall hold hearings and adopt the program in accordance with legislative procedures for enacting ordinances. If the governing body of the local jurisdiction wishes to change any part of the approved proposal before adoption, it shall submit the proposed change to the Commission for approval. Unless the Commission approves the change or disapproves the change and states in writing the reasons for its disapproval within 30 days after it receives the change, the change shall be deemed approved. A changed part may not be adopted until it is approved by the Commission.

(f) *Programs effective within 760 days.*- Within 760 days after criteria adopted by the Commission become effective, there shall be in effect throughout the Chesapeake Bay Critical Area programs approved or adopted by the Commission.

(g) *Proposed amendments.*- Each local jurisdiction shall review and propose any necessary amendments to its program, including local zoning maps, at least every 4 years. Amendments shall be submitted to and acted on by the Commission in the same

manner as the original program.

(h) *Program not be amended without approval of Commission.*- A program may not be amended except with the approval of the Commission. Except for amendments developed during program review under subsection (g) of this section, an amendment to a zoning map may be granted by a local approving authority only on proof of a mistake in the existing zoning.

(i) *Standards for approval by Commission.*- The Commission shall approve programs and amendments that meet:

(1) The standards set forth in §8-1808 (b)(1) through (3) of this subtitle; and

(2) The criteria adopted by the Commission under §8-1808 of this subtitle.

(j) *Program to be available for public inspection.*- Copies of each approved program, as it is amended from time to time, shall be maintained by the local jurisdiction and the Commission in a form available for public inspection. (1984, ch. 794.)

### §8-1810. Programs adopted by Commission.

(a) *When Commission to adopt program.*- If a local jurisdiction fails to notify the Commission that it will develop a program, fails to submit a proposed program or changed proposal on time, or fails to obtain Commission approval of a proposed program or changed proposal that is submitted, the Commission shall prepare and adopt a program that satisfies the criteria adopted under §8-1808 of this subtitle for the part of the Chesapeake Bay Critical Area in that local jurisdiction.

(b) *Public hearing; Commission program to*

*supersede local law.*- Where a local jurisdiction fails to adopt or obtain Commission approval of a program, the Commission shall promulgate a program for that jurisdiction by adopting rules and regulations in accordance with Title 2, Subtitle 5 (Joint Committee on Administrative, Executive, and Legislative Review) and Title 10, Subtitle 1 (Administrative Procedure Act) of the State Government Article. Before the full Commission promulgates a program under this subsection, it shall appoint a panel of 3 of its members to conduct in the affected jurisdiction at least 2 public hearings at least 10 days apart on the proposed program, for which two weeks notice shall be published in a newspaper of general circulation of the local jurisdiction. A program promulgated by the Commission under this subsection supersedes any inconsistent local laws, ordinances, or plans.

(c) *Local jurisdictions to enforce.*- If the Commission adopts a program for a local jurisdiction, the program shall be implemented and enforced by local authorities in the same manner as if the program had been adopted by the local jurisdiction itself.

(d) *Local program to supersede Commission program.*- If at any time after the Commission has adopted a program for a local jurisdiction, the local jurisdiction submits an alternative program of its own that satisfies the criteria adopted under §8-1808 of this subtitle and is approved by the Commission, the alternative program supersedes the program adopted by the Commission. (1984, ch. 794.)

### §8-1811. Project approval.

(a) *Project consistent with program.*- From the effective date of a program approved or adopted by the Commission, a project approval that involves land located in the Chesapeake Bay Critical Area may not be granted unless it is consistent and complies with the program.

(b) *Projects requiring notice to Commission.*- (1) The Commission shall adopt regulations identifying those classes of applications for project approval of which it wishes to receive notice.

(2) From the date designated by the Commission in approving or adopting a program, an applicant for project approval or the local agency authorized to grant project approval on an application in any of the identified classes shall send to the Commission in accordance with the regulations and any other instructions of the Commission, a copy of every pending or new application for approval that is in any of the identified classes. Before the close of the next business day after receipt of a copy of an application in any of the identified classes shall send to the Commission in accordance with the regulations and any other instructions of the Commission, a copy of every pending or new application for approval that is in any of the identified classes. Before the close of the next business day after receipt of a copy of an application from the applicant or the local approving authority, the Commission shall send written notice of receipt to the applicant and to the local approving authority. A failure of the Commission to send a timely notice shall render paragraph (3) of this subsection inapplicable as to that application.

(3) The local approving authority shall not process an application of which a copy must be sent to the Commission until it has received notice of receipt from the Commission, and any action of the local approving authority in violation of this paragraph shall be void. (1984, ch. 794.)

### §8-1812. Commission chairman; authority regarding judicial proceedings.

(a) *In general.*- After the Commission has approved or adopted a program, the chairman of the Commission has standing and the right and authority to initiate or intervene in any administrative, judicial, or other original proceeding or appeal in this State concerning a project approval in the Chesapeake Bay Critical Area. The chairman may exercise this intervention authority without first obtaining approval from the Commission, but the chairman shall send prompt written notice of any intervention or initiation of action under this section to each member of the Commission. The chairman shall withdraw the intervention or action initiated if within 35 days after the date of the chairman's notice, at least 13 members indicate disapproval of the action, either in writing addressed to the chairman or by vote at a meeting of the Commission. A member representing the local jurisdiction affected by the chairman's intervention or action may request a meeting of the Commission to vote on the chairman's intervention or action.

(b) *Rules of procedure.*- Except as stated in this subtitle, the chairman is subject to general laws and rules of procedure that govern

the time within and manner in which the authority granted in subsection (a) may be exercised.

(c) *Appeal authorized.*- The chairman may appeal an action or decision even if the chairman was not a party to or is not specifically aggrieved by the action or decision. (1984, ch. 794.)

### §8-1813. Prior project approval.

(a) *Specific findings required.*- From June 1, 1984 with regard to any subdivision plat approval or approval of a zoning amendment, variance, special exception, conditional use permit or use of a floating zone, affecting any land or water area located within the initial planning area identified in §8-1807 (a) of this subtitle, for which application is completed after that date, the approving authority of the local jurisdiction in rendering its decision to approve an application shall make specific findings that:

(1) The proposed development will minimize adverse impacts on water quality that result from pollutants that are discharged from structures or conveyances or that have run off from surrounding lands; and

(2) The applicant has identified fish, wildlife, and plant habitat which may be adversely affected by the proposed development and has designed the development so as to protect those identified habitats whose loss would substantially diminish the continued ability of populations of affected species to sustain themselves.

(b) *Information required from applicant.*- With regard to any application for project approval described in subsection (a) of this section, a

local approving authority shall require such additional information from an applicant as is necessary in order to make the findings required by subsection (a).

(c) *Section in effect until program effective.*- This section shall remain in effect in a local jurisdiction until such time as an approved program becomes effective.

(d) *Exception.*- This section does not apply to any application initially filed prior to March 1, 1984. (1984, ch. 794.)

### §8-1814. Commission approval of certain projects; applicability of other laws.

(a) *Approval of local agency projects.*- After 760 days have elapsed from the date upon which criteria adopted by the Commission become effective, any State or local agency that proposes development which has not been subject to project approval by the local jurisdiction under an approved program, including buildings, treatment plants, roads, railroads, and airports, in the Chesapeake Bay Critical Area shall, before it begins the development, receive the approval of the Commission in accordance with procedures or exceptions set forth in regulations adopted by the Commission using the standards set forth in §8-1808 (b)(1) through (3) of this subtitle. These regulations shall be promulgated on or before September 1, 1987, and only after consultation with affected State and local agencies.

(b) *Consistency determinations.*- The Secretary shall consult with the Commission in making consistency determinations under the Federal Coastal Zone Management Program.

(c) *Applicability of other laws.*- This subtitle is not intended to relieve any obligation otherwise imposed by law or regulation to obtain licenses, permits, or approvals from State and local regulatory agencies or to comply with applicable State and local regulatory prohibitions or restrictions. (1984, ch. 794.)

### §8-1815. Enforcement.

(a) *Violators subject to prosecution or suit.*- Violators of the provisions of programs approved or adopted by the Commission shall be subject to prosecution or suit by local authorities, who may invoke the sanctions and remedies afforded by State or local law.

(b) *Referral to Attorney General.*- Whenever the chairman has reason to believe that a local jurisdiction is failing to enforce the requirements of a program applicable to a particular development, the chairman shall serve notice upon the local enforcement authorities. If within 30 days after service of such notice, the local authorities have failed to initiate an action to remedy or punish the violation, the chairman may refer the matter to the Attorney General.

(c) *Sanctions-Remedies available to local jurisdictions.*- Upon referral of an alleged violation under subsection (b) of this section, the Attorney General may invoke any sanction or remedy available to local authorities, in any court of competent jurisdiction in which the local authorities would be authorized to prosecute or sue the violator.

(d) *Same-Equitable remedies.*- In addition to any other sanction or remedy available, the Attorney General may bring an action in equity to compel compliance or restrain noncompliance with

the requirements of approved project plans and to compel restoration of lands or structures to their condition prior to any modification which was done in violation of the approved project plans.

(e) *Action to restrain violation.*- Notwithstanding any other provision of this section, whenever a development in the Critical Area is proceeding in violation of approved project plans and thereby threatens to immediately and irreparably degrade the quality of tidal waters or fish, wildlife, or plant habitat, the Attorney General, upon request of the chairman, may bring an action to restrain the violation and, as appropriate, to compel restoration of any land or water areas affected by the development. (1984, ch. 794.)

### §8-1816. Commission to prepare report.

In consultation with State and local agencies involved in planning, acquiring, and managing open space and recreational lands, the Commission shall, by January 1, 1987, prepare a report to the governor and the General Assembly recommending State policy and goals for:

(1) The provision of public access along the shoreline of the Chesapeake Bay and its tributaries; and

(2) The reforestation of land within the Critical Area, and the preservation of forested land within the Critical Area.

(1984, ch. 794.)

Cross reference.- See Editor's note to §8-1801 of this article.

**Amendments To The**

**CHAPTER 601**

AN ACT concerning Chesapeake Bay Critical Area Commission - Quorum - Public Hearings and Official Actions.

FOR the purpose of providing for a quorum of the Chesapeake Bay Critical Area Commission and panels of the Commission; preventing the Commission or a panel of the Commission from holding a public hearing unless a quorum is present; preventing the Commission or a panel of the Commission from taking official actions unless a quorum is present and a certain vote occurs; altering the number of members on certain panels of the Commission; and generally relating to quorum, public hearings, and official actions of the Chesapeake Bay Critical Area Commission and panels of the Commission.

BY adding to Article - Natural Resources Section 8-1801 (c) Annotated Code of Maryland (1983 Replacement Volume and 1985 Supplement)

SECTION 1. BE IT ENACED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article - Natural Resources 8-1801.

(E)(1) A QUORUM OF THE COMMISSION CONSISTS OF 1 MEMBER MORE THAN A MAJORITY OF THE FULL AUTHORIZED MEMBERSHIP OF THE COMMISSION  
(2) A QUORUM OF A PANEL OF THE

**Critical Area Law - 1986**

COMMISSION CONSISTS OF 3 MEMBERS.

(3) THE COMMISSION OR A PANEL OF THE COMMISSION MAY NOT HOLD A PUBLIC HEARING UNLESS A QUORUM IS PRESENT.

(4) THE COMMISSION OR A PANEL OF THE COMMISSION MAY NOT TAKE ANY OFFICIAL ACTION UNLESS:

(I) A QUORUM IS PRESENT; AND

(II) A MAJORITY OF THE MEMBERS WHO ARE PRESENT AND ELIGIBLE TO VOTE CONCUR IN OR VOTE FOR THE ACTION.

8-1809.

(d)(1) Within 30 days after a program is submitted, the Commission shall appoint a panel of 5 of its members to conduct, in the affected jurisdiction, a public hearing of the proposed program.

SECTION 2, AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 1986.

**Chapter 602**

AN ACT concerning Chesapeake Bay Critical Areas-Growth Allocation in the Resource Conservation Area

FOR the purpose of adding to criteria adopted by the Chesapeake Bay Critical Area Commission certain conditions on development in the Critical Area; authorizing certain types of new development in certain portions of the Critical Area; establishing certain requirements that local jurisdictions will have to meet in planning for and permitting certain types of new development in certain

portions of the Critical Area; requiring certain clustering of development in certain areas of the Critical Area; and generally relating to the growth allocation in the Resource Conservation Area of the Chesapeake Bay Critical Area.

BY adding to

Article - Natural Resources Section 8-1808.1 Annotated Code of Maryland (1983 Replacement Volume and 1985 Supplement)

Preamble

HOUSE BILL No. 1434

WHEREAS, To protect the Chesapeake Bay, the General Assembly enacted Chapter 794 of the Acts of 1984; and

WHEREAS, Under Chapter 794 of the Acts of 1984, the Chesapeake Bay Critical Area Commission adopted regulations under COMAR 14.15.02.05 and .06 concerning the development in Resource Conservation Areas of the Critical Area; and WHEREAS, The General Assembly intends, this Act to authorize certain additional types of development and to add certain conditions on new development in the Resource Conservation Area; now, therefore,

SECTION 1, BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article-Natural Resources 8-1808.1

(A) THIS SECTION IS INTENDED TO ESTABLISH CONDITIONS FOR DEVELOPMENT IN THE CHESAPEAKE BAY CRITICAL AREA IN ADDITION TO THOSE ESTABLISHED IN CRITERIA OF THE COMMISSION, HOWEVER, IN THE EVENT OF ANY INCONSISTENCY

BETWEEN THE CRITERIA AND THE PROVISIONS OF THIS SECTION, THIS SECTION SHALL CONTROL.

(B) WHEN LOCATING NEW INTENSELY DEVELOPED OR LIMITED DEVELOPMENT AREAS, LOCAL JURISDICTIONS SHALL USE THE FOLLOWING GUIDELINES:

(1) NEW INTENSELY DEVELOPED AREAS SHOULD BE LOCATED IN LIMITED DEVELOPMENT AREAS OR ADJACENT TO EXISTING INTENSELY DEVELOPED AREAS;

(2) NEW LIMITED DEVELOPMENT AREAS SHOULD BE LOCATED ADJACENT TO EXISTING LIMITED DEVELOPMENT AREAS OR INTENSELY DEVELOPED AREAS;

(3) EXCEPT AS PROVIDED IN PARAGRAPH (5) OF THIS SUBSECTION, NO MORE THAN HALF OF THE EXPANSION ALLOCATED IN THE CRITERIA OF THE COMMISSION MAY BE LOCATED IN RESOURCE CONSERVATION AREAS;

(4) NEW INTENSELY DEVELOPED OR LIMITED DEVELOPMENT AREA TO BE LOCATED IN THE

RESOURCE CONSERVATION AREA SHALL CONFORM TO ALL CRITERIA OF THE

COMMISSION FOR SUCH AREAS AND SHALL BE DESIGNATED ON THE COMPREHENSIVE ZONING MAP SUBMITTED BY THE LOCAL JURISDICTION AS PART OF ITS APPLICATION

TO THE COMMISSION FOR PROGRAM APPROVAL OR AT A LATER DATE IN COMPLIANCE WITH 8-1809(G) OF THIS SUBTITLE; AND

(5) IN CALVERT, CAROLINE, CECIL, CHARLES, DORCHESTER, KENT, QUEEN ANNE'S, ST. MARY'S, SOMERSET,

TALBOT, WICOMICO, AND WORCESTER COUNTIES, IF THE COUNTY IS UNABLE TO UTILIZE A PORTION OF THE GROWTH ALLOCATED TO THE COUNTY IN PARAGRAPHS (1) AND (2) OF THIS SUBSECTION WITHIN OR ADJACENT TO EXISTING INTENSELY DEVELOPED OR LIMITED DEVELOPMENT AREAS AS DEMONSTRATED IN THE LOCAL PLAN APPROVED BY THE COMMISSION, THEN THAT PORTION OF THE ALLOCATED EXPANSION WHICH CANNOT BE SO LOCATED MAY BE LOCATED IN THE RESOURCE CONSERVATION AREA IN ADDITION TO THE EXPANSION ALLOCATED IN PARAGRAPH (3) OF THIS SUBSECTION. A DEVELOPER SHALL BE REQUIRED TO CLUSTER ANY DEVELOPMENT IN AN AREA OF EXPANSION AUTHORIZED UNDER THIS PARAGRAPH.

(C) IN CALCULATING THE 1-IN-20 ACRE DENSITY OF DEVELOPMENT THAT IS PERMITTED ON A PARCEL LOCATED WITHIN THE RESOURCE CONSERVATION AREA, A LOCAL JURISDICTION MAY PERMIT THE AREA OF ANY PRIVATE WETLANDS LOCATED ON THE PROPERTY TO BE INCLUDED, UNDER THE FOLLOWING CONDITIONS:

(1) THE DENSITY OF DEVELOPMENT ON THE UPLAND PORTION OF THE PARCEL MAY NOT EXCEED 1 DWELLING UNIT PER 8 ACRES; AND

(2) THE AREA OF PRIVATE WETLANDS SHALL BE ESTIMATED ON THE BASIS OF VEGETATIVE INFORMATION AS DESIGNATED ON THE STATE WETLANDS MAPS.

SECTION 2. AND BE IT FURTHER ENACTED, That

this Act shall take effect June 1, 1986.

CHAPTER 603

AN ACT concerning Chesapeake Bay Critical Area-Intrafamily Transfers

FOR the purpose of authorizing a person to subdivide a single parcel of land of a certain size in the Chesapeake Bay Critical Area into a certain number of parcels if the conveyances are only to family members; providing for the scope, application, and effect of this Act; making stylistic changes; defining certain terms; authorizing a local jurisdiction to make certain submissions to the Chesapeake Bay Critical Area Commission under this Act; authorizing a local jurisdiction to permit certain intrafamily transfers under certain circumstances; providing for the subdivision of certain parcels of land subject to certain laws; providing for certain powers and duties of a local jurisdiction under this Act; and generally relating to certain intrafamily transfers in the Critical Area

BY adding to Article - Natural Resources Section 8-1801.1 Annotated Code of Maryland (1983 Replacement Volume and 1985 Supplement)

Preamble

WHEREAS, To protect the Chesapeake Bay, the General Assembly enacted Chapter 794 of the Acts of 1984; and

WHEREAS, The General Assembly intends this Act to control over any regulation of the Commission to allow for intrafamily transfers of certain parcels of land in the Critical Area; now, therefore,

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:  
Article - Natural Resources

8-1808.1

(A)(1) IN THIS SECTION, THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(2) "BONA FIDE INTRAFAMILY TRANSFER" MEANS A TRANSFER TO A MEMBER OF THE OWNER'S IMMEDIATE FAMILY OF A PORTION OF THE OWNER'S PROPERTY FOR THE PURPOSE OF ESTABLISHING A RESIDENCE FOR THAT FAMILY MEMBER.

(3) "IMMEDIATE FAMILY" MEANS A FATHER, MOTHER, SON, DAUGHTER, GRANDFATHER, GRANDMOTHER, GRANDSON, OR GRANDDAUGHTER.

(B) NOTWITHSTANDING DENSITY LIMITATIONS ESTABLISHED IN CRITERIA OF THE COMMISSION, AS PART OF ITS LOCAL PROGRAM, A LOCAL JURISDICTION MAY SUBMIT PROVISIONS BY WHICH AN OWNER OF A PARCEL OF LAND IN THE RESOURCE CONSERVATION AREA MAY BE PERMITTED TO MAKE BONA FIDE INTRAFAMILY TRANSFERS.

(C) IF A LOCAL JURISDICTION INCLUDES PROVISIONS FOR BONA FIDE INTRAFAMILY TRANSFERS AS PART OF ITS LOCAL PROGRAM, THE LOCAL JURISDICTION SHALL PERMIT A BONA FIDE INTRAFAMILY TRANSFER TO BE MADE ONLY FROM PARCELS OF LAND THAT:

(1) WERE OF RECORD ON MARCH 1, 1986; AND

(2) ARE 7 ACRES OR MORE AND LESS THAN 60 ACRES IN SIZE.

(D) A BONA FIDE INTRAFAMILY TRANSFER FROM A PARCEL OF LAND SHALL BE A SUBDIVISION OF THE PARCEL OF LAND THAT IS SUBJECT TO LOCAL APPROVAL UNDER "THE SUBDIVISION CONTROL" SUBTITLE OF ARTICLE 66b, UNDER TITLE 7 OF ARTICLE 28 OF THE CODE, OR UNDER ANY SUBDIVISION CONTROL PROVISIONS OF A CHARTER COUNTY.

(E)(1) A LOCAL JURISDICTION MAY APPROVE THE SUBDIVISION OF A PARCEL OF LAND INTO THE NUMBER OF LOTS INDICATED IN THIS SUBSECTION BY MEANS OF A BONA FIDE INTRAFAMILY TRANSFER, AND MAY NOT APPROVE ANY GREATER SUBDIVISION OF THE PARCEL OF LAND OR ANY PORTION OF IT.

(2) A PARCEL THAT IS 7 ACRES OR MORE AND LESS THAN 12 ACRES IN SIZE MAY BE SUBDIVIDED INTO 2 LOTS.

(3) A PARCEL THAT IS 12 ACRES OR MORE AND LESS THAN 60 ACRES IN SIZE MAY BE SUBDIVIDED INTO 3 LOTS. THE LOTS MAY BE CREATED AT DIFFERENT TIMES.

(F)(1) AS A CONDITION OF APPROVAL, A LOCAL JURISDICTION SHALL REQUIRE THAT:

(1) ANY DEED FOR A LOT THAT IS CREATED BY A BONA FIDE INTRAFAMILY TRANSFER SHALL CONTAIN A COVENANT STATING THAT THE LOT IS CREATED SUBJECT TO THE PROVISION OF THIS SECTION; AND

(II) A LOT CREATED BY A BONA FIDE INTRAFAMILY TRANSFER MAY NOT BE CONVEYED

SUBSEQUENTLY TO ANY PERSON OTHER THAN A MEMBER OF THE OWNER'S IMMEDIATE FAMILY, EXCEPT UNDER PROCEDURES ESTABLISHED PURSUANT TO SUBSECTION (G) OF THIS SECTION.

(2) THIS SUBSECTION DOES NOT PREVENT THE CONVEYANCE OF THE LOT TO A THIRD PARTY AS SECURITY FOR A MORTGAGE OR DEED OF TRUST.

(G) IF A LOCAL JURISDICTION INCLUDES PROVISIONS FOR BONA FIDE INTRAFAMILY TRANSFERS AS PART OF ITS LOCAL PROGRAM, THE LOCAL JURISDICTION SHALL ESTABLISH STANDARDS AND PROCEDURES, SUBJECT TO THE APPROVAL OF THE COMMISSION, BY WHICH THE LOCAL JURISDICTION WILL PERMIT THE SUBSEQUENT CONVEYANCE OF LOTS TO PERSONS OTHER THAN IMMEDIATE FAMILY MEMBERS. THE STANDARDS AND PROCEEDS SHALL ASSURE THAT:

(1) THE LOT WAS CREATED AS PART OF A BONA FIDE INTRAFAMILY TRANSFER AND NOT WITH THE INTENT OF SUBDIVIDING THE ORIGINAL PARCEL OF LAND FOR PURPOSES OF ULTIMATE COMMERCIAL SALE; AND

(2)(1) A CHANGE IN CIRCUMSTANCES HAS OCCURRED SINCE THE ORIGINAL TRANSFER WAS MADE THAT IS NOT INCONSISTENT WITH THIS SUBTITLE AND THAT WARRANTS AN EXCEPTION; OR

(II) OTHER CIRCUMSTANCES THAT ARE CONSISTENT WITH SUBTITLE AND WITH

THE COMMISSION'S CRITERIA TO MAINTAIN LAND AREAS NECESSARY TO SUPPORT THE PROTECTIVE USES OF AGRICULTURE, FORESTRY, OPEN SPACE, AND NATURAL HABITATS IN RESOURCE CONSERVATION AREAS WARRANT AN EXCEPTION.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 1986.

CHAPTER 604

AN ACT concerning Chesapeake Bay Critical Area-Impervious Surfaces Limitation

FOR the purpose of prohibiting the Chesapeake Bay Critical Area Commission from establishing an impervious surfaces limitation greater than certain amounts unless approved by the General Assembly; providing for the scope, application, and effect of this Act; and generally relating to impervious surfaces limitations.

BY adding to Article - Natural Resources Section 8-1808.1 Annotated Code of Maryland (1983 Replacement Volume and 1985 Supplement)

Preamble

WHEREAS, To protect the Chesapeake Bay, the General Assembly enacted Chapter 794 of the Acts of 1984; and

WHEREAS, Under Chapter 794 of the Acts of 1984, the Chesapeake Bay Critical Area Commission adopted regulations under COMAR 14.15.02.02 to provide for general policies for development in the Critical Area; and

WHEREAS, The General Assembly intends this Act to prevent the impervious surfaces limitation that is greater than a certain percentage unless the General Assembly specifically approves the action; now, therefore.,

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article - Natural Resources

8-1808.1

(A) THIS SECTION APPLIES NOTWITHSTANDING;

(1) ANY OTHER PROVISION OF THIS SUBTITLE; OR

(2) ANY CRITERIA OR GUIDELINE OF THE COMMISSION ADOPTED UNDER THIS SUBTITLE,

(B) THIS SECTION CONTROLS OVER ANY OTHER REQUIREMENT CONCERNING IMPERVIOUS SURFACES LIMITATIONS IN THE CRITICAL AREA.

(C) FOR STORMWATER RUNOFF, MAN-CAUSED IMPERVIOUS AREAS SHALL BE LIMITED TO 15 PERCENT OF A PARCEL TO BE DEVELOPED. HOWEVER, IMPERVIOUS SURFACES ON ANY LOT NOT EXCEEDING 1 ACRE IN SIZE IN A SUBDIVISION APPROVED AFTER JUNE 1, 1986 MAY BE UP TO 25 PERCENT OF THE LOT.

-- SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 1986.

## The Criteria

### 14.15.01 General Provisions

#### .01 Definitions.

A. As used in this subtitle, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Afforestation" means the establishment of a tree crop on an area from which it has always or very long been absent, or the planting of open areas which are not presently in forest cover.

(2) "Agriculture" means all methods of production and management of livestock, crops, vegetation, and soil. This includes, but is not limited to, the related activities of tillage, fertilization, pest control, harvesting, and marketing. It also includes, but is not limited to, the activities of feeding, housing, and maintaining of animals such as cattle, dairy cows, sheep, goats, hogs, horses, and poultry and handling their by products.

(3) "Agricultural easement" means a non-possessory interest in land which restricts the conversion of use of the land, preventing non-agricultural uses.

(4) "Anadromous fish" means fish that travel upstream (from their primary habitat in the ocean) to freshwaters in order to spawn.

(5) "Aquaculture" means (a) the farming or culturing of finfish, shellfish, other aquatic plants or animals, or both, in lakes, streams, inlets, estuaries, and other natural or artificial water bodies or impoundments. (b) Activities include the hatching, cultivating, planting, feeding, raising, and harvesting of aquatic plants and animals and the maintenance and construction of necessary equipment, buildings, and growing areas. (c) Cultivation methods include, but are not

limited to, seed or larvae development and growout facilities, fish pens, shellfish rafts, tacks and longlines, seaweed floats and the culture of clams and oysters on tidelands and subtidal areas. For the purpose of this definition, related activities such as wholesale and retail sales, processing and product storage facilities are not considered aquacultural practices.

(6) "Barren land" means unmanaged land having sparse vegetation.

(7) "Best Management Practices (BMPs)" means conservation practices or systems of practices and management measures that control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxics, and sediment. Agricultural BMPs include, but are not limited to, strip cropping, terracing, contour stripping, grass waterways, animal waste structures, ponds, minimal tillage, grass and naturally vegetated filter strips, and proper nutrient application measures.

(8) "Buffer" means a naturally vegetated area or vegetated area established or managed to protect aquatic, wetland, shoreline, and terrestrial environments from man-made disturbances.

(9) "Clearcutting" means the removal of the entire stand of trees in one cutting with tree reproduction obtained by natural seeding from adjacent stands or from trees that were cut, from advanced regeneration or stump sprouts, or from planting of seeds or seedlings by man.

(10) "Cluster development" means a residential development in which dwelling units are concentrated in a selected area or selected areas of the development tract so as to provide natural habitat or other open space uses on the remainder.

(11) "Colonial nesting water birds" means herons, egrets, terns, and glossy ibis. For purposes of nesting, these birds congregate (that is "colonize") in relatively few areas, at which time, the regional populations of these species are highly susceptible to local disturbances.

(12) "Commercial harvesting" means a commercial operation that would alter the existing composition or profile, or both, of a forest, including all commercial cutting operations done by companies and private individuals for economic gain.

(13) "Commission" means the Chesapeake Bay Critical Area Commission.

(14) "Community piers" means boat docking facilities associated with subdivisions and similar residential areas, and with condominium, apartment, and other multiple-family dwelling units. Private piers are excluded from this definition.

(15) "Comprehensive or master plan" means a compilation of policy statements, goals, standards, maps, and pertinent data relative to the past, present, and future trends of the local jurisdiction including, but not limited to, its population, housing, economics, social patterns, land use, water resources and their use, transportation facilities, and public facilities, prepared by or for the planning board, agency, or office.

(16) "Conservation easement" means a non-possessory interest in land which restricts the manner in which the land may be developed in an effort to reserve natural resources for future use.

(17) "Cover crop" means the establishment of a vegetative cover to protect soils from erosion and to restrict pollutants from entering

the waterways. Cover crops can be dense, planted crops of grasses or legumes, or crop residues such as corn, wheat, or soybean stubble which maximize infiltration and prevent runoff from reaching erosive velocities.

(18) "Critical Area" means all lands and waters defined in Section 8-1807 of the Natural Resources Article, Annotated Code of Maryland. They include:

(a) all waters of and lands under the Chesapeake Bay and its tributaries to the head of tide as indicated on the State and private wetlands designated under Title 9 of the Natural Resources Article, Annotated Code of Maryland;

(b) all land and water areas within 1,000 feet beyond the landward boundaries of State or private wetlands and the heads of tides designated under Title 9 of the Natural Resources Article, Annotated Code of Maryland; and

(c) modification to these areas through inclusions or exclusions proposed by local jurisdictions and approved by the Commission as specified in Section 8-1807 of the Natural Resources Article, Annotated Code of Maryland.

(19) "Density" means the number of dwelling units per acre within a defined and measurable area.

(20) "Developed woodlands" means those areas of 1 acre or more in size which predominantly contain trees and natural vegetation and which also include residential, commercial, or industrial structures and uses.

(21) "Development activities" means the construction or substantial alteration of residential, commercial, industrial, institutional, or transportation facilities or structures.

(22) "Documented breeding bird areas" means forested areas where the occurrence of interior dwelling birds, during

the breeding season, has been demonstrated as a result of on-site surveys using standard biological survey techniques.

(23) "Ecosystem" means a more or less self-contained biological community together with the physical environment in which the community's organisms occur.

(24) "Excess stormwater run-off" means all increases in stormwater resulting from:

(a) An increase in the imperviousness of the site, including all additions to building, roads, and parking lots;

(b) Changes in permeability caused by compaction during construction or modifications in contours, including the filling or drainage of small depression areas;

(c) Alteration of drainageways, or regarding of slopes;

(d) Destruction of forest; or

(e) Installation of collection systems to intercept street flows or to replace swales or other drainageways.

(25) "Fisheries activities" means commercial water dependent fisheries facilities including structures for the packing, processing, canning, or freezing of finfish, crustaceans, mollusks, and amphibians and reptiles and also including related activities such as wholesale and retail sales product storage facilities, crab shedding, off-loading docks, shellfish culture operations, and shore-based facilities necessary for aquaculture operations.

(26) "Forest" means a biological community dominated by trees and other woody plants covering a land area of 1 acre or more. This also includes forests that have been cut, but not cleared.

(27) "Forest Interior Dwelling Birds" means species of birds which require relatively large forested tracts in order to be successfully (for example, various species of

flycatchers, warblers, vireos, and woodpeckers).

(28) "Forest management" means the protection, manipulation, and utilization of the forest to provide multiple benefits, such as timber harvesting, water transpiration, wildlife habitat, etc.

(29) "Forest practice" means the alteration of the forest either through tree removal or replacement in order to improve the timber, wildlife, recreational, or water quality values.

(30) "Highly erodible soils" means those soils with a slope greater than 15 percent; or those soils with a K value greater than .35 and with slopes greater than 5 percent.

(31) "Historic waterfowl staging and concentration area" means an area of open water and adjacent marshes where waterfowl gather during migration and throughout the winter season. These areas are "historic" in the sense that their location is common knowledge and because these areas have been used regularly during recent times.

(32) "Hydric soils" means soils that are wet frequently enough to periodically produce anaerobic conditions, thereby influencing the species composition or growth, or both, of plants on those soils.

(33) "Hydrophytic vegetation" means those plants cited in "Vascular Plant Species Occurring in Maryland Wetlands" (Dawson, F. et al., 1985) which are described as growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content (plants typically found in water habitats).

(34) "K Value" means the soil erodibility factor in the Universal Soil Loss Equation. It is a quantitative value that is experimentally determined.

(35) "Land-based aquaculture" means the raising of fish or shellfish in any

natural or man-made, enclosed or impounded, water body.

(36) "Land clearing" means any activity that removes the vegetative ground cover.

(37) "Landforms" means features of the earth's surface created by natural causes.

(38) "Marina" means any facility for the mooring, berthing, storing, or securing of watercraft, but not including community piers and other non-commercial boat docking and storage facilities.

(39) "Mean High Water Line" means the average level of high tides at a given location.

(40) "Natural Heritage Area" means any communities of plants or animals which are considered to be among the best Statewide examples of their kind, and are designated by regulation by the Secretary of the Department of Natural Resources.

(41) "Natural vegetation" means those plant communities that develop in the absence of human activities.

(42) "Nature-dominated" means a condition where landforms or biological communities, or both, have developed by natural processes in the absence of human intervention.

(43) "Natural features" means components and processes present in or produced by nature, including but not limited to, soil types, geology, slopes, vegetation, surface water, drainage patterns, aquifers, recharge areas, climate, flood plains, aquatic life, and wildlife.

(44) "Non-point source pollution" means pollution generated by diffuse land use activities rather than from an identifiable or discrete facility. It is conveyed to waterways through natural processes, such as rainfall, storm runoff, or groundwater seepage rather than by deliberate discharge. Non-point source pollution is

not generally corrected by "end-of-pipe" treatment, but rather, by changes in land management practices.

(45) "Non-renewable resources" means resources that are not naturally regenerated or renewed.

(46) "Non-tidal wetlands" means those lands in the Critical Area, excluding tidal wetlands regulated under Title 9 of Natural Resources Article, Annotated Code of Maryland, where the water table is usually at or near the surface, or lands where the soil or substrate is covered by shallow water at some time during the growing season.

These regulations apply to the Palustrine class of non-tidal wetlands as defined in "Classification of Wetlands and Deepwater Habitats of the United States" (Publication FWS/ODS-79/31, December 1979) and as identified on the National Wetlands Inventory maps, or which may be identified by site survey at the time of application for a development activity. These lands are usually characterized by one or both of the following:

(a) At least periodically, the lands support predominantly hydrophytic vegetation;

(b) The substrate is predominantly undrained hydric soils.

(47) "Offsets" means structures or actions that compensate for undesirable impacts.

(48) "Open space" means land and water areas retained in an essentially undeveloped state.

(49) "Overburden" means the strata or material in its natural state, before its removal by surface mining, overlying a mineral deposit, or in between mineral deposits.

(50) "Palustrine" means all non-tidal wetlands dominated by trees, shrubs persistent emergent plants, or emergent mosses or lichens and all such wetlands that occur in tidal

areas where the salinity due to ocean-derived salts is below one-half part per 1,000 parts of water.

(51) "Physiographic features" means the soils, topography, land slope and aspect, and local climate that influence the form and species composition of plant communities.

(52) "Port" means a facility or area established or designated by the State or local jurisdictions for purposes of water-borne commerce.

(53) "Private harvesting" means the cutting and removal of trees for personal use.

(54) "Project approvals" means the approval of development, other than development by a State or local government agency, in the Chesapeake Bay Critical Area by the appropriate local approval authority. The term includes approval of subdivision plats and site plans; inclusion of areas within floating zones; issuance of variances, special exceptions, and conditional use permits; and issuance of zoning permits. The term does not include building permits.

(55) "Public water-oriented recreation" means shore-dependent recreation facilities or activities provided by public agencies which are available to the general public.

(56) "Reclamation" means the reasonable rehabilitation of disturbed land for useful purposes, and the protection of the natural resources of adjacent areas, including waterbodies.

(57) "Redevelopment" means the process of developing land which is or has been developed.

(58) "Reforestation" means the establishment of a forest through artificial reproduction or natural regeneration.

(59) "Renewable resource" means a resource that can renew or replace itself and, therefore, with proper

management, can be harvested indefinitely.

(60) "Riparian habitat" means a habitat that is strongly influenced by water and which occurs adjacent to streams, shorelines, and wetlands.

(61) "Seasonally flooded water regime" means a condition where surface water is present for extended periods, especially early in the growing season, and when surface water is absent, the water table is often near the land surface.

(62) "Selection" means the removal of single, scattered, mature trees or other trees from uneven-aged stands by frequent and periodic cutting operations.

(63) "Significantly eroding areas" means areas that erode 2 feet or more per year.

(64) "Species in need of conservation" means those fish and wildlife whose continued existence as part of the State's resources are in question and which may be designated by regulation by the Secretary of Natural Resources as in need of conservation pursuant to the requirements of Natural Resources Article, 10-2A-06 and 4-2A-03, Annotated Code of Maryland.

(65) "Spoil pile" means the overburden and reject materials as piled or deposited during surface mining.

(66) "Soil Conservation and Water Quality Plans" means land-use plans for farms that show farmers how to make the best possible use of their soil and water resources while protecting and conserving those resources for the future. It is a document containing a map and related plans that indicate:

(a) How the landowner plans to treat a farm unit;

(b) Which best management practices the landowner plans to install to

treat undesirable conditions; and

(c) The schedule for applying those Best Management Practices.

(67) "Steep slopes" means slopes of 15 percent or greater incline.

(68) "Thinning" means a forest practice used to accelerate tree growth of quality trees in the shortest interval of time.

(69) "Topography" means the existing configuration of the earth's surface including the relative relief, elevation, and position of land features.

(70) "Transitional habitat" means a plant community whose species are adapted to the diverse and varying environmental conditions that occur along the boundary that separates aquatic and terrestrial areas.

(71) "Transportation facilities" means anything that is built, installed, or established to provide a means of transport from one place to another.

(72) "Tributary streams" means those perennial and intermittent streams in the Critical Area which are so noted on the most recent U. S. Geological Survey 7 1/2 minute topographic quadrangle maps (scale 1:24,000) or on more detailed maps or studies at the discretion of the local jurisdictions.

(73) "Utility transmission facilities" means fixed structures that convey or distribute resources, wastes, or both, including, but not limited to, electric lines, water conduits, and sewer lines.

(74) "Wash plant" means a facility where sand and gravel is washed during processing.

(75) "Water-based aquaculture" means the raising of fish and shellfish in any natural, open, free-flowing water body.

(76) "Water-use industry" means an industry that

requires location near the shoreline because it utilizes surface waters for cooling or other internal purposes.

(77) "Waterfowl" means birds which frequent and often swim in water, nest and raise their young near water, and derive at least part of their food from aquatic plants and animals.

(78) "Wildlife corridor" means a strip of land having vegetation that provides habitat and a safe passageway for wildlife.

#### .02 Explanation of Certain Terms.

Every provision of this Subtitle constitutes part of the "criteria for program development" within the meaning and intent of Natural Resources Article, §8-1808(d), whether that provision is termed a "definition", "general policy", "policy", or "criteria".

### 14.15.02 Development In the Critical Area

#### .01 Introduction.

The Commission is charged with the development of criteria that will accommodate growth, and also provide for the conservation of habitat and the protection of water quality in the Critical Area. In this Chapter, criteria are proposed for directing managing, and controlling development (e.g., residential, commercial, industrial and related facilities) so that the adverse impacts of growth in the Critical Area are minimized. These criteria are based on the general policies found in Regulation 02.

#### .02 General Policies.

A. In order to recognize already existing land uses and development in the Critical Area, the Commission recognizes these three types of development areas:

(1) Intensely developed Areas;

(2) Limited Development Areas; and

(3) Resource Conservation Areas.

B. Within each jurisdiction, intense development should be directed outside the Critical Area. Future intense development activities, when proposed in the Critical Area, shall be directed towards the Intensely Developed Areas.

C. Additional low intensity development may be permitted in the Limited Development areas, but shall be subject to strict regulation to prevent adverse impacts on habitat and water quality.

D. Development shall be limited in the Resource Conservation Area, which shall be chiefly designated for agriculture, forestry, fisheries activities, other resource utilization activities and for habitat protection.

E. Local jurisdictions shall identify each of the three areas within their jurisdiction based on the criteria to follow, and develop policies and programs to achieve the objectives as proposed by the Commission.

F. Certain new development, or redevelopment activities or facilities, because of their intrinsic nature, or because of their potential for adversely affecting habitats or water quality, may not be permitted in the Critical Area except in Intensely Developed Areas under Regulation .03 of this Chapter, and only after the activity or facility has demonstrated to all appropriate local and State permitting agencies that there will be a net improvement in water quality to the adjacent body of water. These activities include, the following:

(1) Non-maritime heavy industry;

(2) Transportation facilities and utility transmission facilities, except those

necessary to serve permitted uses, or where regional or interstate facilities must cross tidal waters (utility transmission facilities do not include power plants; or

(3) Permanent sludge handling, storage and disposal facilities, other than those associated with wastewater treatment facilities. However, agricultural or horticultural use of sludge under appropriate approvals when applied by an approved method at approved application rates may be permitted in the Critical Area, except in the 100 foot Buffer.

(4) Local jurisdictions may preclude additional development activities that they consider detrimental to water quality or fish, wildlife, or plant habitats within their jurisdictions.

G. Certain new development activities or facilities, or the expansion of certain existing facilities, because of their intrinsic nature, or because of their potential for adversely affecting habitat and water quality, may not be permitted in the Critical Area unless no environmentally acceptable alternative exists outside the Critical Area, and these development activities or facilities are needed in order to correct an existing water quality or wastewater management problem. These include:

(1) Solid or hazardous waste collection or disposal facilities; or

(2) Sanitary landfills.

H. Existing, permitted facilities of the type noted in G(1) and (2), above shall be subject to the standards and requirements of the Maryland Department of Health and Mental Hygiene, under COMAR Title 10.

.03 Intensely Developed Areas.

A. Intensely Developed Areas are those areas where residential, commercial,

institutional, and/or industrial developed land uses predominate, and where relatively little natural habitat occurs. These areas shall have at least one of the following features:

(1) Housing density equal to or greater than four dwelling units per acre;

(2) Industrial, institutional, or commercial uses are concentrated in the area; or

(3) Public sewer and water collection and distribution systems are currently serving the area and housing density is greater than three dwelling units per acre.

B. In addition, these features shall be concentrated in an area of at least 20 adjacent acres, or that entire upland portion of the Critical Area within the boundary of a municipality, whichever is less.

C. In developing their Critical Area Programs, local jurisdiction shall follow these policies when addressing Intensely Developed Areas:

(1) Improve the quality of runoff from developed areas that enters the Chesapeake Bay or its tributary streams;

(2) Accommodate additional development of the type and intensity designated by the local jurisdiction provided that water quality is not impaired;

(3) Minimize the expansion of Intensely Developed Areas into portions of the Critical Area designated as Habitat Protection Areas under COMAR 14.15.09 and Resource Conservation Areas under Regulation .05 of this Chapter;

(4) Conserve and enhance fish, wildlife, and plant habitats, as identified in COMAR 14.15.09, to the extent possible, within Intensely Developed Areas; and

(5) Encourage the use of retrofitting measures to address existing stormwater management problems.

D. In developing their Critical Area Programs, local jurisdictions shall use the following criteria for Intensely Developed Areas:

(1) Local jurisdictions shall develop a strategy to reduce the impacts on water quality that are generated by existing development. This shall include an assessment of water quality and impacts to biological resources prompted by community redevelopment plans and programs and may further include a public education program, the implementation of urban best management practices, and the use of such techniques are as outlined in D(9)(a), below.

(2) Development and redevelopment shall be subject to the Habitat Protection Area criteria prescribed in COMAR 14.15.09.

(3) Stormwater.

(a) The local jurisdiction shall require, at the time of the development or redevelopment, technologies as required by applicable State and local ordinances to minimize adverse impacts to water quality caused by stormwater.

(b) In the case of redevelopment, if these technologies do not reduce pollutant loadings by at least 10 percent below the level of pollution on the site prior to redevelopment, then offsets shall be provided.

(c) In the case of new development, offsets as determined by the local jurisdiction shall be used if they reduce pollutant loadings by at least 10 percent of the predevelopment levels.

(d) Offsets may be provided either on or off site, provided that water quality benefits are equivalent, that their benefits are obtained within the same watershed, and that the benefits can be determined through the use of modeling, monitoring, or other

computation of mitigation measures.

(4) If practicable, permeable areas shall be established in vegetation, and whenever possible, redevelopment shall reduce existing levels of pollution.

(5) Areas of public access to the shoreline, such as foot paths, scenic drives, and other public recreational facilities, should be maintained and, if possible, encouraged to be established within Intensely Developed Areas.

(6) Ports and industries which use water for transportation and derive economic benefits from shore access, shall be located near existing port facilities. Local jurisdictions may identify other sites for planned future port facility development and use if this use will provide significant economic benefit to the State of local jurisdiction and is consistent with the provisions of COMAR 14.15.03.03, 14.15.03.04, 14.15.03.05, 14.15.09, and other State and federal regulations.

(7) Local jurisdictions shall be encouraged to establish, with assistance from the State, programs for the enhancement of biological resources within the Critical Area for their positive effects on water quality and urban wildlife habitat. These programs may include urban forestry, landscaping, gardens, wetland, and aquatic habitat restoration elements.

(8) To the extent practicable, future development shall use cluster development as a means to reduce impervious areas and to maximize areas of natural vegetation.

(9) When the cutting or clearing of trees in forests and developed woodland areas is associated with current or planned development activities, the following shall be required:

(a) Establishment of programs for the enhancement of forest and developed woodland resources such as programs for urban forestry (for example, street tree plantings, gardens, landscaping, open land buffer plantings);

(b) Establishment by regulation that development activities shall be designed and implemented to minimize destruction of forest and woodland vegetation; and

(c) Protection for existing forests and developed woodlands identified as Habitat Protection Areas in COMAR 14.15.09.

#### .04 Limited Development Areas.

A. Limited Development Areas are those areas which are currently developed in low or moderate intensity uses. They also contain areas of natural plant and animal habitats, and the quality of runoff from these areas has not been substantially altered or impaired. These areas shall have at least one of the following features:

(1) Housing density ranging from one dwelling unit per 5 acres up to four dwelling units per acre;

(2) Areas not dominated by agriculture, wetland, forest, barren land, surface water, or open space;

(3) Areas meeting the conditions of Regulation .03A, but not .03B, above;

(4) Areas having public sewer or public water, or both.

B. In developing their Critical Area Programs, local jurisdictions shall follow these policies when addressing Limited Development Areas:

(1) Maintain, or if possible, improve the quality of runoff and groundwater entering the Chesapeake Bay and its tributaries;

(2) Maintain, to the extent practicable, existing areas of natural habitat; and

(3) Accommodate additional low or moderate intensity development if:

(a) This development conforms to the water quality and habitat protection criteria in C, below; and

(b) The overall intensity of development within the Limited Development Area is not increased beyond the level established in a particular area so as to change its prevailing character as identified by density and land use currently established in the area.

C. In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria for Limited Development Areas:

(1) For all development activities in the Limited Development Areas, the jurisdiction shall require that the developer identify any environmental or natural feature described below, and shall meet all of the following standards of environmental protection:

(a) Criteria as provided for the Habitat Protection Areas in COMAR 14.15.09, and those for the Water-Dependent Facilities in COMAR 14.15.03.

(b) All roads, bridges, and utilities that must cross a Habitat Protection Area shall be located, designed, constructed, and maintained so as to provide maximum erosion protection and minimize negative impacts to wildlife, aquatic life and their habitats and maintain hydrologic processes and water quality. Roads, bridges, or utilities may not be located in any Habitat Protection Area unless no feasible alternative exists.

(c) All development activities that must cross or affect streams shall be designed to:

(i) Reduce increases in flood frequency and severity that are attributable to development;

(ii) Retain tree canopy so as to maintain stream water temperature within normal variation;

(iii) Provide a natural substrate for streambeds; and

(iv) Minimize adverse water quality and quantity impacts of stormwater.

(d) All development sites shall incorporate a wildlife corridor system that connects the largest undeveloped, or most vegetative tracts of land within and adjacent to the site in order to provide continuity of existing wildlife and plant habitats with offsite habitats.

The wildlife corridor system may include Habitat Protection Areas identified in COMAR 14.15.09. Local jurisdictions shall ensure the maintenance of the wildlife corridors by requiring the establishment of conservation easements, restrictive covenants, or similar instruments through which the corridor is preserved by public or private groups, including homeowners associations, nature trusts, and other organizations.

(2) For the cutting or clearing of trees in forests and developed woodland areas which are associated with current or planned development activities in the Limited Development Area, all jurisdictions shall:

(a) Require that the developer consider the recommendations of the Maryland Forest, Park and Wildlife Service when planning development on forested lands;

(b) Provide regulations that development activities be designed and implemented to minimize destruction of woodland vegetation; and

(c) Provide protection for forests and developed woodlands identified as Habitat Protection Areas in COMAR 14.15.09.

(3) For the alteration of forest and developed woodland in the Limited

Development Area, the jurisdiction shall apply all of the following criteria:

(a) The total acreage in forest coverage within a jurisdiction in the Critical Area shall be maintained, or preferably, increased.

(b) All forests that are allowed to be cleared or developed shall be replaced in the Critical Area on not less than an equal area basis.

(c) That no more than 20 percent of any forest or developed woodland may be removed from forest use, except as provided in C(4), below. The remaining 80 percent shall be maintained through recorded, restrictive covenants or similar instruments.

(d) Developed woodland vegetation shall be conserved to the greatest extent practicable.

(4) For replacement of forest and developed woodland, if more than 20 percent is removed from forest use, the following formula shall apply: a developer may clear or develop more forest than otherwise permitted to disturbed, if the total forest area removed from forest use is not increased by more than 50 percent of the area permitted to be disturbed in C(3)(c) above, provided that the afforested area shall consist of 1.5 times the total surface acreage of the disturbed forest or developed woodland area, or both.

(5) In addition, local jurisdictions shall adhere to the following criteria for forest and woodland development:

(a) Local programs shall make provision for surety to be provided by owners or developers in an amount acceptable to the local jurisdiction and suitable to assure satisfactory replacement as required by C(4), above;

Grading permits shall be required before forest or

developed woodland is cleared;

(c) Forests which have been cleared before obtaining a grading permit, or that exceed the maximum area allowed in C(4) shall be replanted at three times the areal extent of the cleared forest;

(d) If the areal extent of the site limits the application of C(3), C(4), and C(5)(c), above, alternative provisions or reforestation guidelines may be developed by the local jurisdiction, if they are consistent with the intent of COMAR 14.15.05, to conserve the forest and developed woodland resources of the Critical Area. Alternative provisions may include fees-in-lieu provisions if the fee is adequate to ensure the restoration or establishment of an equivalent forest area;

(c) If no forest is established on proposed development sites, these sites shall be planted to provide a forest or developed woodland cover of at least 15 percent;]

(f) All forests designated on development plans shall be maintained to the extent practicable, through conservation easements, restrictive covenants, or other protective instruments;

(g) The developer shall designate, subject to the approval of the local jurisdiction, a new forest area on a part of the site not forested; and

(h) The afforested area shall be maintained as forest cover through easements, restrictive covenants, or other protective instruments.

(6) Development on slopes greater than 15 percent, as measured before development, shall be prohibited unless the project is the only effective way to maintain or improve the stability of the slope and is consistent with the policies in B, above.

(7) For stormwater runoff, man-caused impervious areas shall be limited to 15 percent of the site.

(8) Local jurisdictions should allow for modifications in road standards to reduce potential impacts to the site and Critical Area resources, where the reduced standards do not significantly affect safety.

(9) To reduce the extent of impervious areas and maximize areas of natural vegetation, cluster development shall be considered when planning for future development.

(10) Development may be allowed on soils having development constraints if it includes mitigation measures that adequately address the identified constraints and that will not have significant adverse impacts on water quality or plant, fish, or wildlife habitat.

D. In developing their Critical Area Programs, the local jurisdictions shall refer to all of the following complementary existing State laws and regulations:

(1) For soil erosion and sediment control (COMAR 08.05.0):

(a) In order to prevent soil erosion and sedimentation, a Soil Erosion and Sedimentation Control Plan shall be required whenever a development within the Critical Area will involve any clearing, grading, transporting, or other form of disturbance to land by the movement of earth. This plan shall be consistent with the Requirements of Natural Resources Article §§8-1101 through 8-1108, Annotated Code of Maryland, and local ordinances. Sediment control practices shall be appropriately designed to reduce adverse water quality impact.

(b) Jurisdictions shall require erosion control as the basis of sediment control plans within the Critical Area.

(2) For stormwater runoff (COMAR .08.05.05):

(a) Limitation on Stormwater Runoff. Development may not cause downstream property, watercourses, channels, or conduits to receive stormwater runoff at a higher volume or rate than would have resulted from a 10-year storm were the land in its predevelopment state.

(b) Storage Capacity. All stormwater storage facilities shall be designed with sufficient capacity to achieve water quality goals of this Subtitle and to eliminate all runoff caused by the development in excess of that which would have come from the site if it were in its predevelopment state.

(c) Stormwater management measures shall be consistent with the requirements of Natural Resources Article, §8-11A-01 et seq., Annotated Code of Maryland.

.05 Resource Conservation Areas.

A. Resource Conservation Areas are those areas characterized by nature-dominated environments (that is, wetlands, forests, abandoned fields) and resource-utilization activities (that is, agriculture, forestry, fisheries activities, or aquaculture). These areas shall have at least one of the following features:

- (1) Density is less than one dwelling unit per 5 acres; or
- (2) Dominant land use is in agriculture, wetland, forest, barren land, surface water, or open space.

B. In developing their Critical Area Programs, local jurisdictions shall follow these policies when addressing Resource Conservation Areas:

(1) Conserve, protect, and enhance the overall ecological values of the Critical Area, its

biological productivity, and its diversity;

(2) Provide adequate breeding, feeding, and wintering habitats for those wildlife populations that require the Chesapeake Bay, its tributaries, or coastal habitats in order to sustain populations of those species;

(3) Conserve the land and water resource base that is necessary to maintain and support land uses such as agriculture, forestry, fisheries activities, and aquaculture; and

(4) Conserve the existing developed woodlands and forests for the water quality benefits that they provide.

C. In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria for Resource Conservation Areas:

(1) Land use management practices shall be consistent with the policies and criteria for Habitat Protection Areas in COMAR 14.15.09, the policies and criteria for Agriculture in COMAR 14.15.06, and the policies and criteria on Forestry in COMAR 14.15.05.

(2) Agricultural and conservation easements shall be promoted in Resource Conservation Areas.

(3) Local jurisdictions are encouraged to develop tax or other incentive/disincentive programs to promote the continuation of agriculture, forestry, and natural habitats in Resource Conservation Areas.

(4) Land within the Resource Conservation Area may be developed for residential uses at a density not to exceed one dwelling unit per 20 acres. Within this limit of overall density, minimum lot sizes may be determined by the local jurisdiction. Local jurisdictions are encouraged to consider such mechanisms as cluster development, transfer of development rights, maximum lot size provisions, and/or additional means to maintain the land area

necessary to support the protective uses.

(5) Existing industrial and commercial facilities, including those that directly support agriculture, forestry, aquaculture, or residential development not exceeding the density specified in C(4), above, shall be allowed in Resource Conservation Areas. Additional land may not be zoned for industrial or commercial development, except as provided in Regulation .06, below.

(6) Local jurisdictions shall develop a program to assure that the overall acreage of forest and woodland within their Resource Conservation Areas does not decrease.

(7) Development activity within the Resource Conservation Area shall be consistent with the criteria for Limited Development Areas in Regulation .04.

(8) Nothing in this regulation shall limit the ability of a participant in the Agriculture Easement Program to convey real property impressed with such an easement to family members provided that no such conveyance will result in a density greater than 1 dwelling unit per 20 acres.

.06 Location and Extent of Future Intensely Developed and Limited Development Areas.

A. Intensely Developed and Limited Development Areas may be increased subject to these guidelines:

(1) The area of expansion of Intensely Developed or Limited Development Areas, or both, may not exceed an area equal to 5 percent of the county's portion of the Resource Conservation Area lands that are not tidal wetlands or federally owned;

(2) When planning future expansion of Intensely-Developed and Limited Development Areas,

counties in coordination with affected municipalities, shall establish a process to accommodate the growth needs of the municipalities.

B. When locating new Intensely Developed or Limited Development Areas, local jurisdictions shall use these guidelines:

(1) New Intensely Developed Areas should be located in Limited Development Areas or adjacent to existing Intensely Developed Areas;

(2) New Limited Development Areas should be located adjacent to existing Limited Development Areas or Intensely Developed Areas;

(3) No more than one half of the allocated expansion may be located in Resource Conservation Areas;

(4) New Intensely developed Areas and Limited Development Areas should be located in order to minimize impacts to Habitat Protection Areas as specified in COMAR 14.15.09 and in an area and in a manner that optimizes benefits to water quality;

(5) New Intensely Developed Areas should be located where they minimize their impacts to the defined land uses of the Resource conservation Area;

(6) New Intensely Developed Areas and Limited Development Areas in the Resource Conservation Area should be located at least 300 feet beyond the landward edge of tidal wetlands or tidal waters.

.07 Grandfathering.

A. After program approval, local jurisdictions shall permit the continuation, but not necessarily the intensification or expansion, of any use in existence on the date of program approval, unless the use has been abandoned for more than one year or is otherwise restricted by existing local ordinances. If any

existing use does not conform with the provisions of a local program, its intensification or expansion may be permitted only in accordance with the variance procedures outlined in COMAR 14.15.11.

B. Local jurisdictions shall establish grandfather provisions as part of their local Critical Area Programs.

Except as otherwise provided, local jurisdictions shall permit the types of land described in the following subsections to be developed in accordance with density requirements in effect prior to the adoption of the local Critical Area Program notwithstanding the density provisions of the Chapter. A local jurisdiction shall permit a single lot or parcel of land that was legally of record on the date of the program approval to be developed with a single family dwelling, if a dwelling is not already placed there, notwithstanding that such development may be inconsistent with the density provisions of the approved local program:

(1) Any land on which development activity has progressed to the point of the pouring of foundation footings or the installation of structural members;

(2) Any legal parcel of land, not being part of a recorded or approved subdivision, that was recorded or approved subdivision, that was recorded as of December 1, 1985, and land that was subdivided into recorded, legally buildable lots, where the subdivision received the local jurisdiction's final approval prior to June 1, 1984, provided that:

(a) The local jurisdiction develops as part of its program, procedures to bring these lands into conformance with the local Critical Area Program insofar as possible, including the consolidation or reconfiguration of lots not individually owned, and these

procedures are approved by the Commission, or

(b) If any such land has received a building permit subsequent to December 1, 1985, but prior to local program approval, and is located in a Resource conservation Area, that land must be counted by the local jurisdiction against the growth increment permitted in that area under COMAR

14.15.02.06, unless the Commission determines at the time of the program approval that steps had been taken to conform the development to the criteria in this Subtitle insofar as possible;

(3) Land that was subdivided into recorded, legally buildable lots, where the subdivision received the local jurisdiction's final approval between June 1, 1984 and December 1, 1985; and

(4) Land that was subdivided into recorded, legally buildable lots, where the subdivision received the local jurisdiction's final approval after December 1, 1985, provided that either development of any such land conforms to the criteria in this subtitle, or the area of the land is counted by the local jurisdiction against the growth increment permitted under COMAR 14.15.02.06.

C. For purposes of implementing this regulation, a local jurisdiction shall have determined, based on land uses and development in existence on December 1, 1985, which land areas fall within the three types of development areas described in COMAR 14.15.02.

D. Nothing in this regulation may be interpreted as altering any requirements for development activities set out in COMAR 14.15.03 and 14.15.09 of this Subtitle.

### 14.15.03 Water Dependent Facilities

#### .01 Definition.

A. "Water-dependent facilities" means those structures or works associated with industrial, maritime, recreation, educational, or fisheries activities that require location at or near the shoreline within the Buffer specified in COMAR 14.15.09.

B. An activity is water-dependent if it cannot exist outside the Buffer and is dependent on the water by reason of the intrinsic nature of its operation. These activities include, but are not limited to, ports, the intake and outfall structures of power plants, water-use industries, marinas and other boat docking structures, public beaches and other public water-oriented recreation areas, and fisheries activities.

C. Excluded from this regulation, are individual private piers installed or maintained by riparian landowners, and which are not part of a subdivision which provides community piers (see Regulation, .07 below).

#### .02 Policies.

In developing their Critical area Programs, local jurisdictions shall follow these policies when addressing water-dependent facilities:

A. Limit development activities in the Buffer, specified in COMAR 14.15.09, to those that are water-dependent; and

B. Provide by design and locational criteria, that these activities will have minimal individual and cumulative impact on water quality and fish, wildlife, and plant habitat in the Critical Area.

#### .03 General Criteria.

In developing their Critical Area Programs, local jurisdictions shall follow these

criteria when addressing water-dependent facilities:

A. Except as otherwise provided in this Chapter, new or expanded development activities may be permitted in the Buffer in Intensely Developed and Limited Development Areas provided that it can be shown:

(1) That they are water-dependent;

(2) That the project meets a recognized private right or public need;

(3) That adverse effects on water quality, and fish, plant, and wildlife habitat are minimized;

(4) That, in so far as possible, non-water-dependent structures or operations associated with

water-dependent projects or activities are located outside the Buffer; and

(5) That the facilities are consistent with an approved local plan as set forth below.

B. Except as otherwise provided in this regulation, new or expanded development activities may not be permitted in those portions of the Buffer which occur in Resource Conservation Areas.

#### .04 Local Plan Requirements for Water-Dependent Facilities.

A. Local jurisdictions, with the assistance of appropriate State agencies, shall develop a plan and associated policies and implementation programs for approving areas suitable for new or expanded water-dependent facilities in accordance with Regulation .03, above, and others in this Chapter. The plans and programs should include the re-evaluation of areas currently zoned or approved for these facilities to determine if current policies are consistent with the Critical Area Program.

B. The plan shall specify a process which considers the following factors in planning for areas suitable for water-dependent activities:

(1) That the activities will not significantly alter existing water circulation patterns or salinity regimes;

(2) That the water body upon which these activities are proposed has adequate flushing characteristics in the area;

(3) That disturbance to wetlands, submerged aquatic plant beds, or other areas of important aquatic habitats will be minimized;

(4) That adverse impacts to water quality that may occur as a result of these activities, such as non-point source run-off, sewage discharge from land activities or vessels, or from boat cleaning and maintenance operations, is minimized;

(5) That shellfish beds will not be disturbed or be made subject to discharge that will render them unsuitable for harvesting;

(6) That dredging shall be conducted in a manner, and using a method, which causes the least disturbance to water quality and aquatic and terrestrial habitats in the area immediately surrounding the dredging operation or within the Critical Area, generally;

(7) That dredged spoil will not be placed within the Buffer or elsewhere in that portion of the Critical Area which has been designated as a Habitat Protection Area except as necessary for:

(a) Backfill for permitted shore erosion protection measures;

(b) Use in approved vegetated shore erosion projects;

(c) Placement on previously approved channel maintenance spoil disposal areas; and

(d) Beach nourishment; and

(8) That interference with the natural transport of sand will be minimized.

C. The information necessary for evaluating the above factors, if not available

locally, should be obtained from appropriate State and federal agencies.

**.05 Industrial and Port-Related Water-Dependent Facilities**

New, expanded, or redeveloped industrial or port-related facilities and the replacement of these facilities may be permitted only in those portions of Intensely Developed Areas exempted from Buffer designation in COMAR 14.15.09 and are subject to the requirements set forth in Regulation .03A, above.

**.06 Marinas and Other Water-Dependent Commercial Maritime Facilities**

A. New or expanded marinas and related facilities may be permitted in the Buffer within Intensely Developed Areas and Limited Development Areas subject to the requirements of Regulation .03A, above.

B. New marinas or related maritime facilities may not be permitted in the Buffer within Resource Conservation Areas, except as provided in Regulation .08, below.

C. Expansion of existing marinas may be permitted by local jurisdictions within Resource Conservation Areas provided that it is sufficiently demonstrated that the expansion will not adversely affect water quality, and that it will result in an overall net improvement in water quality at or leaving the site of the marina.

D. New and existing marinas shall meet the sanitary requirements of the State Department of Health and Mental Hygiene as required in COMAR 10.17.02.

E. New marinas shall establish a means of minimizing the discharge of bottom wash waters into total waters.

**.07 Community Piers and Other Related Non-Commercial Boat Docking and Storage Facilities.**

A. New or expanded community marinas and other non-commercial boat-docking and storage facilities may be permitted in the Buffer subject to the requirements of Regulation .03A, above, and Regulation .07B, below, provided that:

(1) These facilities may not offer food, fuel, or other goods and services for sale and shall provide adequate and clean sanitary facilities;

(2) The facilities are community owned and established and operated for the benefit of the residents of a platted and recorded riparian subdivision;

(3) The facilities are associated with a residential development approved by the local jurisdiction for the Critical Area and consistent with all criteria and local regulations for the Critical Area;

(4) Disturbance to the Buffer is the minimum necessary to provide a single point of access to the facilities; and

(5) If community piers, slips, or moorings are provided as part of the new development, private piers in the development are not allowed.

B. The number of slips, piers, or mooring buoys permitted at the facility shall be the lesser of §B(1) or (2), below:

(1) One slip for each 50 feet of shoreline in the subdivision in the Intense and Limited Development Areas and one slip for each 300 feet of shoreline in the subdivision in the Resource Conservation Area; or

(2) A density of slips, piers, or mooring buoys to platted lots or dwellings within the subdivision in the Critical Area according to the following schedule:

(4) Disturbance to the Buffer is the minimum necessary to provide a single point of access to the facilities; and

(5) If community piers, slips, or moorings are provided as part of the new development, private piers in the development are not allowed.

B. The number of slips, piers, or moorings buoys permitted at the facility shall be the lesser of §B(1) or (2), below:

Platted Lots of Dwellings in the Critical Area	Slips and Moorings
up to 15	1 for each lot
16 - 40	15 or 75%, whichever is greater
41 - 100	30 or 50%, whichever is greater
101 - 300	50 or 25%, whichever is greater
over 300	75 or 15%, whichever is greater.

**08. Public Beaches and Other Public Water-Oriented Recreation of Education Areas.**

A. Public beaches or other public water-oriented recreation or education areas including, but not limited to publicly owned boat launching and docking facilities and fishing piers may be permitted in the Buffer in Intensely Developed Areas.

B. These facilities may be permitted within the Buffer in Limited Development Areas and Resource Conservation Areas provided that:

(1) Adequate sanitary facilities exist;

(2) Service facilities are, to the extent possible, located outside the Buffer;

(3) Permeable surfaces are used to the extent practicable, if no degradation of groundwater would result;

(1) One slip for each 50 feet of shoreline in the subdivision in the intense and Limited Development Areas and one slip for each 300 feet of shoreline in the subdivision in the Resource Conservation Area; or

(2) A density of slips, piers, or mooring buoys to platted lots or dwellings within the subdivision in the Critical Area according to the following schedule:

(4) Disturbance to natural vegetation is minimized; and  
 (5) Areas for passive recreation, such as nature study, and hunting and trapping, and for education, may be permitted in the Buffer within Resource Conservation Areas, if service facilities for these uses are located outside of the Buffer.

**09. Research Areas.**  
 Water-dependent research facilities or activities operated by State, federal, or local agencies, or educational institutions, may be permitted in the Buffer, if non-water-dependent structures or facilities associated with these projects are, to the extent possible, located outside of the Buffer.

**10 Fisheries Activities.**  
 A. Lands and water areas with high aquacultural potential should be identified

by the local jurisdictions in cooperation with the State. These areas are encouraged for that use and if so used, should be protected from degradation by other types of land and water use or by adjacent land and water uses.

B. Commercial water-dependent fisheries facilities including, but not limited to, structures for crab shedding, fish off-loading docks, shellfish culture operations, and shore-based facilities necessary for aquaculture operations, and fisheries activities, may be permitted in the Buffer, in Intensely Developed, Limited Development, and Resource Conservation Areas.

#### 14.15.04 Shore Erosion Protection Works

##### .01 Definition.

A. "Shore erosion protection works" means those structures or measures constructed or installed to prevent or minimize erosion of the shoreline in the Critical Area.

B. The criteria below are not intended to apply to those structures necessarily associated with water-dependent facilities in COMAR 14.15.03.

##### .02 Policies.

In developing their Critical Area Programs, local jurisdiction shall follow these policies in regard to shore erosion protection works:

A. Encourage the protection of rapidly eroding portions of the shoreline in the Critical Area by public and private landowners;

B. Where such measures can effectively and practically reduce or prevent shore erosion, encourage the use of nonstructural shore protection measures in order to conserve and protect plant, fish, and wildlife habitat.

##### .03 Criteria.

In developing their Critical Area Programs, local jurisdictions shall use these criteria:

A. Local jurisdictions, with assistance from the State, shall designate and map the following shoreline areas:

(1) Shoreline areas where no significant shore erosion occurs,

(2) Other eroding areas where non-structural measures would be a practical and effective method of erosion control; and

(3) Eroding areas where only structural measures would provide effective and practical erosion control;

B. Local jurisdictions shall adopt policies to be reflective of shoreline characteristics to accomplish the following objectives:

(1) Provide that structural control measures only be used in areas designated in A(3), above, where non-structural control measures would be impractical or ineffective;

(2) Provide that where structural erosion control is required, the measure that best provides for conservation of fish and plant habitat, and which is practical and effective shall be used;

(3) Provide that non-structural measures be utilized in areas of erosion as described in A(2), above;

(4) Provide that structural erosion measures not be encouraged in areas where no significant erosion occurs; and

(5) Provide that if significant alteration in the characteristics of a shoreline occurs, the measure that best fits the change may be used for sites in that area.

#### 14.15.05 Forest and Woodland Protection

##### .01 Definitions.

A. "Forests" means biological communities dominated by trees and other woody plants covering a land area of 1 or more acres.

B. "Developed woodlands" means those areas of 1 acre or more in size which predominantly contain trees and natural vegetation and which also include residential, commercial, or industrial structures and uses.

##### .02 Policies.

In developing their Critical Area Programs, local jurisdictions shall follow these policies in regard to forest and developed woodland protection:

A. Maintain and increase the forested vegetation of the Critical Area;

B. Conserve forests and developed woodlands and provide for expansion of forested areas;

C. Provide that the removal of trees associated with development activities shall be minimized and, where appropriate, shall be mitigated; and

D. Recognize that forests are a protective land use and should be managed in such a manner so that maximum values for wildlife, water quality, timber, recreation and other resources can be maintained, recognizing that, in some cases, these uses be mutually exclusive.

##### .03 Criteria.

In developing their Critical Area Programs, local jurisdictions shall use the following criteria:

A. Where forests or developed woodlands occur within local jurisdictions, the local jurisdictions shall develop a Forest Preservation Plan as part of their Critical Area Program. These plans are to be developed in cooperation with the Maryland Forest, Park

and Wildlife Service and other appropriate agencies.

B. Each Forest Preservation Plan shall consist of the following:

(1) Identification and mapping, or otherwise designating, forests and developed woodland occurring within the Critical Area;

(2) Identification of those forest areas and developed woodlands which include Habitat Protection Areas in COMAR 14.15.09; and which also may include forest areas that are periodically flooded within the State wetlands boundary; and

(3) Programs to provide incentives for the conversion of other land uses to forested conditions.

C. Where forests or developed woodland occur within the local jurisdiction's Critical Area, local policies and programs for tree cultural operations in the Critical Area shall include all of the following:

(1) A Forest Management Plan shall be required for all timber harvesting occurring within any 1 year interval and affecting 1 or more acres in forest and developed woodland in the Critical Area. The Plans shall be prepared by a registered professional forester and be reviewed and approved by the Maryland Forest, Park and Wildlife Service through the District Forestry Boards and the project forester, and filed with an appropriate designated agency within the local jurisdiction. Plans shall include measures to protect surface and groundwater quality and identify whether the activities will disturb or affect Habitat Protection Areas as identified in COMAR 14.15.09, and incorporate protection measures for these areas as specified by the local jurisdictions. To provide for the continuity of habitat, the plans shall address mitigation

through forest management techniques which include scheduling size, timing and intensity of harvest cuts, afforestation, and reforestation.

(2) A Sediment Control Plan shall be required for all harvests of 5,000 square feet or more of disturbed area in the Critical Area, including harvesting on agricultural lands. This plan shall be developed according to the State guidelines entitled: "Standard Erosion and Sediment Control Plan for Harvest Operations." The operations shall be implemented in accordance with specifications set out by the Maryland Forest, Park and Wildlife Service, and enforced by the Department of Natural Resources or the local jurisdictions.

(3) The cutting or clearing of trees within the 100-foot Buffer, as described in COMAR 14.15.09, shall be in accordance with that Chapter.

## 14.15.06 Agriculture

### .01 Definitions.

"Agriculture" means all methods of production and management of livestock, crops, vegetation, and soil. This includes but is not limited to, the related activities of tillage, fertilization, pest control, harvesting, and marketing. It also includes, but is not limited to the activities of feeding, housing, and maintaining of animals such as cattle, dairy cows, sheep, goats, hogs, horses, and poultry and handling their by-products.

### .02 Policies.

In developing their Critical Area Programs, local jurisdictions shall follow all of

these policies when addressing agriculture:

A. Assure that agriculture lands are identified and that programs are established for the Critical Area to maintain, where appropriate, agricultural lands in agricultural use, to the greatest extent possible.

B. Recognize that agriculture is a protective land use that should be properly managed so that it minimizes its contribution to pollutant loadings to the Bay and its tributaries.

C. Assure that the creation of new agricultural lands is not accomplished:

(1) By diking, draining, or filling of any class or subclass of palustrine wetlands, as described in COMAR 14.15.09.02, which have a seasonally flooded or wetter water regime, unless mitigation as provided for in COMAR 14.15.09.02 of these regulations is accomplished;

(2) By clearing of forests or woodland on soils with a slope greater than 15 percent; or on soils with a "K" value greater than .35 and slope greater than 5 percent;

(3) If the clearing will adversely affect water quality or will destroy plant and wildlife habitat as defined in COMAR 14.15.09 of these regulations; or

(4) By the clearing of existing natural vegetation within the Buffer as defined in COMAR 14.15.09 of these regulations.

D. Assure that the drainage of non-tidal wetlands for the purpose of agriculture be done in accordance with a Soil Conservation and Water Quality Plan, approved by the local Soil Conservation District.

E. Assure that Best Management Practices for the control of nutrients, animal wastes, pesticides, and sediment runoff be used to protect the productivity of the land base and enhance water quality. These practices shall

minimize contamination of surface and groundwater and, further, shall minimize adverse effects on plants, fish, and wildlife resources.

F. Assure that animal feeding operations, including retention and storage ponds, feed lot waste storage, and manure storage minimize the contamination of water bodies.

G. Assure that agricultural activity permitted within the Critical Area use Best Management Practices in accordance with a Soil Conservation and Water Quality Plan approved by the local Soil Conservation District.

### .03 Criteria.

A. In developing their Critical Area Programs, local jurisdictions shall use the following criteria for agriculture:

(1) Local jurisdictions shall develop an Agricultural Protection Plan as part of their Critical Area Program if the land use exists in the jurisdiction. These plans are to be developed in cooperation with the Soil Conservation Districts, the County Agricultural Land Preservation Advisory Boards, and other appropriate agencies.

(2) Each agricultural plan shall consist of the following:

(a) An identification, inventory, and mapping of agricultural lands occurring within the Critical Area;

(b) An identification of agricultural lands which include Habitat Protection Areas defined in COMAR 14.15.09;

(c) Programs for maintaining the agricultural lands in agricultural use and for protecting water quality, and plant and wildlife habitat, which shall include at a minimum:

(i) The incorporation of the agricultural components of the State 208 Water Quality Plan into local water quality plans if any exist,

(ii) Development of measures for encouraging the preservation of agricultural lands,

(iii) Provisions for the protection of Habitat Protection Areas within agricultural lands as required in COMAR 14.15.09, and

(iv) Provisions requiring Forest Management Plans for those farms which harvest timber to conform with the harvesting practices requirements in COMAR 14.15.05 and COMAR 14.15.09.

(3) Within 5 years from the effective date of these criteria, all farms within the Critical Area shall have in place and be implementing a currently approved Soil Conservation and Water Quality Plan approved by the local Soil Conservation District. Landowners who have signed up as conservation district cooperators, but who do not have a conservation plan developed for them by the District, shall be allowed to continue farming until a conservation plan is developed, provided that the goals of the Act and policies and all other requirements of the Chapter are being met.

(4) A landowner shall select and implement, with the assistance of a technically trained soil conservation planner or technician, from among the several Best Management Practices that minimize impacts to water quality, conserve fish, wildlife, and plant habitat, and integrate best with the farming operation.

(5) Until such time as a Soil Conservation and Water Quality Plan is approved and in place, landowners shall be encouraged to use the following practices:

(a) Proper nutrient application rates;

(b) Appropriate timing of nutrient application;

- (c) Appropriate method of nutrient application
- (d) Reduced tillage practices;
- (e) Crop rotations;
- (f) Cover crop.
- (6) Agricultural activities are permitted in the Buffer in accordance with COMAR 14.15.09. Agricultural activities shall refer to and use COMAR 14.15.09 in implementing this portion of this Subtitle.

**14.15.07  
Surface Mining in the  
Critical Area**

**.01 Definitions.**

- A. "Surface mining" means:
  - (1) The breaking of the surface soil in order to extract or remove minerals in the Critical Area;
  - (2) Any activity or process constituting all or part of a process for the extraction or removal of minerals from their original location in the Critical Area; and
  - (3) The extraction of sand, gravel, rock, stone, earth, or fill from borrow pits for highway construction purposes or other public facilities.
- B. For the purposes of this chapter, surface mining also means:
  - (1) Operations engaged in processing minerals at the site of extraction;
  - (2) Removal of overburden and mining of limited amounts of any mineral when done for the purpose of prospecting and to the extent necessary to determine the location, quantity, or quality of any natural deposit; and
  - (3) Mining operations, if the affected land exceeds 1 acre or more in area.

**.02 Policies.**

In developing their Critical Area Programs, local jurisdictions shall use the

following policies when addressing surface mining:

- A. Assure that all available measures be taken to protect the Critical Area from all sources of pollution from surface mining operations including, but not limited to, sedimentation and siltation, chemical and petrochemical use and spillage, and storage or disposal of wastes, dusts, and spoils;
- B. Assure that mining be conducted in a way to permit the reclamation of the site as soon as possible and to the extent possible.

**.03 Criteria.**

In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria:

- A. Local jurisdictions shall develop a mineral resources plan and program for management to include in their comprehensive or master plan, if these resources exist in the jurisdiction.
- B. The plans and programs are to be developed in conjunction with the Water Resources Administration of the Department of Natural Resources and other appropriate agencies.
- C. Each plan and program shall consist of all of the following:
  - (1) An identification and mapping of the undeveloped land in the Critical Area that should be kept in its undeveloped state until the land can be used to provide or assist in providing a continuous supply of minerals pursuant to Article 66B, §3.05(a)(1)(v), Annotated code of Maryland, as amended. Surface mining areas which include Habitat Protection Areas under COMAR 14.15.09 shall also be identified.
  - (2) An identification of appropriate post-excavation uses for this land such as recreation, habitat restoration, open space use, or

development in accordance with the guidelines for development in COMAR 14.15.02.

D. Local authorities shall establish regulations that designate those portions of the Critical Area that are unsuitable for future sand and gravel operations and shall prohibit those operations therein. Areas are unsuitable where:

- (1) Important natural resources such as threatened and endangered species, areas of scientific value, or rare assemblages of species occur as discussed in COMAR 14.15.09 of these regulations:
- (2) Areas where highly erodible soils exist;
- (3) The use of renewable resource lands would result in the substantial loss of long range (that is, 25 years or more) productivity of forest and agriculture, or would result in a degrading of water quality or a loss of vital habitat; or
- (4) The lands are within 100 feet of the Mean High Water Line of tidal waters or the edge of streams.

E. Future wash plants including ponds, spoil piles, and equipment may not be located within the Buffer as defined in COMAR 14.15.09.

F. Existing wash ponds shall be reclaimed as soon as possible after the cessation of a sand and gravel operation.

G. To the fullest extent possible, existing sand and gravel operations shall conduct their extraction activities so as to provide, at a minimum, a 100-foot buffer of natural vegetation between the operation of the Mean High Water Line of tidal waters or the edges of streams, and tidal wetlands, whichever is further inland.

**14.15.08  
Natural Parks**

**.01 Definition.**

A. "Natural parks" means areas of natural habitat that provide opportunities for those recreational activities that are compatible with the maintenance of natural conditions.

**.02 Policy.**

It is the policy of the Commission to encourage the creation of opportunities for interaction between people and natural environments without destroying the fragile components of natural habitats.

**.03 Criteria.**

In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria:

A. Local jurisdictions shall identify areas within their Critical Area where natural parks could be established, and consider conserving these features through acquisitions, easements, designation, or other appropriate means. Parks should not be chosen to preserve only natural curiosities, but they should be planned to include examples of coastal ecosystems that are found within the jurisdiction, each with its geological and biological resources intact. Park boundaries should be based on biological necessity rather than administrative convenience.

B. Any plans developed for the use of parks should recognize that all natural terrain has a finite capacity to tolerate human disturbances and, therefore, should give utmost attention to limiting the number of park visitors in any park at any one time or in the course of a season.

## 14.15.09 Habitat Protection Areas In The Critical Area

### .01 Buffer.

A. Definition. "Buffer" means an existing, naturally vegetated area, or an area established in vegetation and managed to protect aquatic, wetlands, shoreline, and terrestrial environments from man-made disturbances.

B. Policies. In developing their Critical Area Programs, local jurisdictions shall use the following policies with regard to the Buffer:

(1) Provide for the removal or reduction of sediments, nutrients, and potentially harmful or toxic substances in runoff entering the Bay and its tributaries;

(2) Minimize the adverse effects of human activities on wetlands, shorelines, stream banks, tidal waters, and aquatic resources;

(3) Maintain an area of transitional habitat between aquatic and upland communities;

(4) Maintain the natural environment of streams; and

(5) Protect riparian wildlife habitat.

C. Criteria. In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria:

(1) Local jurisdictions shall establish a minimum 100-foot Buffer landward from the Mean High Water Line of tidal waters, tributary streams, and tidal wetlands. The Buffer is not required for agricultural drainage ditches if the adjacent agricultural land has in place Best Management Practices as required in COMAR 14.15.06.

(2) New development activities, including structures, roads, parking areas and other impervious surfaces, mining and related facilities, or septic systems, may not be permitted in the Buffer, except for those

necessarily associated with water-dependent facilities, as set forth in COMAR 14.15.03.

(3) The Buffer shall be maintained in natural vegetation, but may include planted vegetation where necessary to protect, stabilize, or enhance the shoreline.

(4) Agricultural activities are permitted in the Buffer, if, as a minimum Best Management Practice, as 25-foot vegetated filter strip measured landward from the Mean High Water Line of tidal waters or tributary streams (excluding drainage ditches), or from the edge of tidal wetlands, whichever is further inland, is established, and further provided that:

(a) The filter strip shall be composed of either trees with a dense ground cover, or a thick sod of grass; and shall be so managed as to provide water quality benefits and habitat protection consistent with the policies stated in B, above. Noxious weeds, including Johnson grass, Canada thistle, and multiflora rose, which occur in the filter strip, may be controlled by authorized means;

(b) The filter strip shall be expanded by a distance of 4 feet for every 1 percent of slope, for slopes greater than 6 percent;

(c) The 25-foot vegetated filter strip shall be maintained until such time as the landowner is implementing, under an approved Soil Conservation and Water Quality Plan, a program of Best Management Practices for the specific purposes of improving water quality and protecting plant and wildlife habitat; and provided that the portion of the Soil Conservation and Water Quality Plan being implemented achieves the water quality and habitat protection objectives of the 25-foot vegetated filter strip;

(d) The Best Management Practices shall include a

requirement for the implementation of a grassland and manure management program, where appropriate, and that the feeding or watering of livestock, may not be permitted within 50 feet of the Mean High Water Line of tidal water and tributary streams, or from the edge of tidal wetlands, whichever is further inland;

(e) Clearing of existing natural vegetation in the Buffer is not allowed; and

(f) Farming activities including the grazing of livestock, do not disturb stream banks, tidal shorelines or other Habitat Protection Areas as described in this Chapter.

(5) The Buffer shall be managed to achieve or enhance the functions stated in Sections B(1) through (5) above. Cutting or clearing of trees within the Buffer shall be prohibited except that:

(a) Commercial harvesting of trees by selection or by the clearcutting of Loblolly Pine and Tulip Poplar may be permitted to within 50 feet of the landward edge of the Mean High Water Line of tidal waters and perennial tributary streams, or the edge of tidal wetlands, provided that this cutting does not occur in the Habitat Protection Areas described in COMAR 14.15.09.02, .03, .04, and .05 and that the cutting is conducted pursuant to the requirements of COMAR 14.15.05 and in conformance with a buffer management plan prepared by a registered, professional forester and approved by the Maryland Forest, Park and Wildlife Service. The plan shall be required for all commercial harvests within the Buffer, regardless of the size of the area to be cut, and shall contain the following minimum requirements:

(i) That disturbance to stream banks and shorelines shall be avoided;

(ii) That the area disturbed or cut shall be replanted, or allowed to regenerate in a manner that assures the availability of cover and breeding sites for wildlife, and reestablishes the wildlife corridor function of the Buffer; and

(iii) That the cutting does not involve the creation of logging roads and skid trails within the Buffer.

(b) Commercial harvesting of trees, by any method, may be permitted to the edge of intermittent streams provided that the cutting is conducted pursuant to the requirements of §C(5)(n) above.

(c) Cutting of trees or removal of natural vegetation may be permitted where necessary to provide access to private piers, or to install or construct a shore erosion protection device or measure, or a water-dependent facility, providing the device, measure, or facility has received all necessary State and federal permits.

(d) Individual trees may be cut for personal use providing this cutting does not impair the water quality or existing habitat value or other functions of the Buffer as set forth in the policies of this Chapter, and provided that the trees are replaced on an equal basis for each tree cut.

(e) Individual trees may be removed which are in danger of falling and causing damage to dwellings or other structures, or which are in danger of falling and therefore causing the blockage of streams, or resulting in accelerated shore erosion.

(f) Horticultural practices may be used to maintain the health of individual trees.

(g) Other cutting techniques may be undertaken within the Buffer and under the advice and guidance of the Departments of Agriculture and Natural Resources, if necessary to preserve the

forest from extensive pest or disease infestation or threat from fire.

(6) Where agricultural use of lands within the area of the Buffer ceases and the lands are proposed to be converted to other uses, the Buffer shall be established. In establishing the Buffer, management measures shall be undertaken to provide forest vegetation that assures the Buffer functions set forth in the policies of this Chapter.

(7) Local jurisdictions shall expand the Buffer beyond 100 feet to include contiguous, sensitive areas, such as steep slopes, hydric soils, or highly erodible soils, whose development or disturbance may impact streams, wetlands, or other aquatic environments. In the case of contiguous slopes of 15 percent or greater, the Buffer shall be expanded 4 feet for every 1 percent of slope, or to the top of the slope, whichever is greater in extent.

(8) As part of the local Critical Area Program to be submitted to the Commission, local jurisdictions may request an exemption of certain portions of the Critical Area from the Buffer requirements where it can be sufficiently demonstrated that the existing pattern of residential, industrial, commercial, or recreational development in the Critical Area prevents the Buffer from fulfilling the functions stated in §B, above. If an exemption is requested, local jurisdictions shall propose other measures for achieving the water quality and habitat protection objectives of the policies. These measures may include, but are not limited to, public education and urban forestry programs.

#### .02 Non-Tidal Wetlands.

A. Definition. (1) "Non-tidal wetlands" means those lands in the Critical Area, excluding tidal wetlands regulated under

Title 9 of Natural Resources Article, Annotated Code of Maryland, where the water table is usually at or near the surface, or lands where the soil or substrate is covered by shallow water at some time during the growing season, and which are usually characterized by one or both of the following:

(a) At least periodically, the lands support predominantly hydrophytic vegetation;

(b) The substrate is predominantly undrained hydric soils.

(2) Excluded from these regulations are existing farm ponds and other existing man-made-bodies of water whose purpose is to impound water for agriculture, water supply, recreation, or waterfowl habitat purposes.

B. Policy. In developing their Critical Area Programs, local jurisdictions shall protect those non-tidal wetlands in the Critical Area of Importance to plant, fish, and wildlife, and water quality.

C. Criteria.

(1) In developing their Critical Area Programs, local jurisdictions shall develop a non-tidal wetlands protection program as an element of their Critical Area Program.

(2) These programs should be developed using the expertise of the Coastal Resources Division and the Maryland Natural Heritage Program of the Department of Natural Resources, the U. S. Fish and Wildlife Service, and other appropriate agencies and organizations.

(3) Each Program shall consist of the following:

(a) Local programs shall identify non-tidal wetlands within the jurisdiction including:

(i) Non-tidal wetlands of 1 acre or larger classified as Palustrine Aquatic Bed, Palustrine Emergent, Palustrine Forested and Palustrine Scrub-shrub as defined in "Classification of

Wetlands and Deepwater Habitats of the United States" (Publication FWS/OBS-79/31, December 1979, Fish and Wildlife Service, U. S.

Department of the Interior) and as identified on the National Wetlands Inventory Maps;

(ii) Non-tidal wetlands, not mapped on the National Wetlands Inventory, which may be found by site survey or other means at the time of application for a development activity to be hydrologically connected, through surface or subsurface flow, to streams, tidal wetlands, or tidal waters; or are determined to be of special importance to fish, wildlife, or plant habitat by the Maryland Natural Heritage Program, the Coastal Resources Division and the Maryland Forest, Park and Wildlife Service of the Department of Natural Resources, the local jurisdiction, or other appropriate agencies.

(b) Local jurisdictions shall develop policies and programs for protecting the non-tidal wetlands identified in this Regulation. At a minimum, these policies and programs shall accomplish all of the following objectives:

(i) Maintain at least a 25-foot buffer around identified non-tidal wetlands where development activities or other activities which may disturb the wetlands or the wildlife contained therein, shall be prohibited unless it can be shown that these activities will not adversely affect the wetland. This requirement is not intended to restrict the grazing of livestock in these wetlands.

(ii) Protect the hydrologic regime and water quality of identified non-tidal wetlands by providing that development activities or other land disturbances in the drainage area of the wetlands will minimize alterations to the surface or subsurface flow of

water into and from the wetland and not cause impairment of the water quality or the plant and wildlife and habitat value of the wetland.

(iii) Provide for the preparation of a mitigation plan by the proposer of activities or operations which, as a result of their being water-dependent or of substantial economic benefit, will cause unavoidable and necessary impacts to the wetlands. These activities include, but are not limited to, development activities, tree cutting operations, and those agricultural operations permitted under COMAR 14.15.06.02C and D for which mitigation is required. The plan shall specify mitigation measures that will provide water quality benefits and plant and wildlife habitat equivalent to the wetland destroyed or altered and shall be accomplished, to the extent possible, onsite or near the affected wetland.

(iv) For all non-agricultural activities, local jurisdictions shall seek comments on mitigation plans from the Department of Natural Resources, and where appropriate, State departments including Health and Mental Hygiene and Agriculture, the local Soil Conservation Districts and the U. S. Fish and Wildlife Service. Upon finding that the plan as proposed, or as may be modified to address the comments of these agencies, provides mitigation sufficient to accomplish the objectives of this Section, then local jurisdictions shall provide that the proposer shall implement the plan.

(v) For agricultural operations, the local Soil Conservation District shall, with the assistance of the Department of Natural Resources, determine whether the plan provides mitigation sufficient to accomplish the objectives of this Regulation. Agricultural drainage

operations conducted pursuant to Agriculture Article, §8-603, Annotated Code of Maryland, shall provide mitigation consistent with any regulation developed pursuant to that Section.

(4) The determination of the existence and extent of non-tidal wetlands and the protection of these areas shall result from a cooperative effort between the local jurisdiction and public agencies or private organizations, but no designation of habitat and protective measures shall be accomplished unless the affected public is given an adequate opportunity to be heard at the local level. A local jurisdiction's public hearing on its proposed Critical Area Program may be used to satisfy this requirement, if full notice of the proposed habitat management program is included in the general notice of the hearing. If additional non-tidal wetlands are identified for protection in the future, additional local public hearings shall be held, as appropriate, to consider comments on the protection measures proposed for these wetlands.

### .03 Threatened, and Endangered Species and Species in Need of Conservation

#### A. Definition.

(1) "Species in need of conservation" means those fish and wildlife whose continued existence as a part of the State's resources are in question and which may be designated by regulation by the Secretary of the Department of Natural Resources as in need of conservation pursuant to the requirements of Natural Resources Articles, §§10-2A-03 and 4-2A-03, Annotated Code of Maryland.

(2) "Threatened species" means any species of fish, wildlife, or plants designated

as such by regulation by the Secretary of the Department of Natural Resources which appear likely, within the foreseeable future, to become endangered, including any species of wildlife or plant determined to be a "threatened" species pursuant to the federal Endangered Species Act, 16 U.S.C. §1531 et seq., as amended.

(3) "Endangered species" means any species of fish, wildlife, or plants which have been designated as such by regulation by the Secretary of the Department of Natural Resources. Designation occurs when the continued existence of these species as viable components of the State's resources are determined to be in jeopardy. This includes any species determined to be an "endangered" species pursuant to the federal Endangered Species Act, cited above.

B. Policy. In developing their Critical Area Programs, local jurisdictions shall provide protection for those species in need of conservation and threatened and endangered species, and their habitats which occur in the Critical Area.

C. Criteria. In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria with regard to species in need of conservation, threatened, or endangered species:

(1) Local jurisdictions shall develop programs for the protection of the habitats of species in need of conservation and threatened and endangered species. These programs should be developed using the expertise of the Maryland Natural Heritage Program, the Maryland Forest, Park and Wildlife Service, and other appropriate public agencies and private organizations.

(2) These programs shall consist of one or both of the following elements:

(a) Designation of a protection area around each of the habitats occurring in the jurisdiction within which development activities and other disturbances shall be prohibited unless it can be shown that these activities or disturbances will not have or cause adverse impacts on these habitats;

(b) Development of programs for providing protection for the habitats of species in need of conservation and endangered, and threatened species which may include, but are not limited to, acquisition, conservation easements, cooperative agreements with landowners, special provisions in forest management and soil conservation, plans, and special provisions in subdivision or zoning regulations.

(3) The determination of the existence and extent of these habitats and protection areas shall result from a cooperative effort between the local jurisdiction and the public agencies or private organizations noted above, but no designation of habitat and protective measures shall be accomplished unless the affected public is given an adequate opportunity to be heard at the local level. A local jurisdiction's public hearing on its proposed Critical Area Program may be used to satisfy this requirement, if full notice of the proposed habitat management program is included in the general notice of the hearing. If the Secretary of Natural Resources designates additional species by regulation in the future, additional local public hearings, as appropriate, shall be held to consider comments on the protection measures proposed for these species. The protection measures shall be

adopted within 12 months of the date of the Secretary's designation.

### .04 Plant and Wildlife Habitat.

#### A. Definition.

(1) "Plant habitat" means a community of plants commonly identifiable by the composition of its vegetation and its physiographic characteristics as described below in C.

(2) "Wildlife habitat" means those plant communities and physiographic features that provide food, water and cover, nesting, and foraging or feeding conditions necessary to maintain populations of animals in the Critical Area as described below in C.

B. Policies. In developing their Critical Area Programs, local jurisdictions shall use the following policies with regard to plant and wildlife habitat:

(1) Conserve wildlife habitat in the Critical Area;

(2) Protect those wildlife habitats that tend to be least abundant or which may become so in the future if current land-use trends continue;

(3) Protect those wildlife habitat types which are required to support the continued presence of various species;

(4) Protect those wildlife habitat types and plant communities which are determined by local jurisdictions to be of local significance; and

(5) Protect Natural Heritage Areas.

C. Criteria. In developing their Critical Area Programs, the local jurisdictions shall use all of the following criteria:

(1) The local jurisdictions shall develop a plant and wildlife habitat protection program as an element of their Critical Area Program. These programs are to be developed using the expertise of the Maryland Forest, Part and Wildlife Service; the Tidewater Administration; the Maryland

Natural Heritage Program; the U. S. Fish and Wildlife Service; other appropriate agencies; and adjacent jurisdictions.

(2) Each Plant and Wildlife Habitat Protection Program shall consist of the following:

(a) Identification of the following plant and wildlife habitats in the Critical Area:

(i) Colonial water bird nesting sites;

(ii) Historic water fowl staging and concentration areas in tidal waters, tributary streams, or tidal and non-tidal wetlands;

(iii) Existing riparian forests (for example, those relatively mature forests of at least 300 feet in width which occur adjacent to streams, wetlands, or the Bay shoreline and which are documented breeding areas);

(iv) Forest areas utilized as breeding areas by forest interior dwelling birds and other wildlife species (for example, relatively mature forested areas within the Critical Area of 100 acres or more, or forest connected with such areas);

(v) Other areas which may in the future be identified by State and Federal agencies as important plant or wildlife habitat areas;

(vi) Other plant and wildlife habitats determined to be of local significance; and

(vii) Natural Heritage Areas which have been designated.

(b) Establishment of programs for conserving or protecting the plant and wildlife habitat areas identified above. These programs, and the protection measures suggested below,

(i) Establish buffer areas for colonial water bird (heron, egret, tern, and glossy ibis) nesting sites so that these sites are protected from the adverse impacts of development activities and from disturbance during the breeding season.

(ii) Provide that new water-dependent facilities are so located as to prevent disturbance to sites of significance to wildlife such as historic, aquatic staging and concentration areas for waterfowl;

(iii) Provide protection measures including a buffer area where appropriate, for other plant and wildlife habitat sites identified in §C(2)(a)(v) of this Section.

(iv) Protect and conserve those forested areas required to support wildlife species identified above in §C(2)(a)(iii) and (iv), by developing management programs which have as their objective, conserving the wildlife that inhabit or use the areas. The programs should assure that development activities, or the clearing or cutting of trees which might occur in the areas, is conducted so as to conserve riparian habitat, forest interior wildlife species, and their habitat. Management measures may include incorporating appropriate wildlife protection elements into forest management plans, and cluster zoning or other site design criteria which provide for the conservation of wildlife habitat. Measures may also be included in soil conservation plans which have wildlife habitat protection provisions appropriate to the areas defined above, and incentive programs containing the acquisition of easements and other similar techniques.

(v) Require to the extent practical, that when development activities, or the cutting or clearing of trees, occurs in forested areas, corridors of existing forest or woodland vegetation be maintained to provide effective connections between wildlife habitat areas.

(vi) Protect by appropriate means those plant and wildlife habitats considered to be of significance by local

jurisdictions. Examples of these areas are those whose habitat values may not be of Statewide significance, but are of importance locally or regionally because they contain species uncommon or of limited occurrence in the jurisdiction, or because the species are found in unusually high concentrations.

(vii) Protect Natural Heritage Areas from alteration due to development activities or cutting or clearing so that the structure and species composition of the areas are maintained.

(c) The determination of the existence and extent of these plant and wildlife habitats, and the development of appropriate protection measures for these areas, shall result from a cooperative effort between the local jurisdiction and the public agencies or private

organizations noted above. Designation of habitat and protective measures may not be accomplished unless the affected public is given an adequate opportunity to be heard. A local jurisdiction's public hearing on its proposed Critical Area Program may be used to satisfy this requirement, if full notice of the proposed habitat management program is included in the general notice of the hearing. If additional plant and wildlife habitat areas are designated in the future, local public hearings, as appropriate, shall be held to consider comments on the areas and protection measures proposed.

.05 Anadromous Fish Propagation Waters.

A. Definition. "Anadromous fish propagation waters" means those streams that are tributary to the Chesapeake Bay where spawning of anadromous species of fish (e.g., rockfish, yellow perch, white perch, shad, and river herring) occurs or has occurred. The streams are

designated by the Tidewater Administration. For purposes of this Regulation "streams" refers to designated anadromous fish propagation waters within the Critical Area.

B. Policies. In developing their Critical Area Programs, local jurisdictions shall use the following policies with regard to anadromous fish:

(1) Protect the instream and streambank habitat of anadromous fish propagation waters;

(2) Promote land use policies and practices in the watershed of spawning streams within the Critical Area which will minimize the adverse impacts of development on the water quality of the streams; and

(3) Provide for the unobstructed movement of spawning and larval forms of anadromous fish in streams.

C. Criteria.

(1) In developing their Critical Area Programs, local jurisdictions shall use all of the following criteria:

(a) The installation or introduction of concrete riprap or other artificial surfaces onto the bottom of natural streams shall be prohibited unless it can be demonstrated that water quality and fisheries habitat can be improved.

(b) Channelization or other physical alterations which may change the course or circulation of a stream and thereby interfere with the movement of fish, shall be prohibited.

(c) Local jurisdictions shall develop policies and programs for avoiding adverse impacts of any activities occurring on those portions of any watershed within the Critical Area which drain into anadromous fish spawning streams. These policies and programs shall address at least the following objectives:

(i) Minimize development activities or other land disturbances in the watershed;

(ii) Maintain, or if practicable, improve water quality in streams;

(iii) Minimize, to the extent possible, the discharge of sediments into streams; and

(iv) Maintain, or if practicable, increase the natural vegetation of the watershed.

(d) Local jurisdictions are encouraged to adopt land-use policies and programs in watersheds outside the Critical Area to minimize the impacts of any activities on anadromous fish spawning streams.

(2) In developing their Critical Area Programs, local jurisdictions shall use all of the following complementary State laws and regulations:

(a) The construction or placement of dams or other structures that would interfere with or prevent the movement of spawning fish or larval forms in streams shall be prohibited. If practical, the removal of existing barriers shall be effected (COMAR 08.05.03.02).

(b) Local jurisdictions shall assure that the construction, repair, or maintenance activities associated with bridges, or other stream crossings or with utilities and roads, which involve disturbance within the Buffer or which occur in-stream, as described in COMAR .08.05.03.09B(4), shall be prohibited between March 1 and June 15.

### 14.15.10 Directives for Local Program Development

#### .01 Criteria.

In developing their Critical Area Programs, local jurisdictions shall use the following general program criteria;

A. Each jurisdiction shall inventory or map or both, certain resources of its Critical

Area. The inventory shall include the following resources (as defined in the appropriate foregoing chapters of this Subtitle concerning specific criteria):

- (1) Agricultural lands;
- (2) Non-tidal wetlands;
- (3) Tidal wetlands;
- (4) Forest resources;
- (5) Sand and gravel resources;
- (6) Tributary streams;
- (7) Known threatened and endangered species habitats; as well as the habitats of species in need of conservation;
- (8) The watersheds of anadromous fish spawning streams;
- (9) Plant and wildlife habitats;
- (10) Steep slopes;
- (11) Soils with development constraints; and
- (12) Intensely Developed, Limited Development, and Resource Conservation Areas as defined in COMAR 14.15.02.

B. Any such mapping shall be at a scale that is relevant to local jurisdictions and of sufficient detail to assess the potential impacts of proposed land-use changes on the quality and quantity of local water resources and on local wildlife and plant habitats.,

C. Each program submission shall list the specific local program objectives and an expected time schedule for implementation.

D. Local permitting and approval processes shall be coordinated so that cumulative impacts of regulated activities can be readily assessed. Local jurisdictions shall maintain records of the area of land that converts from Resource Conservation Area to Intensely Developed or Limited Development Areas and that converts from Limited Development to Intensely Developed Areas.

E. The local program document shall, if applicable, include, but not be limited to:

- (1) A forest and woodland protection program;
- (2) A mineral resources plan;
- (3) An agricultural protection plan;
- (4) A habitat protection area plan; and
- (5) A water-dependent facilities planning process for identifying suitable areas.

F. Jurisdictions shall review and revise local plans, programs, and regulations that are inconsistent with the intent of the policies and criteria in this Subtitle. At a minimum, and if applicable, the review and revisions shall include:

- (1) Comprehensive or master plans;
- (2) Comprehensive water and sewer plans;
- (3) Comprehensive solid waste plans and any other health/environment-related plans and ordinances, for example, regulation for septic system placement;
- (4) Capital improvements programs and capital budgets;
- (5) Zoning ordinances and comprehensive zoning maps;
- (6) Subdivision regulations; and
- (7) Growth management ordinances.

G. The local program document shall include a statement of the local agencies involved, their responsibilities and their coordination with each other and appropriate State, federal, or private organizations.

H. Local jurisdictions shall demonstrate that the local regulations and programs proposed to meet the criteria in this regulation are enforceable.

I. Each jurisdiction shall attempt to establish cooperative arrangements with adjacent jurisdictions and with State and federal agencies concerning the policies and objectives for lands within and

adjoining the jurisdiction's Critical Area.

J. Local jurisdictions are encouraged to apply protection measures similar to those contained in their Critical Area Program to land disturbances beyond the Critical Area boundary in an effort to protect or enhance water quality and to conserve plant and animal habitats of the Critical Area.

K. Local jurisdictions are encouraged to establish a program that provides tax benefits to landowners who wish to donate conservation easements and consider other financial incentives as provided for in Maryland State law, and are encouraged to identify other appropriate protection measures which may include: acceptance of donations, acquisition of easements, or fee simple purchase. Funding mechanisms for this protection may include, but not be limited to, federal and State programs, local bonding authority, or donations from private organizations.

L. Local jurisdictions are encouraged to establish an education program as a means by which landowners in the Critical Area may be informed of the intent of the law, the status of the local program, and sources of additional information and assistance.

M. Controls in a local program, beyond those required by other State programs or statutes, designated to prevent the runoff of pollutants, need not be required on sites where the topography prevents runoff from either directly or indirectly entering the tidal waters.

N. The establishment of buffer areas around sites of special significance (that is, Habitat Protection Areas) is not intended to restrict or affect, beyond any existing local, State, or federal laws, or regulations or on private land, any private restrictions, such activities as non-commercial

passive recreation (for example, hiking and nature photography), educational pursuits, scientific observation, or hunting trapping, or fishing.

O. The program shall require that all project approvals shall be based on findings that projects are consistent with the following goals of the Critical Area law;

(1) Minimize adverse impacts on water quality that result from pollutants that are discharged from structures or conveyances or that have run off from surrounding lands;

(2) Conserve fish, wildlife, and plant habitat; and

(3) Establish land use policies for development in the Chesapeake Bay Critical Area which accommodate growth and also address the fact that, even if pollution is controlled, the number, movement, and activities of persons in that area can create adverse environmental impacts.

P. Counties and municipalities within their political boundaries are encouraged to develop their Critical Area Protection Programs cooperatively so that programs can be developed more efficiently and so that common land use objectives can be realized.

### 14.15.11 Variances

#### .01 Local Programs

A. In the preparation of local programs, local jurisdictions shall make provision for the granting of variances to these criteria where, owing to special features of a site or other circumstances, local government implementation of this Subtitle or a literal enforcement of provisions within the jurisdiction's Critical Area Program would result in unwarranted hardship to an applicant. These variance provisions shall be designed in a manner consistent with the

spirit and intent of this Chapter and all local Critical Area Program elements. The variance provisions shall, at a minimum, provide for the following:

(1) That findings are made by the local jurisdiction which demonstrate that special conditions or circumstances exist that are peculiar to the land or structure within the jurisdiction involved and that a literal enforcement of provisions within the jurisdiction's Critical Area Program would result in unwarranted hardship;

(2) That a literal interpretation of this Subtitle or the local Critical Area Program and related ordinances will deprive the applicant of rights commonly enjoyed by other properties in similar areas within the Critical Area of the local jurisdiction;

(3) That the granting of a variance will not confer upon an applicant any special privilege that would be denied by this Subtitle or the local Critical Area Program to other lands or structures within the jurisdiction's Critical Area;

(4) That the variance request is not based upon conditions or circumstances which are the result of actions by the applicant, nor does the request arise from any condition relating to land or building use, either permitted or non-conforming, on any neighboring property;

(5) That the granting of a variance will not adversely affect water quality or adversely impact fish, wildlife, or plant habitat within the jurisdiction's Critical Area, and that the granting of the variance will be in harmony with the general spirit and intent of the Critical Area law and the regulations adopted in this Subtitle; and

(6) That applications for a variance will be made in writing to the local approving authority

with a copy provided to the Commission.

B. Local jurisdictions may establish additional, more restrictive standards for the granting of variances consistent with the intent and purposes of this Subtitle and the approved local Critical Area Program, and further shall establish notification procedures to permit Commission review of findings made in the granting of variances.

C. Appeals from decisions concerning the granting or denial of a variance under these regulations shall be taken in accordance with all applicable laws and procedures of each local jurisdiction for variances. Variance decisions by local Boards of Appeal or the local legislative body may be appealed to the Circuit Court in accordance with the Maryland Rules of Procedure. Appeals may be taken by any person, firm, corporation, or governmental agency aggrieved or adversely affected by any decision made under this Section, and the Chairman may appeal an action or decision even if the Chairman was not a part to or is not specifically aggrieved by the action or decision.

Solomon Liss, Chariman

AGREEMENT FOR THE  
CHERRY CREEK BASIN AUTHORITY

THIS AGREEMENT entered into as of this 2nd day of October, 1985 by and among the following:

1. Arapahoe County;
2. Douglas County;
3. The Town of Castle Rock;
4. The Town of Parker;
5. Greenwood Village;
6. The City of Aurora;
7. The Arapahoe Water and Sanitation District;
8. Cottonwood ~~Metropolitan District~~; *Water and Sanitation District;*
9. Denver Southeast Suburban Water and Sanitation District;
10. Inverness Water and Sanitation District;
11. Meridian Metropolitan District;
12. Parker Water and Sanitation District; and
13. Stonegate Center Metropolitan District.

WHEREAS, the parties to this Agreement have the authority pursuant to Article XIV, Section 18 of the Colorado Constitution and Section 29-1-201, et seq., Colorado Revised Statutes, to enter into intergovernmental agreements for the purpose of providing any service or performing any function which they can perform individually;

WHEREAS, the parties deem it necessary and advisable to enter into this Agreement in order to set forth their goals and objectives in implementing the Cherry Creek Basin Water Quality Management Master Plan (hereinafter referred to as the Plan) heretofore adopted by the Water Quality Control Commission of the State of Colorado;

WHEREAS, the parties, by their execution and adoption of this Agreement, wish clearly to memorialize their acceptance of the basic goals and objectives of said plan, which goals and objectives are promulgated for the general health and safety of all persons living, and utilizing water and property, within the Cherry Creek Basin, while recognizing the inherent governmental limitations incumbent upon each such party;

WHEREAS, the parties wish to establish herein an agenda for the implementation of the goals and objectives of the plan by the creation of alternative mechanisms by which the separate governmental entities signatory hereto may lawfully and prudently plan and budget monies for the funding of structures and programs for the control of phosphorus discharge into the Cherry Creek Basin;

NOW, THEREFORE, the parties hereby mutually agree as follows:

1. Cherry Creek Basin Authority. There is hereby established a Cherry Creek Basin Authority consisting of one voting member from each entity signatory hereto.

2. Voting. There is hereby created three categories of votes, representing the three types of governmental entities signatory hereto. In order for future phosphorus allocations, site plan approvals for site plans filed after the effective date of this agreement, discharge permits, plan amendments and budget and funding decisions to be approved, modified, or adopted, the same shall require that the following combinations be attained: (1) at least one affirmative vote from those counties signatory hereto, (2) at least one-half of those cities and towns signatory hereto, and (3) at least one-half of the special districts signatory hereto. All other decisions shall be made and decided by majority vote of all entities present and voting.

3. Purpose of Agreement. The parties hereby agree that, in order to provide for a coordinated approach to the protection of the water Quality of the Cherry Creek Basin, the following purposes must be accomplished:

- a. Parties signatory hereto must commit funds for completion of initial engineering and planning, which funds are pledged pursuant to paragraph 6 hereof;
- b. The parties must establish, by agreement, a prioritized listing of actions to be accomplished;
- c. The parties, by agreement, must establish a time table for the accomplishment for those actions specified in the preceding subparagraph;
- d. The parties, by agreement, must establish a date certain for the commencement and completion of  
- necessary engineering studies.

The overall goals to be accomplished by the parties in completion of the above tasks include, but are not limited to, the following:

1. Provide for a regional, coordinated approach to phosphorus control in the Cherry Creek Basin;

2. Provide for a regional, coordinated approach for the construction and operation and maintenance of nonpoint phosphorus control projects;
3. Provide for regional, coordinated water quality monitoring of Cherry Creek Reservoir, Cherry Creek and the waters flowing into them, as well as recommending water quality standards for the reservoir and its tributary waters, as appropriate;
4. Provide for coordination with state and federal agencies having water quality responsibilities in the Cherry Creek Basin;
5. Make recommendations to the Regional Planning Agency and Water Quality Control Division, as appropriate, on phosphorus allocations to all sources and special allocations from the reserve pooling;
6. Provide for benefits to the parties to this Agreement, including but not limited to continuing local control over the herein described water quality programs and a continued or increased level of phosphorus load allocations; both of which will result in significant cost savings and the ability to provide for continued population growth in the respective jurisdictions of each of the parties hereto.

4. Officers; Bylaws. The Authority has the authority to elect such officers and adopt such bylaws and internal regulations as are necessary and convenient to carry out the purposes of this Agreement.

5. Duties and Responsibilities. The Authority shall have the following duties and responsibilities:

- a. To seek legislative action from the Colorado Legislature to provide for any of the following;
  1. Any necessary amendments to existing state statutes to grant specific bonding and taxing authority to counties, municipalities, and special districts to utilize in the operation of a basin wide authority, or
  2. The creation of a specific basin wide authority with taxing and/or bonding powers, such as the specific authorities found in C.R.S. 1973, 29-1-204, 29-1-204.2, and 29-1-204.5.
- b. The Authority, subject to funding limitations, shall have the following duties and responsibilities:

1. Develop and implement plans for water quality control strategies for the Cherry Creek Basin watershed and revise those plans as needed.
2. To the extent funds are, or may be made, available, construct, operate and maintain nonpoint phosphorus control projects;
3. Review nonpoint source control projects constructed in Cherry Creek Basin and recommend operation and maintenance plans, monitoring systems and phosphorus credits;
4. Recommend to the Regional Planning Agency and Water Quality Control Commission amendments to the water quality plan and wasteload allocations for the phosphorus sources in the Cherry Creek Basin;
5. Recommend to the Water Quality Control Division temporary allocations of phosphorus from the reserve pool to any entity which due to an emergency, upset or bypass condition is unable to meet their phosphorus allocation;
6. Oversee and conduct water quality monitoring in the Cherry Creek Basin and review, analyze and report on the water quality monitoring results to the Regional Planning Agency and Water Quality Control Commission;
7. Recommend to the local governments erosion and urban runoff control standards, which may be adopted by those local governments, for the Cherry Creek Basin;
8. Recommend programs to decrease the phosphorus contributions from septic systems, industrial sources, construction, or any other activities in the Cherry Creek Basin;
9. Conduct pilot studies on nonpoint source control projects, including monitoring of the effectiveness of certain projects and erosion control measures;
10. Prepare reports, including reports on the water quality of Cherry Creek Reservoir; audits on the construction projects, annual operations, maintenance and administrative summaries; audits upon the completion of each major construction project; and any other reports requested by the Authority;

11. Enter into lawful Agreements with any person, private corporation or business, or any federal, state or local government agency for the purposes contemplated by this Agreement;
12. Recommend nonpoint phosphorus control projects for construction and recommend funding mechanisms for constructions, operation and maintenance for nonpoint source projects within the Cherry Creek Basin;
13. Pursue continued study of potential phosphorus control solutions;
14. Analyze the cost effectiveness of recommended standards, regulations, ordinances and control projects;
15. Adopt annual scopes of work, budgets and fee assessments (pursuant to the limits of Section 6 herein) to carry out its responsibilities;
16. Hire staff as needed and/or contract with a public agency as an administrative agency to provide accounting, administrative, secretarial, audit, payroll and other staff functions;
17. Draft and continuously update a five-year projection of phosphorus loading levels and phosphorus discharge requirements for the Cherry Creek Basin;
18. Do any and all acts and things necessary to effectively exercise the powers given in this Agreement.

6. Funding. Each party signatory hereto agrees to provide \$15,000 from its 1986 budget to fund ongoing monitoring and the activities specified in paragraph 3a through 3d above. To the extent funds are, or, in the exercise of sound legislative discretion may be made, available for subsequent fiscal years, the parties agree to budget a similar, or other agreed upon, sum in subsequent years to accomplish the purposes of this Agreement including the costs of planning, construction, operation and maintenance of improvements. The parties hereto pledge their best efforts, exercised in good faith, to provide funds for implementation of this Agreement until the legislative solutions to be sought pursuant to paragraph 5a hereof are attained.

In the event a governmental entity, in the exercise of its legislative discretion, is unable, due to budgetary considerations, to provide the funds specified herein in any fiscal year subsequent to 1986, the entity shall be provided an

opportunity until the 31st of January of the subsequent year to pay its proportionate share of funds due for the previous and the then-current year as called for herein from subsequent budgets or such other funds as the entity shall deem appropriate and lawful.

7. Enforcement. It shall be the responsibility of each party to this Agreement, having jurisdiction within the watershed covered by the plan, to consider the implementation of the water quality management plan agreed upon by the Cherry Creek Basin Authority. Members should use their best efforts to consider for adoption those erosion controls regulation that are recommended by the Authority as part of the water qualify control strategy. Adoption and enforcement of any such regulations shall remain within the sole jurisdiction and be the complete responsibility of each individual member.

8. Termination and Withdrawals.

- a. Discharge permits issued and their phosphorus wasteload allocations are available because of the nonpoint source control plan to remove 50% of the nonpoint source phosphorus basinwide, to a level of 10,270 pounds of phosphorus per year. In the event that a member of the Authority ceases to participate or withdraws from participation in the Authority and its projects: (1) the withdrawing member shall have one hundred twenty (120) days, following written notice, in which to cure their withdrawal. If the withdrawal is not cured, the party shall lose all rights and benefits under this Agreement, which rights and benefits may be reassigned by action of the Authority.
- b. Subject to the provisions of paragraph 6 hereof, should any member of the Authority fail to appropriate funds to satisfy its annual fee assessment, the rights and benefits accorded to such member by this Agreement may be terminated and may be reassigned by the Authority.

9. Addition of New members. New members, who are counties, municipalities, or special districts providing wastewater treatment services in the Cherry Creek basin, shall be admitted after approving and signing this agreement; agreeing to comply with the conditions, restrictions and limitations outlined in the bylaws of the Authority; and reimbursing the Authority for expenses incurred by the Authority for water quality monitoring and planning for the basin, and complying with conditions in the bylaws for new members.

10. Term of Agreement. This Agreement shall endure for a period of five (5) years from July 1, 1985. After this time, the Agreement shall be deemed to automatically renew each year; unless two-thirds of the members of the Committee vote to cancel the Agreement.

11. Amendment. This Agreement may be amended only by the unanimous vote of the entire Cherry Creek Basin Authority membership.

12. Execution. This Agreement shall be executed by the appropriate elected officials of each member.

DOUGLAS COUNTY, COLORADO

Attest:

By: Julio G. [Signature]

By: Francis P. [Signature]

ARAPAHOE COUNTY, COLORADO

Attest:

By: H. J. Reid

By: [Signature]

The Town of Castle Rock,  
a Colorado municipal corporation

Attest:

By: [Signature]

By: [Signature]

The City of Greenwood Village,  
a Colorado municipal corporation

Attest:

By: Barbara Smith

By: Fred Fisher

The City of Aurora,  
a Colorado municipal corporation

Attest:

By: [Signature]

By: [Signature]

The Town of Parker,  
a Colorado municipal corporation

Attest:

By: [Signature]  
Town Clerk

By: [Signature]  
MAYOR

The Arapahoe Water and Sanitation District, a quasi-municipal corporation

Attest:

By:

[Signature]  
Asst Sec

By:

Manuwar Jalil

<sup>Water and Sanitation District</sup>  
Cottonwood Metropolitan District,  
a quasi-municipal corporation

*[Handwritten initials]*

Attest:

By:

[Signature]  
Secretary

By:

[Signature]

Denver Southeast Suburban Water and Sanitation District, a quasi-municipal corporation

Attest:

By:

[Signature]

By:

[Signature]

Meridian Metropolitan District, a quasi-municipal corporation

Attest:

By:

[Signature]  
Secretary

By:

[Signature]

Inverness Water and Sanitation District, a quasi-municipal corporation

Attest:

By:

[Signature]

By:

[Signature]

Parker Water and Sanitation District, a quasi-municipal corporation

Attest:

By:

[Signature]

By:

[Signature]

Stonegate Center Metropolitan  
District, a quasi-municipal

Attest:

By: *[Signature]*

By: *[Signature]*  
*MS. [Signature]*  
PRESIDENT

# An Act

HOUSE BILL NO. 1029.

BY REPRESENTATIVES D. Williams, Ruddick, Carpenter, Chlouber, P. Hernandez, Masson, and Neale;  
also SENATOR Fenlon.

CONCERNING THE CREATION OF THE CHERRY CREEK BASIN WATER  
QUALITY AUTHORITY.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. Title 25, Colorado Revised Statutes, 1982  
Repl. Vol., as amended, is amended BY THE ADDITION OF A NEW  
ARTICLE to read:

## ARTICLE 8.5

### Cherry Creek Basin Water Quality Authority

25-8.5-101. Legislative declaration. (1) The general  
assembly hereby finds and declares that the organization of a  
Cherry Creek basin water quality authority will:

(a) Be for the public benefit and advantage of the  
people of the state of Colorado;

(b) Benefit the inhabitants and landowners within the  
authority by preserving water quality in Cherry Creek and  
Cherry Creek reservoir;

(c) Benefit the people of the state of Colorado by  
preserving waters for recreation, fisheries, water supplies,  
and other beneficial uses;

(d) Promote the health, safety, and welfare of the  
people of the state of Colorado.

(2) It is further declared that the authority will  
provide for effective efforts by the various counties,

Capital letters indicate new material added to existing statutes;  
dashes through words indicate deletions from existing statutes and  
such material not part of act.

municipalities, special districts, and landowners within the boundaries of the authority in the protection of water quality.

(3) It is further declared that the authority should provide that new developments and construction activities pay their equitable proportion of costs for water quality preservation and facilities.

(4) This article, being necessary to secure the public health, safety, convenience, and welfare, shall be liberally construed to effect its purposes.

25-8.5-102. Definitions. As used in this article, unless the context otherwise requires:

(1) "Agricultural lands" means all lands except land rezoned by a county or municipality for business, commercial, residential, or similar uses or subdivided lands. Those include property consisting of a lot with one acre or more in size which contains a dwelling unit.

(2) "Authority" means the Cherry Creek basin water quality authority created pursuant to section 25-8.5-103.

(3) "Board" means the governing body of the authority provided for in section 25-8.5-106.

(4) "County" means any county enumerated in article 5 of title 30, C.R.S.

(5) "Municipality" means a municipality as defined in section 31-1-101 (6), C.R.S.

(6) "Publication" means three consecutive weekly advertisements in a newspaper or newspapers of general circulation within the boundaries of the authority. It shall not be necessary that an advertisement be made on the same day of the week in each of the three weeks, but not less than twelve days, excluding the day of first publication, shall intervene between the first publication and the last publication. Publication shall be complete on the date of the last publication.

(7) "Resolution" means an ordinance as passed by a member municipality or a resolution as passed by a member county or special district.

(8) "Soil conservation district" means any soil conservation district created pursuant to article 70 of title 35, C.R.S.

(9) "Special district" means any district created pursuant to article 1 of title 32, C.R.S., which has the power to provide sanitation services or water and sanitation services and has wastewater treatment facilities within the boundaries of the authority.

(10) "Wastewater treatment facility" means a facility providing wastewater treatment services which has a designed capacity to receive sewage for treating, neutralizing, stabilizing, and reducing pollutants contained therein prior to the disposal or discharge of the treated sewage. "Wastewater treatment facility" does not include any pretreatment facilities, lift stations, interceptor lines, or other transmission facilities to transmit sewage effluent outside the boundaries of the authority.

25-8.5-103. Creation and organization. The Cherry Creek basin water quality authority is hereby created. The authority shall be a quasi-municipal corporation and political subdivision of the state, with the powers provided in this article.

25-8.5-104. Boundaries of the authority. (1) The boundaries of the authority shall be determined by the authority, subject to the following:

(a) The boundaries shall be limited to the drainage basin of Cherry Creek from its headwaters to the dam at Cherry Creek reservoir, which the general assembly hereby finds to be:

(I) Arapahoe county: Portions of sections thirty-five and thirty-six, township four south, range sixty-seven west of the sixth principal meridian; a portion of section thirty-one, township four south, range sixty-six west of the sixth principal meridian; portions of sections one, two, three, ten, fifteen, twenty-two, twenty-three, twenty-seven, and thirty-four, and all of sections eleven, twelve, thirteen, fourteen, twenty-four, twenty-five, twenty-six, thirty-five and thirty-six, township five south, range sixty-seven west of the sixth principal meridian; all of sections seven, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-two, twenty-five, twenty-six, twenty-seven, twenty-eight, twenty-nine, thirty, thirty-one, thirty-two, thirty-three, thirty-four, thirty-five, thirty-six and portions of sections five, six, eight, nine, fourteen, fifteen, sixteen, twenty-three and twenty-four, township five south, range sixty-six west of the sixth principal meridian; all of section thirty-one and portions of sections nineteen, twenty-nine, thirty, and thirty-two, township five south, range sixty-five west of the sixth principal meridian;

(II) Douglas county: Portions of sections four, nine, sixteen, twenty-one, twenty-eight and thirty-three, and all of sections five, six, seven, eight, seventeen, eighteen, nineteen, twenty, twenty-nine, thirty, thirty-one, and thirty-two, township six south, range sixty-five west of the sixth principal meridian; township six south, range sixty-six west of the sixth principal meridian; portions of sections three, ten, fifteen, twenty-one, twenty-two, twenty-eight, thirty-one, thirty-two and thirty-three, and all of sections one, two, eleven, twelve, thirteen, fourteen, twenty-three, twenty-four, twenty-five, twenty-six, twenty-seven, thirty-four, thirty-five and thirty-six, township six south, range sixty-seven west of the sixth principal meridian; portions of sections four, nine, sixteen, and twenty-one, and all of sections five, six, seven, eight, seventeen, eighteen, nineteen, twenty, twenty-eight, twenty-nine, thirty, thirty-one, thirty-two, and thirty-three, township seven south, range sixty-five west of the sixth principal meridian; township seven south, range sixty-six west of the sixth principal meridian; portions of sections four, five, nine, fourteen, fifteen, sixteen, twenty-three, twenty-five, twenty-six, and thirty-six, and all of sections one, two, three, ten, eleven, twelve, thirteen, and twenty-four, township seven south, range sixty-seven west of the sixth principal meridian; portions of sections twenty-eight and thirty-three and all of sections four, five, six, seven, eight, nine, sixteen, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-nine, thirty, thirty-one, and thirty-two, township eight south, range sixty-five west of the sixth principal meridian; portions of sections six, seven, eighteen, nineteen, twenty-nine, thirty, and thirty-one, and all of sections one, two, three, four, five, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, twenty, twenty-one, twenty-two, twenty-three, twenty-four, twenty-five, twenty-six, twenty-seven, twenty-eight, thirty-two, thirty-three, thirty-four, thirty-five and thirty-six, township eight south, range sixty-six west of the sixth principal meridian; a portion of section one, township eight south, range sixty-seven west of the sixth principal meridian; all of sections four, five, six, seven, eight, nine, sixteen, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-eight, twenty-nine, thirty, thirty-one, thirty-two and thirty-three, township nine south, range sixty-five west of the sixth principal meridian; all of township nine south, range sixty-six west excepting portions of sections six and seven; portions of sections thirteen, twenty-three, twenty-four, twenty-five, and thirty-six, township nine south, range sixty-seven west of the sixth principal meridian; portions of sections twenty-eight and thirty-three, and all of sections four, five, six, seven, eight, nine, sixteen, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-nine, thirty, thirty-one, and thirty-two,

township ten south, range sixty-five west of the sixth principal meridian; portions of sections five, six, seven, eight, seventeen, eighteen, nineteen, twenty-nine, thirty, thirty-one, and all of sections one, two, three, four, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, twenty, twenty-one, twenty-two, twenty-three, twenty-four, twenty-five, twenty-six, twenty-seven, twenty-eight, thirty-two, thirty-three, thirty-four, thirty-five and thirty-six, township ten south, range sixty-six west of the sixth principal meridian; a portion of section one, township ten south range sixty-seven west of the sixth principal meridian;

(b) Lands may be included within the boundaries of the authority pursuant to section 25-8.5-119.

(c) Lands within the boundaries identified in paragraph (a) of this subsection (1) may be excluded from the authority pursuant to section 25-8.5-120.

(2) The authority shall maintain a current map, showing all lands that are included in the authority's boundaries.

25-8.5-105. Authority members. (1) The following governmental entities shall be members of the authority:

(a) Every county which has property within the authority's boundaries;

(b) Every municipality which has property within the authority's boundaries; and

(c) Every special district which includes in its service area property within the Cherry Creek basin and which owns and operates a wastewater treatment services facility in the Cherry Creek basin. For the purposes of this paragraph (c), wastewater treatment services shall mean a wastewater treatment facility with a designed capacity to receive more than two thousand gallons of sewage per day.

25-8.5-106. Board of directors. (1) The governing body of the authority shall be a board of directors which shall exercise and perform all powers, rights, privileges, and duties invested or imposed by this article.

(2) Each authority member shall appoint one representative and two alternates to serve on the board. Any county, municipality, or special district that provides wastewater treatment services by contract with another entity which is a member of the authority shall not be entitled to a separate member on the board.

(3) Directors shall be appointed for terms of two years. Notice of each appointment shall be given to the recording secretary for the authority.

(4) No director shall receive compensation as an employee of the authority. Reimbursement of actual expenses for directors shall not be considered compensation.

(5) An appointment to fill a vacancy on the board shall be made by the authority member for the remainder of the unexpired term.

(6) If a board member or designated alternate fails to attend two consecutive regular meetings of the board, the authority may submit a written request to the appointing authority member to have its representative attend the next regular meeting. If, following such request, said representative fails to attend the next regular board meeting, the board may appoint an interim representative from the authority member's jurisdiction to serve until the authority member appoints a new representative.

(7) An authority member, at its discretion, may remove from office any board member or designated alternate representing the authority member and appoint a successor.

(8) The board shall elect one of its members as chairman of the authority and one of its members as secretary-treasurer and shall appoint a recording secretary who may be a member of the board.

(9) The recording secretary shall keep, in a well-bound book, a record of all of the authority's meetings, resolutions, certificates, contracts, bonds given by employees or contractors, and all corporate acts which shall be open to inspection of all interested parties.

(10) The secretary-treasurer shall keep strict and accurate accounts of all money received by and disbursed for and on behalf of the authority.

25-B.5-107. Voting. (1) Each authority member, through its designated director or designated alternate acting in the director's place, shall be entitled to one vote.

(2) Board action upon waste load allocations, site location, or site plans selected pursuant to section 25-6-702, discharge permits secured pursuant to section 25-6-501, amendments to the authority's wastewater management plan, and all budget and funding decisions shall require a vote of the following combinations of member votes:

(a) An affirmative vote of fifty percent of the counties which are members of the authority; and

(b) An affirmative vote of a majority of the municipalities which are members of the authority; and

(c) An affirmative vote of a majority of the special districts which are members of the authority.

(3) All decisions of the board not enumerated in subsection (2) of this section shall be made and decided by a majority of the quorum.

(4) A director shall disqualify himself from voting on any issue in which he has a conflict of interest unless such director has disclosed such conflict of interest in compliance with section 18-8-308, C.R.S., in which case such disclosure shall cure the conflict. A director shall abstain from voting if the director would obtain a personal financial gain from the contract or services being voted upon by the authority.

25-8.5-108. Ex officio members. (1) Ex officio members shall be provided with notice of the authority meetings. Ex officio members shall not serve on the board. Ex officio members are not voting members. The following shall be considered ex officio members:

(a) Every soil conservation district of which more than two-thirds of its territory is included within the authority's boundaries;

(b) Any other governmental or quasi-governmental agency designated as an ex officio member by the authority.

25-8.5-109. Meetings. (1) The board shall fix the time and place at which its regular meetings shall be held and provide for the calling and holding of special meetings.

(2) Notice of the time and place designated for all regular meetings shall be posted at the office of the county clerk and recorder of each of the counties included within the authority. Such notices shall remain posted and shall be changed in the event that the time or place of such regular meetings is changed.

(3) Special meetings of the board shall be held at the call of the chairman or upon request of two board members. The authority shall inform all board members five calendar days before the special meeting and shall post notice in accordance with subsection (2) of this section at least three days before the special meeting of the date, time, and place of such special meeting and the purpose for which it is

called.

(4) All business of the board shall be conducted only during said regular or special meetings, and all said meetings shall be open to the public, but the board may hold executive sessions as provided in article 9 of title 29, C.R.S.

25-8.5-110. Powers of board - organization - administration. (1) The board has the following powers relating to carrying on the affairs of the authority:

(a) To organize, adopt bylaws and rules of procedure, and select a chairman and chairman pro tempore;

(b) To make and pass resolutions and orders which are necessary for the governance and management of the affairs of the authority, for the execution of the powers vested in the authority, and for carrying out the provisions of this article;

(c) To fix the location of the principal place of business of the authority and the location of all offices maintained under this article;

(d) To prescribe by resolution a system of business administration, to create any and all necessary offices, to establish the powers and duties and compensation of all employees, and to require and fix the amount of all official bonds necessary for the protection of the funds and property of the authority;

(e) To appoint and retain employees, agents, and consultants to make recommendations, coordinate authority activities, conduct routine business of the authority, and act on behalf of the authority under such conditions and restrictions as shall be fixed by the board;

(f) To prescribe a method of auditing and allowing or rejecting claims and demands and a method for the letting of contracts on a fair and competitive basis for the construction of works, structures, or equipment or for the performance or furnishing of such labor, materials, or supplies as may be required for the carrying out of any of the purposes of this article.

25-8.5-111. Powers of authority - general and financial.

(1) In order to accomplish its purposes, the authority has the power to:

(a) Develop and implement, with such revisions as become necessary in light of changing conditions, plans for water quality controls for the reservoir, applicable drainage basin,

waters, and watershed;

(b) Conduct pilot studies and other studies that may be appropriate for the development of potential water quality control solutions;

(c) Develop and implement programs to provide credits, incentives, and rewards within the Cherry Creek basin plan for water quality control projects;

(d) Recommend the maximum loads of pollutants allowable to maintain the water quality standards and allocate, if delegated the power to pursuant to federal or state law, waste loads among both present and future sources of pollutants;

(e) Recommend erosion controls and urban runoff control standards;

(f) Recommend septic system maintenance programs;

(g) Incur debts, liabilities, and obligations;

(h) Have perpetual existence;

(i) Have and use a corporate seal;

(j) Sue and be a party to suits, actions, and proceedings;

(k) Enter into contracts and agreements affecting the affairs of the authority including, but not limited to, contracts with the United States and the state of Colorado and any of their agencies or instrumentalities, political subdivisions of the state of Colorado, corporations, and individuals;

(l) Acquire, hold, lease (as lessor or lessee), and otherwise dispose of and encumber real and personal property;

(m) Acquire, lease, rent, manage, operate, construct, and maintain water quality control facilities or improvements for drainage, nonpoint sources, or runoff within or without the authority;

(n) Establish rates, tolls, fees, charges, and penalties except on agricultural land for the functions, services, facilities, and programs of the authority; except that the total annual budgeted rates, tolls, fees, and charges for property owners shall not exceed thirty percent of the annual authority budget and shall not exceed the total annual budgeted fees to be paid by users of the Cherry Creek reservoir;

(o) Establish in cooperation with the department of natural resources fees for Cherry Creek reservoir users, which amounts shall be subject to the review and approval of the board of parks and outdoor recreation, which shall not unreasonably withhold approval. Said reservoir fees, including all users regardless of activity, however established, shall not in total exceed the amount that would be collected if the reservoir user fee was one dollar per reservoir user per year.

(p) (I) Levy and collect ad valorem taxes on and against all taxable property within the authority subject to the limitation that no mill levy for any fiscal year shall exceed one-half mill, however, ad valorem taxes greater than one-half mill can be levied by the authority if it is approved by the electors at an election held according to the procedures of part 8 of article 1 of title 32, C.R.S.

(II) No property tax shall be levied until the fees from the recreation users and the development fees are established.

(q) Issue and refund revenue and assessment bonds and pledge the revenues of the authority or assessments therefor to the payment thereof in the manner provided in part 4 of article 35 of title 31, C.R.S., and as provided in this article;

(r) Invest any moneys of the authority in any manner permitted by law;

(s) Review and approve water quality control projects of any entity other than the authority within the boundaries of the authority;

(t) Except that the authority shall not have the power to regulate agricultural nonpoint source activities; such agricultural nonpoint source activities shall be subject only to the provisions of section 25-8-205 (5);

(u) Have and exercise all rights and powers necessary or incidental to or implied from the specific powers granted to the authority by this article. Such specific powers shall not be considered as a limitation upon any power necessary or appropriate to carry out the purposes and intent of this article.

25-8.5-112. Power to issue bonds. To carry out the purposes of this article, the board is authorized to issue revenue or assessment bonds of the authority. Bonds shall bear interest at a rate such that the net effective interest rate of the issue of bonds does not exceed the maximum interest rate set forth in the resolution adopted by the board

authorizing the issuance of the bonds, payable semiannually, and shall be due and payable serially, either annually or semiannually, commencing not later than three years after date of issuance. The form and terms of said bonds, including provisions for their payment and redemption, shall be determined by the board. If the board so determines, such bonds may be redeemable prior to maturity upon payment of a premium not exceeding three percent of the principal thereof. Said bonds shall be executed in the name and on behalf of the authority, signed by the chairman of the board with the seal of the authority affixed thereto, and attested by the secretary of the board. Said bonds shall be in such denominations as the board shall determine, and the bonds and coupons shall bear the original or facsimile signature of the chairman of the board.

25-8.5-113. Revenue refunding bonds. Any revenue bonds issued by the authority may be refunded by the authority, or by any successor thereof, in the name of the authority, subject to the provisions concerning their payment and to any other contractual limitations in the proceedings authorizing their issuance or otherwise appertaining thereto, by the issuance of bonds to refund, pay, and discharge all or any part of such outstanding bonds, including any interest on the bonds in arrears or about to become due, for the purpose of avoiding or terminating any default in the payment of the interest on and principal of the bonds, of reducing interest costs or effecting other economies, or of modifying or eliminating restrictive contractual limitations appertaining to the issuance of additional bonds or to any system appertaining thereto or for any combination of such purposes. Refunding bonds may be delivered in exchange for the outstanding bonds refunded or may be sold as provided in this article for an original issue of bonds.

25-8.5-114. Use of proceeds of revenue refunding bonds. The proceeds of revenue refunding bonds shall either be immediately applied to the retirement of the bonds being refunded or be placed in escrow in any state or national bank within the state which is a member of the federal deposit insurance corporation to be applied to the payment of the bonds being refunded upon their presentation therefor; but, to the extent any incidental expenses have been capitalized, such refunding bond proceeds may be used to defray such expenses, and any accrued interest and any premium appertaining to a sale of refunding bonds may be applied to the payment of the interest thereon or the principal thereof, or both interest and principal, or may be deposited in a reserve therefor, as the board may determine. Any such escrow shall not necessarily be limited to proceeds of refunding bonds but may include other moneys available for its purpose. Any proceeds in escrow, pending such use, may be invested or reinvested in

any items permitted by the state of Colorado and bills, certificates of indebtedness, notes, or bonds which are direct obligations of, or the principal and interest of which obligations are unconditionally guaranteed by, the United States. Such proceeds and investments in escrow, together with any interest to be derived from any such investment, shall be in an amount at all times sufficient as to principal, interest, any prior redemption premium due, and any charges of the escrow agent payable therefrom to pay the bonds being refunded as they become due at their respective maturities or due at any designated prior redemption dates in connection with which the board shall exercise a prior redemption option. Any purchase of any refunding bond issued under this article shall in no manner be responsible for the application of the proceeds thereof by the authority or any of its officers, agents, or employees.

25-8.5-115. Facilities - comprehensive program.

(1) The authority, acting by and through the board, may acquire, construct, lease, rent, improve, equip, relocate, maintain, and operate water quality control facilities, any project, or any part thereof for the benefit of the authority and the inhabitants thereof, after the board has made such preliminary studies and otherwise taken such action as it determines to be necessary or desirable.

(2) (a) The authority shall develop a comprehensive program for the water quality control facilities specified in subsection (1) of this section. A comprehensive program may consist of one project or more than one project.

(b) A hearing on the proposed comprehensive program shall be scheduled, and notice of the hearing shall be given by publication and posted in the office of the county clerk and recorder of each member county. Upon closure of the hearing, the board may either require changes to be made in the comprehensive program or the board may approve or reject the comprehensive program as prepared.

(c) If any substantial changes to the comprehensive program are ordered at any time, a further hearing shall be held pursuant to notice which shall be given by publication.

25-8.5-116. Coordination with drainage and flood control measures.

(1) Any exercise by the authority of the powers granted by section 25-8.5-111 or 25-8.5-115 which affects drainage and flood control shall be consistent with and conform to the drainage and flood control program of the urban drainage and flood control district adopted pursuant to section 32-11-214, C.R.S., the resolutions, rules, regulations, and orders of the district issued pursuant to section 32-11-218 (1) (e), C.R.S., and any flood plain zoning

resolutions, rules, regulations, and orders of any public body having jurisdiction to adopt the same.

(2) Construction by the authority of drainage or water quality control facilities which might or will affect drainage or flood control within the boundaries of the urban drainage and flood control district shall not be undertaken until a proposal therefor has been presented to and approved by the board of directors of said district. Such proposal shall demonstrate compliance with the requirements of subsection (1) of this section, and the board shall apply the same standards of flood control and drainage criteria for approval thereof as it applies for review of proposals presented for approval pursuant to section 32-11-221, C.R.S. The provisions of section 32-11-221, C.R.S., shall apply to the presentation, consideration, and determination by said board of directors of any such proposal or modification thereof.

25-8.5-117. Transfer of powers. (1) Upon the adoption of the board of directors of the urban drainage and flood control district and the board of directors of the authority created herein of a joint resolution delegating the agreed-upon responsibility to the urban drainage and flood control district for carrying out and meeting, within the district's boundaries, the compliance requirements and the permitting requirements imposed with respect to storm water runoff quality by the federal "Water Quality Act of 1987" and any regulations and standards adopted pursuant thereto or pursuant to state law, all powers contained in this act to deal with water quality control and compliance relating to the agreed-upon aspects of storm water runoff and nonpoint sources of pollution, including financial powers and special assessment powers but not including ad valorem taxation powers, shall be transferred to the urban drainage and flood control district.

(2) Upon the transfer of powers as provided in subsection (1) of this section, any allocation of waste loads affecting storm water runoff or nonpoint sources of pollution proposed or adopted by the authority shall be effective only upon adoption thereof or concurrence therewith by the board of directors of the urban drainage and flood control district.

(3) If the urban drainage and flood control district accepts the responsibility and the transfer of powers as provided in subsection (1) of this section, after completion of a plan for water quality controls by the authority which involves storm drainage runoff or nonpoint sources and after commencement of implementation of such plan, the district shall be bound to carry out the plan as it relates to the storm water and nonpoint source powers transferred to it within the time requirements, if any, of the plan.

25-8.5-118. Power to levy special assessments. (1) The board, in the name of the authority, for the purpose of defraying all the cost of acquiring or constructing, or both, any project or facility authorized by this article, or any portion of the cost thereof not to be defrayed with moneys available therefor from its own funds, any special funds, or otherwise, also has the power under this article:

(a) To levy assessments against all or portions of the property within the authority and to provide for collection of the assessments pursuant to part 6 of article 20 of title 30, C.R.S.;

(b) To pledge the proceeds of any assessments levied under this article to the payment of assessment bonds and to create liens on such proceeds to secure such payments;

(c) To issue assessment bonds payable from the assessments, which assessment bonds shall constitute special obligations of the authority and shall not be a debt of the authority; and

(d) To make all contracts, to execute all instruments, and to do all things necessary or convenient in the exercise of the powers granted in this article or in the performance of the authority's duties or in order to secure the payment of its assessment bonds.

(2) The authority shall give notice, by publication once in a newspaper of general circulation in the authority, to the owners of the property to be assessed, which shall include:

(a) The kind of improvements proposed;

(b) The number of installments and the time in which the cost of the project will be payable;

(c) A description of the properties which will be assessed;

(d) The probable cost per acre or other unit basis which, in the judgment of the authority, reflects the benefits which accrue to the properties, except no benefit shall accrue to agricultural lands, to be assessed;

(e) The time, not less than thirty days after the publication, when a resolution authorizing the improvements will be considered;

(f) A map of the properties to be assessed, together with an estimate and schedule showing the approximate amounts to be assessed, and a statement that all resolutions and

proceedings are on file and may be seen and examined by any interested person at the office of the authority or other designated place at any time within said period of thirty days; and

(g) A statement that all complaints and objections by the owners of property to be assessed in writing concerning the proposed improvements will be heard and determined by the authority before final action thereon.

(3) The finding, by resolution, of the board that said improvements were ordered after notice given and after hearing held and that such proposal was properly initiated by the said authority shall be conclusive of the facts so stated in every court or other tribunal.

(4) Any resolution or order regarding the assessments or improvements may be modified, confirmed, or rescinded at any time prior to the passage of the resolution authorizing the improvements.

25-8.5-119. Inclusion of territory. (1) Any municipality, county, or special district, or any portion thereof, shall be eligible for inclusion upon resolution of its governing body requesting inclusion in the authority and describing the property to be included. The authority, by resolution, may include such property on such terms and conditions as may be determined appropriate by the board.

(2) Upon receipt of a resolution requesting inclusion, the board shall cause an investigation to be made within a reasonable time to determine whether or not the municipality, county, or special district, or portion thereof, may feasibly be included within the authority, whether the municipality, county, or special district has any property which is tributary to the basin, waters, or watersheds governed by the authority, and the terms and conditions upon which the municipality, county, or special district may be included within the authority. If it is determined that it is feasible to include the municipality, county, or special district, or portion thereof, in the authority, and the municipality, county, or special district has property tributary to the basin, waters, or watersheds governed by the authority, the board by resolution shall set the terms and conditions upon which the municipality, county, or special district, or portion thereof, may be included within the authority and shall give notice thereof to the municipality, county, or special district. If the board determines that the municipality, county, or special district, or portion thereof, cannot feasibly be included within the authority or otherwise determines that the municipality, county, or special district should not be included within the authority, the board shall

pass a resolution so stating and notifying the municipality, county, or special district of the action of the board. The board's determination that the county, municipality, or special district, or portion thereof, should not be included in the authority shall be conclusive.

(3) (a) If the governing body of the municipality, county, or special district desires to include the municipality, county, or special district, or portion thereof, within the authority upon the terms and conditions set forth by the board, the governing body shall adopt a resolution declaring that the public health, safety, and general welfare requires the inclusion of said municipality, county, or special district within the authority and that the governing body desires to have said municipality, county, or special district, or portion thereof, included therein upon the terms and conditions prescribed by the board. The governing body of such municipality, county, or special district, before final adoption of said resolution, shall hold a public hearing thereon, notice of which shall be given by publication in a newspaper of general circulation within such municipality, county, or special district, which shall be complete at least ten days before the hearing. Upon the final adoption of said resolution, the clerk of the governing body of such municipality, county, or special district shall forthwith transmit a certified copy of the resolution to the board and to the division of local government in the department of local affairs.

(b) After receipt of a copy of such resolution, the board shall pass and adopt a resolution including said municipality, county, or special district, or portion thereof, in the authority and shall cause a certified copy thereof to be transmitted to the division of local government and a certified copy to the governing body of the municipality, county, or special district.

(4) The director of said division, upon receipt of a certified copy of the resolution of the board, shall forthwith issue a certificate reciting that the municipality, county, or special district, or portion thereof, described in such resolution has been duly included within the authority according to the laws of the state of Colorado. The inclusion of such territory shall be deemed effective upon the date of the issuance of such certificate, and the validity of such inclusion shall not be contestable in any suit or proceeding which has not been commenced within thirty days from such date. The said division shall forthwith transmit to the governing body of such municipality, county, or special district and to the board five copies of such certificate, and the clerk of such governing body shall forthwith record a copy of the certificate in the office of the clerk and recorder of

each county in which such municipality, county, or special district, or portion thereof, is located and file a copy thereof with the county assessor of each such county. Additional copies of said certificate shall be issued by the division of local government upon request.

25-8.5-120. Exclusion of property. (1) Any owner of property within the boundaries of the authority may petition to be excluded from the authority.

(2) In order for such property to be excluded, the board shall determine that the property to be excluded does not receive wastewater treatment services or have an individual sewage disposal system located within the authority and either:

(a) Was improperly included within the authority; or

(b) Is not tributary to the basin, waters, or watersheds governed by the authority or will not benefit from projects or improvements provided by the authority.

(3) Any petition for exclusion shall specify the property to be excluded, and evidence that the property complies with the criteria of subsection (2) of this section.

(4) The authority shall provide notice of the date, time, and place of the authority's meeting to consider the petition for exclusion.

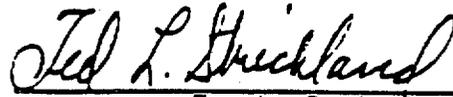
(5) The authority may approve, modify, or deny a petition for exclusion.

(6) If the authority approves a petition for exclusion of property, the authority shall file a copy of said resolution with the division of local government and with the county, municipality, or special district authority members which includes within its boundaries the excluded property, record a copy of the resolution in the office of the county clerk and recorder in the county in which said excluded property is located, and file a copy with the county assessor in such county.

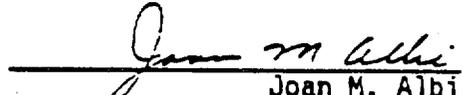
SECTION 2. Safety clause. The general assembly hereby

finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

  
\_\_\_\_\_  
Carl E. Bledsoe  
SPEAKER OF THE HOUSE  
OF REPRESENTATIVES

  
\_\_\_\_\_  
Ted L. Strickland  
PRESIDENT OF  
THE SENATE

  
\_\_\_\_\_  
Lee C. Bahrych  
CHIEF CLERK OF THE HOUSE  
OF REPRESENTATIVES

  
\_\_\_\_\_  
Joan M. Albi  
SECRETARY OF  
THE SENATE

APPROVED April 28, 1988, at 2:35 PM

  
\_\_\_\_\_  
Roy Romer  
GOVERNOR OF THE STATE OF COLORADO