VA. Coastal Zone Management Program

**PROPOSED PROGRAM FOR PREPARATION OF**

**AN ENVIRONMENTAL ELEMENT FOR THE**

**CITY OF RICHMOND MASTER PLAN**

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COASTAL ZONE

INFORMATION CENTER

Prepared by the
Richmond Regional Planning District Commission

October, 1990

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In the spring of this year, the City submitted a request for coastal resource management planning funds from the Virginia Council on the Environment. These funds were requested to aid in the preparation of an Environmental Plan. In July, the Council on the Environment notified the City that its request had been approved. At the request of the City, the Richmond Regional Planning District Commission (RRPDC) has prepared a proposal outlining an approach that could be used in the preparation of an Environmental Element for the Master Plan.

The purpose of this document is to:

- discuss reasons for preparing an Environmental Plan at this time,
- describe the elements of an Environmental Plan, and
- present a program for preparing an Environmental Plan.

For purposes of this proposal, the environment encompasses the land, the air and the water. The environment also includes potential threats to people and to the natural environment due to man-made and natural actions. Man-made actions range from the clearing of land to spills of toxic materials. Natural actions include such features as floods and earth quakes.

**REASONS FOR PREPARING AN ENVIRONMENTAL ELEMENT FOR THE MASTER PLAN**

Section 15.1-446.1 of the Code of Virginia requires that all localities adopt a comprehensive plan for physical development. This section also states that the plan may include the designation of areas for "...conservation, recreation, public service, flood plain and drainage (and) the implementation of reasonable groundwater protection measures...". Furthermore, Section 15.1-447 states that during the preparation of the plan, localities "shall survey and study such matters as ... use of land, ... natural resources, groundwater, surface water, geologic factors,...drainage, flood control and flood damage prevention measures, ... and any other matters relating to the subject matter and general purposes of the comprehensive plan."

The City of Richmond adopted its current Master Plan on April 25, 1983. This document provides direction concerning future development in the City. The Plan contains broad environmental



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policies, but does not identify specific environmentally sensitive areas within the City. Furthermore, the environmental polices set forth in the Plan are not explicitly a part of the plans for each district.

There is another, perhaps more important, reason for developing an environmental element. This reason deals with the benefits derived from preserving and protecting the natural environment. Clean air and a safe and adequate supply of potable water are necessary to retain and attract investment and jobs in the City. The retention of wetlands and other vegetation can help reduce flooding, soil erosion and the flow of pollutants into the James River and, ultimately, the Chesapeake Bay.

Environmental planning should not be thought of in a vacuum, however. The incorporation of environmental protection measures into the Master Plan will allow the City to blend efforts to protect and enhance the natural environment with development and redevelopment activities. Clear policies and standards that encourage the retention of green spaces as part of redevelopment along the James could serve to improve access to the river as well as filter pollutants from urban runoff. The protection of wetlands and other vegetation aids in the retention of habitat for wildlife as well as aiding water quality. All these factors contribute to maintaining the quality of life in Richmond.

As discussed below the City is now or will be facing a variety of environmental mandates and issues. These mandates and issues are now or will be addressed by several different City departments. A comprehensive analysis of these mandates and issues will help insure consistency in programs and implementation activities. This approach will also allow the environment and City development to be viewed as a whole instead of as individual pieces without relationship to one another.

**ENVIRONMENTAL ISSUES CURRENTLY FACING THE CITY**

Apart from the general planning requirements set forth in the Code of Virginia, the City is subject to a variety of federal and state laws, regulations and standards concerning the environment. In addition, the City has taken or is considering action which will impact the environment and surrounding land uses. Following is a brief synopsis of some of these laws or actions.

- The City is now in the midst of efforts to implement the Chesapeake Bay Preservation Act. The purpose of the Act is to protect and improve water quality in the Chesapeake Bay and its tributaries. One requirement of the Act's implementing regulations is that by September, 1991, all localities must review, and where necessary, amend local comprehensive plans to incorporate actions aimed at protecting water quality from non-point source pollution.

The regulations which implement the Preservation Act suggest several studies that a locality should consider undertaking during this review process. (These studies are enumerated later in this document.) While the implementing regulations address storm water management and erosion and sediment control, these requirements will only apply to portions of the City designated Chesapeake Bay Preservation Areas.

- In 1989, the General Assembly enacted legislation establishing a cooperative state and local stormwater management program. (Ref: Section 10.1-603.1, Code of Virginia) This legislation allows local governments the option of adopting a storm water management program dealing with runoff from development sites. Regulations implementing the Act are now being finalized. The federal Environmental Protection Agency will issue regulations in the near future dealing with point source management of storm water. The net effect of these two actions, plus the Chesapeake Bay Preservation Act, will be to increase the ability and the need for the City to address the issue of managing storm water, both in a qualitative and quantitative manner.

- The City is part of the National Flood Insurance Program. This gives the City responsibility for regulating development in a manner that preserves the floodplains of streams and rivers. In a similar manner, Section 15.1-466 of the Code of Virginia requires that "a subdivision ordinance shall include reasonable regulations and provisions ...for drainage and flood control. The City has plans to construct a flood wall in the downtown area. Construction of the flood wall may stimulate additional development or redevelopment. At the same time, other floodplain areas need to be carefully monitored due to the presence of wetlands or other environmentally sensitive areas. Both actions may require a rethinking of appropriate land uses in these designated flood prone areas.

- The City is continuing to address the combined sewer overflow situation. A plan has been prepared outlining a phased attack on the problem. The City may want to consider how the construction of these facilities will impact adjacent land uses as well as river use and development.

- The State has recently adopted several requirements dealing with solid waste management. One of these requirements is that by 1995, 25% of the City's solid waste must be recycled. The City is working with other localities to create the new Central Virginia Waste

Management Authority to address these solid waste issues. At the same time the City has recently instituted a pilot program for curb-side pickup of recyclables. There may be additional actions the City may want to consider in the area of solid waste management.

- The City contains one or more sites that may be placed on the federal superfund list. The designation of these sites may cause the City to reconsider appropriate land uses on and near these areas.

- Plans have been developed and partially implemented to breach some dams along the James River, improving the ability of fish to travel upstream. This will offer increased recreational opportunities and may call for additionally access points to the river. The Department of Conservation and Recreation is currently assessing river access throughout the tidal portion of the State. The City should coordinate its efforts at improving river access with this State project.

- The National Ambient Air Quality Standards establish maximum allowable levels of air pollution for six pollutants. Currently the City is classified as a non-attainment area for one of these pollutants--ozone. The City may want to consider the impact of this classification in relationship to the Master Plan and to future development possibilities.

**ELEMENTS OF AN ENVIRONMENTAL PLAN**

Several approaches can be used to prepare an Environmental Plan. These approaches all share certain steps in the process, however.

The first step is to establish certain broad statements, or goals, about the desired environment for the community, now and in the future. These goal statements are then used as benchmarks to determine what actions are necessary to maintain or improve the environment.

The second step is to analyze the existing environment and the opportunities and threats facing the environment. Included in this step is an analysis of the causes of the threats to the environment and the effectiveness of existing systems, ordinances and polices aimed at protecting the environment. Existing and proposed mandates to protect the environment are examined.

The third step is to develop a plan of action to protect and conserve the environment. This plan of action is composed of a series of objectives, policies and implementation strategies developed to address the opportunities and threats that surfaced

in step two. One or more maps are often prepared which identify critical environmental areas that need to be protected as well as areas when environmental conditions limit or prohibit development.

One more step is necessary, although it is not actually a part of the plan. That additional step is the monitoring of plan implementation. The community must continually assess efforts to implement the plan. It may be necessary to modify the plan of action from time to time as objectives are reached or to react to unforseen events, such as new mandates.

**CRITERIA FOR PLAN DEVELOPMENT**

RRPDC staff met with Department of Community Development personnel on several occasions to discuss the City's needs relative to an Environmental Plan. During these meeting, several "criteria" for a recommended planning program became apparent.

1. **The process must be inclusive.** The proposed process must provide opportunity for participation from a wide cross section of the Richmond community.

2. **The process must be designed with two deadlines in mind.** The aforementioned Chesapeake Bay Preservation Act requires modification to local plans by September 20, 1991. (This date may change due to the slippage that has occurred in meeting this year's deadlines.) The second deadline is established by the grant from the Council on the Environment. Funds from this grant cannot be used prior to October 1, 1990 and a final draft document must be ready for Planning Commission review by October, 1991.

3. **The process must be capable of bringing a wide variety of resources to bear.** The complexity of certain environmental issues and the press of other City business may hinder staff efforts to meet the above mentioned deadlines. The proposal must be designed so that work can be distributed among various City departments and, where necessary, outside resources incorporated into the process.

**PROPOSAL FOR PREPARATION OF AN ENVIRONMENTAL PLAN**

With the above in mind, the RRPDC staff has prepared the following proposal for the preparation of an Environmental Plan. Key features of this proposal are:

1. A Staff Committee to bring together representatives of the various City departments involved in monitoring and regulating environmental matters. This committee will have primary responsibility for preparation of the document.

2. An Advisory Committee to aid in development of goals, identification and analysis of environmental opportunities and threats and to assist the Staff Committee in the preparation of a plan of action. This committee, composed of citizens representing various backgrounds, will broaden the knowledge and experience brought to the table regarding environmental issues facing the City.

3. A work scope that examines the key environmental issues and mandates facing the City, but also investigates several important, though not necessarily, high profile environmental issues.

3. A list of environmental issues for consideration by City staff and the Advisory Committee in establishing the areas to be investigated.

4. A list of resources available to assist the City in this effort.

**Recommended Process And Timetable**

The following process and timetable have been developed to meet the October 1, 1991, deadline of the Council on the Environment grant. If the Chesapeake Bay Local Assistance Board takes a firm stand on plan amendments being in place by September, 1991, the City may want to revise portions of this timetable.

**Task** **Activity**

1. Approval of Work Program and Selection of Advisory Committee. Planning Commission reviews proposed work program and list of environmental issues, modifies where necessary, and approves. Planning Commission appoints Advisory Committee to work with City staff.

   **Schedule: Complete by mid-November, 1990**

2. Preparation of Briefing Paper. City staff prepares briefing paper for Technical Committee. This briefing paper should cover the purpose of this project, responsibilities of the Advisory Committee, possible resources to aid in the process and include the initial list of environmental issues to be investigated.

   **Schedule: Distribute to Committee in late November, 1990**

4. Formation of Advisory Committee. Advisory Committee holds orientation meeting to discuss role and responsibility and review list of environmental issues to be analyzed. This list may be modified based on input

from Advisory Committee members. Advisory and Staff Committees develop list of groups and/or individuals that may be helpful in analysis of environmental issues.

**Schedule: Early December, 1990**

5. Development of Environmental Goals. Advisory Committee, working with the Staff Committee, develops draft environmental goals. These goals should be general in nature and set the tone for the work to follow. One or more additional meetings may be necessary.

**Schedule: January, 1991**

6. Research and Analysis of Environment Issues, Needs and Opportunities. Staff Committee researches environmental issues in accordance with Work Scope and prepares a briefing paper covering the existing and projected status of various elements of the City's environment and associated federal, state and local mandates. These briefing papers will be presented to the Advisory Committee at a series of meetings for review and comment.

**Schedule: January through March, 1991**

7. Public Review of Issues, Needs and Opportunities

The Advisory Committee holds a public meeting to discuss the conclusions reached during the environmental analysis phases and to obtain public input regarding environmental issues, needs and opportunities facing the City. Prior to the meeting, the environmental analysis will be distributed to special interest groups and the media as well as be made available to the general public.

**Schedule: March, 1991**

8. Development of Objectives, Policies and Implementation Program. Advisory Committee reviews previously submitted information and suggests appropriate city role in dealing with issues. Staff and Advisory Committees develop objectives, polices and implementation actions to deal with issues.

**Schedule: April through May, 1991**

9. Preparation of Draft Environmental Plan. The Staff Committee prepares a draft Environmental Plan. This draft will incorporate the previous briefing papers as well objectives, policies and implementation program. This information will be presented to the Advisory Committee for review and comment at a series of meetings.

**Schedule: May through August, 1991**

10. Public Review of Draft Environmental Plan

The Advisory Committee holds a public meeting to discuss the draft plan and to obtain public input regarding the plan. Prior to the meeting, the plan will be distributed to special interest groups and the media as well as be made available to the general public.

**Schedule: August, 1991**

12. Preparation of Final Draft. Advisory Committee reviews final draft and recommends Environmental Element to Planning Commission for action.

**Schedule: September, 1991.**

**Committee Structure**

The need to be inclusive, to act in a timely manner and to use a variety of resources played an important role in developing this proposal. The establishment of a Staff Committee and an Advisory Committee to actively work on Plan preparation is recommended. Following is a description of the suggested composition and role of each committee.

Staff Committee. The bulk of the research and analysis work will be done by the Staff Committee. This group, chaired by a representative from the Department of Community Development, should include representatives from the Law, Public Works, Public Utilities, Public Safety (Fire Bureau) and Recreation and Parks departments.

Overall project management and coordination should be the responsibility of the Department of Community Development. It is important, however, that each department involved in the protection or regulation of the issues under investigation be a full partner and share in the responsibility for creating this Environmental Element.

The Staff Committee will be responsible for:

a. gathering and analyzing information related to the preparation of the Environmental Element,

b. securing and coordinating technical input from outside resources,

c. preparing staff reports and recommendations, and

d. communicating information on this project to interest groups, the media and the general public.

Advisory Committee. This committee will assist the Staff Committee in preparing the Environmental Element for Planning Commission review and action. The purpose of this committee is to provide additional technical expertise and policy guidance. Therefore, this group is envisioned as a working group rather than a review committee. The Advisory Committee will bring to the table a wide variety of interests and specialized backgrounds necessary for a comprehensive review of the environment. Advisory Committee members will also act as liaisons, keeping various sectors of the community informed on progress in developing the Plan.

The Advisory Committee will be responsible for:

a. defining issues to be investigated during this process and preparing a set of draft environmental goals.

b. evaluating technical reports prepared by the Staff Committee and other experts,

c. evaluating Staff recommendations regarding the issues, needs and opportunities facing the City,

d. developing a consensus on recommended objectives and policies regarding the City's environment,

e. assisting in the development of a draft Environmental Element for review by the Planning Commission, and

f. meeting with the Planning Commission to assist in the presentation and explanation of the draft.

Three possible approaches to the preparation of the Plan were considered. Following is a discussion of each approach and the pros and cons associated with each.

1. One approach is for all work to be done by City staff, with or without assistance from outside resources. This technique may be the fastest, but involves the least amount of direct input from those effected or knowledgeable in the various areas to be investigated. This technique also places a tremendous burden on the staff as far as evaluating its own proposals. This approach was rejected as too limited in participation by the public in the preparation of the Plan.

2. Another technique is the formation of a large Task Force with multiple subcommittees to investigate each issue. While this technique allows the broadest representation and level of expertise, it also can be cumbersome. Finding a place for 50-150 individuals to meet is not easy, nor is maintaining a quorum for action of various

proposals. Groups of this size may inhibit the face to face communications needed to discuss controversial issues such as the environment. The subcommittees normally used in a process such as this also place large demands on staff time. The time limitation factor and logistical factors resulted in this process being rejected.

3. A third technique is to appoint a small advisory committee of 15 to 25 individuals to evaluate staff work. This committee should include representatives from the various sectors of the community that will be impacted by the Plan. This committee should also include individuals who can act as technical resources to the staff and other committee members when discussing environmental and development issues. The relatively small size of such a committee also facilitates discussion and consensus building. Being a small group, this technique permits fairly rapid review and action. The most difficult issue faced in using this technique is the selection of members that adequately represents the broad viewpoints found in a City like Richmond. Even with this potential limitation, the RRPDC staff recommends the City appoint this type of committee to assist with the Plan.

The RRPDC recommends that the City consider appointing individuals with the following interests or positions. The exact size and membership of the committee should be left to the Planning Commission, with advise from Staff and the City Manager.

1. Planning Commission. To provide insight into current planning and environmental issues facing the City as well as keep the Commission abreast of progress on the Plan.

2. Local Environmental Interest. To provide insight into the environmental concerns of the City's residents and to act as liaison to the numerous environmental groups in the City.

3. Real Estate and Development Interest. Discussions on the environment eventually impact land and its development. Issues such as compliance with the Chesapeake Bay Preservation Act will attract the interest of the development community.

4. Industrial Interest. Issues under discussion will include the improvement of water quality, air and noise pollution and the handling of solid waste and hazardous materials. These interest will be able to contribute to these discussions.

5. Transportation Interests. Transportation involves numerous modes which carry or use hazardous materials, create noises and own land throughout the City, some of which is along streams.

6. Local Environmental Experts. The City is fortunate to be the residence of several individuals with extensive experience in dealing with the environment. This resource should be tapped.

7. Representatives of Professional Organizations. There are several professions, such as engineering, architecture, landscape architecture, geologists, soil scientists and the like, which can add to the deliberations of this committee.

**Work Scope**

The proposed work scope is found at the end of this document.

**Issues**

There are numerous issues that could be investigated in preparation of this Environmental Element. The following is offered as a starting point for determining issues to be investigated in this effort. A quick review of this list will also point out that many issues are inter-related. For instance, wetlands provide habitat for wildlife, filter pollutants from surface water and can help in flood control. The process should investigate these inter-relations. The process should also examine both the local and regional implications related to these issues.

1. **Chesapeake Bay Preservation Act.** The Chesapeake Bay Preservation Act addresses several issues including storm water management, the protection of environmentally sensitive areas and public access to streams. The latest information available from the Local Assistance Department indicates that the following information should be considered while evaluating the Master Plan as required by the Act. This guidance is subject to change and/or clarification, therefore, close contact should be maintained with the Local Assistance Department liaison during the planning process.

   A. Chesapeake Bay Preservation Areas:

      1. Purpose and benefit,
      2. Information used for designation, and
      3. Description and map.

   B. Shoreline erosion problems and location of erosion

structures.

C. Conflict between existing and proposed land uses and water quality protection.

D. Local policy on land use issues relative to water quality protection.

E. Discussion of each CBPA component in relation to the types of land uses considered appropriate and consistent with the goals and objectives of the Act, regulations and local program.

F. Policy statements on:

1. Physical constraints to development, including soil limitation, with explicit discussion of soil suitability for septic tank use.

2. Protection of potable water supply, including groundwater resources.

3. Relationship of land use to commercial and recreational fisheries.

4. Appropriate density for docks and piers.

5. Public and private access to water-front areas and effect on water quality.

6. Existing pollution sources.

7. Potential water quality improvements through the redevelopment of intensely developed areas.

For each of the policy issues listed above, the plan should contain a discussion of the scope and importance of the issue, alternative policies considered, the policy adopted by the local government for that issue and a description of how the local policy will be implemented.

With the policy discussion, local governments should address consistency between the plan and all adopted land use, public service, land use value taxation ordinances and policies, and capital improvement plans and budgets.

2. **Combined Sewer Overflow Situation.** The City has a program for addressing the issue of periodic overflow of the combined sewer into the James. The alleviation of this problem will make a positive contribution to water quality in the James. This project will also require large scale construction along the river. The Environmental Element should address the impacts of this project of the river, those areas where

construction will take place and on adjoining lands. The contribution of this project toward meeting the storm water management requirements of the Chesapeake Bay Preservation Act should also be investigated.

3. **Storm Water Management.** This issue will be investigated as part of items 1 and 2. However, there are portions of the City that are not covered by the Preservation Act and/or not served by a combined sewer. Therefore, this project should investigate the effectiveness of existing policies and ordinances in dealing with storm water, both from a qualitative and quantitative prospective. The impacts of proposed federal and state regulations dealing with storm water should also be included in this investigation.

6. **Protection of Ground Water.** In addition to work done under the Preservation Act, the Plan should examine existing ground water resources, areas of the City which are dependent on ground water and any threats to ground water. Potential threats include underground storage tanks, past and present users of hazardous materials, pesticides, herbicides and land fills.

7. **Protection of Surface Water.** In addition to the Preservation Act activities, the Plan should examine existing and potential threats to surface water quality from surface runoff and point sources. (This investigation would include the threats listed above under ground water.) An analysis should also be made of any threats to the use of the James River as the City water supply due to either low flows or pollution. The need for water conservation should also be examined.

8. **Protection of Environmentally Sensitive Areas.** The protection of areas that are considered environmentally sensitive to development or misuse should be examined. Areas commonly classified as such are:

   1. Flood plains and flood prone areas
   2. Wetlands, both tidal and non-tidal
   3. Steep slopes (those in excess of 20%)
   4. Highly permeable and highly erodible soils

   Threats to these lands come in two forms. First is the threat from actual development or use of the lands or adjacent property. Development on or adjacent to these environmentally sensitive lands can reduce or eliminate the beneficial effects of flood plains and wetlands. A second threat to these lands is the result of development, that is, storm water runoff from parking lots, foot or automobile traffic and so forth.

   This analysis should examine threats to these areas due to erosion, pesticides, herbicides, fertilizers, ground and

surface water pollution, and improper land development. Fortunately, many of these environmentally sensitive areas have been located, at least in a preliminary manner, as part of the City's effort to implement the Preservation Act.

4. **Utilization of the James River Waterfront.** The James River is a valuable resource to the City. It offers a variety of passive and active recreational opportunities as well as a variety of views and vistas . The river is home to the full range of development within the City; residential, commercial and industrial uses line the river as do parks and other open spaces. There is also vacant land along the river that the City would like to see develop.

   The river is also the major environmental element of the City. It provides drinking water, accepts the runoff from yards and parking lots and receives the waste water from the sewage treatment plant. For all of the above reasons, the Environmental Element must consider the impacts on the James and its tributaries in a variety of ways.

10. **Geology.** The Geology that underlies the City should be examined. This work should highlight potential threats to existing and future development due to geological features such as fault lines. The presence of radon should be examined.

11. **Mineral Extraction.** The City should examine existing and potential mining operations. If possible, the projected life span and future uses of existing mines should be investigated. The City may want to consult Sand and Gravel Resources: Local Options for Protection and Regulation, prepared by the RRPDC, regarding this issue.

5. **Solid Waste Management.** This analysis should encompass the existing waste management system and projected needs in the future. Waste materials that should be examined include household and commercial garbage, industrial waste, construction materials, infectious and other medical waste, sludge and septage, hazardous household waste as well as the disposal of motor vehicles, oil, tires and batteries. The problem of litter should also be examined. This examination should look at waste reduction and recycling as well as disposal. (Note: The soon to be formed Central Virginia Waste Management Authority should be helpful with this effort.)

9. **Hazardous Materials Handling.** This analysis should examine the existing and past location of hazardous materials within the City and what efforts are underway to protect the environment from these materials. This examination should also look at the City's plans and policies regarding accidents

involving hazardous materials, including those in transport. As operator of the Port of Richmond, the City may want to examine the handling of any hazardous materials that flow through the port.

12. **Air Quality.** The Plan should assess existing air quality and identify any existing or potential threats to air quality. This examination should investigate appropriate actions needed to mitigate these threats and maintain or improve air quality.

13. **Noise Pollution.** This analysis should site the source and location of any noise generators that may threaten or limit development and methods of mitigating these threats.

14. **Views and Vistas.** Important views and vistas as they relate to other environmental features should be located and considered. Existing and potential threats to these views and vistas should be cited.

15. **Habitat Protection.** This analysis should locate Important habitat areas and existing and potential threats to these areas. A starting point for this investigation could be the Department of Conservation and Recreation. Local organizations should also be of assistance.

16. **Rare and Endangered Species.** This analysis should investigate the presence of any rare or endangered species and potential threats to these species.

**Resources**

There are a variety of individuals that are available and willing to assist with this project. The RRPDC is compiling a list of resources, by subject matter, for use by the City.

The RRPDC has already set aside technical assistance time to aid the City with this project. At the same time this project is underway, the RRPDC will be conducting an environmental analysis of the region. Any information gathered will be made available to the City.

**Attachment 1**

**CITY OF RICHMOND**

**ENVIRONMENTAL ELEMENT**

**WORK SCOPE**

**I. Environmental Issues and Goals Identification**

A. Define environmental issues to be addressed
B. Identify environmental goals for City

**II. Environmental Assessment**

A. Identify and assess the following environmental features. This assessment should include a thorough analysis of the factors that may positively or negatively impact each feature. Such factors may include land uses, the environment or other factors.

1. Surface water, including both quality and sufficiency to meet the City's existing and projected needs. Locate existing and proposed water intake and outfall points. Identify existing and potential point and nonpoint sources of pollution to surface water.

2. Ground water, including both quality and quantity. Identify portions of the City dependent on ground water for drinking water and areas served by septic tanks. Identify potential point and nonpoint sources of pollution to ground water and soil.

3. Environmentally sensitive areas including:

   a. Flood plains and flood prone areas
   b. Wetlands, tidal and nontidal
   c. Highly permeable and highly erodible soils
   d. Soils classified as unsuitable for building
   e. Slopes in excess of 20%
   f. Geologically sensitive areas
   g. Shorelines, noting areas of erosion and areas with erosion control, areas of public and private access and water dependent uses.

4. Air quality, including fixed and nonpoint sources of air pollution as well as radon.

5. Noise generators, including noise associated with aircraft and transportation corridors as well as fixed sources.

6. Minerals and other minable materials, including the quantity and economic feasibility of mining these materials.

7. Important wildlife habitat

8. Rare and endangered species locations.

9. Important views and vistas related to other issues address in the Environmental Element

B. Assess the potential impacts of the following on existing and potential land uses and other elements within the City's environment.

1. The plan for addressing the combined sewer overflow situation.

2. Storm water management program and facilities, including the effectiveness of such programs and facilities in managing the quality and the quantity of storm water runoff on individual properties and within drainage basins.

3. Solid waste management program and facilities, including the handling of various types of waste such as household, industrial, hazardous including household, infectious waste, and the disposal of automobiles, tires, batteries and waste oils and lubricants.

4. Hazardous materials transportation and storage requirements and spill clean-up programs.

5. Proposed flood wall project.

C. Identify existing conditions and/or projected trends that could threaten or enhance items identified in Sections A and B.

D. Identify existing and projected development trends, either local or regional, that could threaten or enhance the environment of the City.

## III. Regulatory Assessment

A. Identify existing and proposed state and federal regulations and mandates related to the protection or management of items identified in Section II.

B. Determine actions needed by the City to address the issues identified in A above.

C. Assess the strengths and weaknesses of existing City regulations, programs, staff and facilities to adequately address the environmental concerns discussed in Section II.

## IV. Land Use Compatibility Assessment

A. Prepare a composite map indicating environmental features or concerns determined in Section II.

B. Identify potential environmental impacts associated with particular land use types and development patterns as well as environmental limitations to development.

C. Compare existing and future land uses with the composite map prepare in A above.

D. Determine existing and potential conflicts and compatibilities between environment features in the City and existing and potential land uses in and adjacent to the City.

E. Prepare a map that highlights existing and potential conflicts and compatibilities between environmental features and land uses. This map should indicate city owned land for reference.

## V. Development Objectives and Policies

A. Develop environmental objectives based on City goals and land use compatibility assessment.

B. Prepare overall development concept for the City. This concept should define and delineate areas suitable for development by generalized land use category as well as areas appropriate for conservation, that is, where development should be discouraged due to environmental considerations or development limitations. Prepare one or more maps to illustrate this development concept. This development concept should also address the following issues:

1. Locations of Chesapeake Bay Preservation Areas
2. Appropriate development patterns for the James River shoreline.
3. Public and private access to rivers and streams.
4. Appropriate locations for water dependent uses, including commercial and recreational fishing.

C. Prepare policies for guiding development and other decisions regarding environmental features and programs within the city.

D. Prepare a development suitability matrix for specific land use types and intensities with regard to various environmental features.

## VII. Implementation Program

A. Identify specific actions for implementing the plan with associated manpower and/or cost estimates including:

1. Actions to guide or regulate development, and
2. Actions to prevent or mitigate environmental impacts through specific projects or other intervention.

B. Develop a recommended implementation program that places the actions identified in A within some priority or phasing framework.

**RICHMOND TECHNICAL ASSISTANCE**
**RESOURCE AND INFORMATION LIST**

**Council on the Environment:**

John Marling 786-4500

John will be able to help identify individuals who could provide information who might otherwise be difficult to identify or contact. Additionally, he may be able to coax and prod those agencies which might not otherwise be willing to cooperate with the data collection and planning efforts.

**Virginia Water Control Board:**

Curt Linderman 367-6435

The Water Control Board will be able to provide information regarding VPDES permits and VPA permits issued within the region. The Water Control Board will also provide copies of the water Quality Management Plans for the James River which are required by the Clean Water Act.

In addition to data being supplied regarding water quality, the board will also provide information concerning stream flow, groundwater quality and its relationship to surface water quality, dredge and fill operations and water intake points. Lastly, Mr. Linderman suggested we examine sections 205-J, 208, 303-E and 1251 of the Clean Water Act. Apparently these sections detail the type of data and analysis which must be included in water quality management plans. These sections should be reviewed for reference purposes only, but they may prove to be a valuable source for policy development.

**Virginia Department of Health:**

Morris Brown 662-9552

After speaking with Mr. Brown, it was revealed that his area of expertise was limited to water supply and waste water treatment. He indicated that this is the area in which his division could be of most help in providing informational assistance. Mr. Brown said he did not think he would be able to provide information regarding threats to the public health resulting from full body contact recreation within the James River (This could be associated with the public access issue). He also expressed an interest in serving on an advisory committee during the planning process.

**Air Pollution Control Board:**

Region Five State Capitol Region
Bob Beasly 371-3067

Mr. Beasly is the Region Five director. His office will probably be able to provide technical data concerning air quality within the region. Mr. Beasly provided information regarding three major issues confronted by this region.

1. All new major permit applications require the APCB to make pollution emission estimates for the applicant's particular type of industry. These projections are made using pollution models based on the maximum amount of emissions that could ever be expected from the industry. As such, the projections regularly indicate that pollution levels will exceed the limits established for the region. Additionally, many of the pollutants are caused by the industry burning high sulfur content oil and coal. There are currently no regulations controlling the amount of sulfur which can be present in the fuel.

2. Richmond City, Henrico and Chesterfield Counties are all non-attainment areas for ozone (organic) pollutants. In short, organic pollutants can not exceed the amounts currently present. Industries can, however, purchase from other industries, emission allowances which will allow them to increase the amount of pollutants being released. The credits offset the increased amounts. The concept is the same as transfer development rights. Apparently it has not been tested in the courts.

3. The APCB anticipates changes in the regulation of automobile emissions. These emissions appear to be one of the leading contributors to the air pollution problems being experienced by the region.

Bureau of Planning and Resource Management
Nancy Saylor 786-1249

Ms. Saylor indicated that there is no state agency with authority to address the noise pollution issue. She did, however, confirm that her department does receive numerous public inquiries regarding this topic. Because of state budget restrictions, she questioned the amount of assistance the APCB can provide to this project.

Ms. Saylor insinuated that the issue of air pollution may be one of the most difficult issues to address. The reason this is so is that all forms of air pollution can not be evaluated, and subsequently regulated, in the same manner. There are currently a variety of regulating methods in place on both the state and federal levels. Researching and analyzing all of these regulations could easily overshadow the other aspects of the plan. In short,

difficulties in addressing this issue in a meaningful manner should be expected in the scope of this particular project.

Lastly, Ms. Saylor provided the names of two individuals within the department which she feels can provide further assistance. They are:

Kirit Chaudhari
Computer Services
786-0174

Bill Parks
Director, Division of Monitoring
786-3356

**Department of Mines, Minerals and Energy:**

Rick Berquist 804-221-2448

Mr. Berquist suggested the primary sources for the geologic data should be the already published USGS Map I-2033 geologic map of the Coastal Plain Region and the soon to be published Department of Mines, Minerals and Energy geologic map of the Piedmont Region. The Piedmont Region map will contain several layers. One layer will delineate economic mineral resources throughout the region. Both the Coastal Plain and Piedmont maps will also delineate groundwater recharge zones. Mr. Berquist mentioned that many of these zones currently run a significant risk of serious contamination because of incompatible activities occurring in and around them.

Furthermore, there is a problem of radon within the Coastal Plain, however, there is not proper documentation to sufficiently address this issue in a responsible manner. The problem of radon has not been extensively studied in the Piedmont Region so Mr. Berquist suggested that those individuals who may be concerned about it begin testing their homes and documenting any problems identified. The Virginia Department of Health is the lead agency for the state dealing with radon.

Lastly, the subsidence and sinkhole issue is present within the region. Subsidence problems are usually located in Chesterfield County in the vicinity of Midlothian Village and other areas where extensive coal mining has occurred. Areas susceptible to sinkholes have not been clearly identified nor have they presented any major threats within the region. The problem is, however, present to one degree or another.

**Virginia Marine Resources Commission:**

Tony Watkinson 804-247-2255

VMRC has control over tidal wetlands and state owned submerged lands. VMRC can help to identify some likely tidal wetland areas, however, because these areas are defined by state code, they must be classified on a case by case basis. VMRC must issue permits for land disturbing activities in tidal wetlands and activities which will encroach upon state waterways (this includes both tidal and non-tidal waters). Additionally, VMRC has published informational guidelines concerning the above activities and Mr. Watkinson will send the RRPDC copies of these publications.

Lastly, VMRC is not in a position to define areas for public access and so forth, but is rather better able to react to any specific

**Virginia Department of Conservation and Recreation:**

Division of Planning and Recreation Resources
John R. Davy
203 Governor St.
Richmond, VA 23219
786-1119

Mr. Davy's office will soon be distributing base line maps which will delineate existing and potential public access points for many of the localities within the region. The City of Richmond is one of the jurisdictions for which this information has been collected and mapped. These maps will also delineate natural and cultural heritage sites located within 1/4 mile of the James River. Planning and Recreation is also about to publish a technical assistance report which will offer guidelines for siting public access facilities.

To obtain assistance from the department, it would be best to send Mr. Davy a letter of request which will briefly explain the project and outline the issues to be addressed by the department. Upon receipt of the letter, Mr. Davy will distribute the request among all the divisions within the Department of Conservation and Recreation so that all divisions will have the opportunity to respond to the request in a coordinated effort.

Division of Natural Heritage
Katie Perry
786-7951

Ms. Perry's office is the repository for information about threatened and endangered species, unique natural communities and unique geologic formations. Ms. Perry said that information may be limited to park lands due to the intense development in the City, but is very willing to assist in this project. It may be appropriate to check with her before contacting Game and Inland

Fisheries or the Bureau of Plant Protection and Control because of the overlap of information on threatened and endangered species and habitat.

**Virginia Department of Game and Inland Fisheries:**

Division of Planning and Environmental Services
Bill Neal 367-8998
Becky Wajea (pronounced Vida) 367-8351
4010 West Broad Street
Richmond, VA 23230

This office maintains the Fish and Wildlife Information System. This system identifies habitat characteristics and lists all species which are normally associated with the particular characteristic. The office also maintains locational maps pinpointing known nesting and breeding sites for endangered species. Lastly, the fish division will also be able to provide information concerning the location of fish habitats. Again, it would be best if a formal informational request to the Department was made through Ms. Wajea.
proposals.

**Department of Agriculture and Consumer Services**

Bureau of Plant Protection and Control
Marshall Trammell 786-3516

Mr. Trammell indicated there are no threatened or endangered plant species within the Richmond region. His department could, however, provide general guidelines which will help to identify the factors and activities within this region that have the potential to harm threatened or endangered species found in locations downstream.

# Richmond Regional Planning District Commission

2104 West Laburnum Avenue, Suite 101
Richmond, Virginia 23227

(804) 358-3684 • SCATS (804) 367-1546 • FAX (804) 358-5386

Town of
*Ashland*

Counties of
*Charles City*
*Chesterfield*
*Goochland*
*Hanover*
*Henrico*
*New Kent*
*Powhatan*

City of
*Richmond*


August 9, 1990

Mr. Keith Bull
Executive Director
Chesapeake Bay Local Assistance Department
805 East Broad Street, Suite 701
Richmond, VA 23219

Dear Mr. Bull:

The RRPDC staff has reviewed the latest Local Assistance Department quarterly report and finds several misleading and inaccurate statements in the report.

1. On Page 20, the quarterly report states that each Tidewater planning district commission "will receive $40,000 (in coastal zone management funds) as part of the state's ongoing commitment to staff an environmental planner in" each planning district. We are unaware of any ongoing State commitment to fund an environmental planner. These funds are allocated for coastal planning activities, not specifically to fund staff members. Richmond Regional PDC is using these funds for a host of coastal activities, including local technical assistance, environmental reviews and regional environmental planning, all part of our multi-year coastal planning program.

2. The latest written guidance from the COE states that NOAA has determined that FY 1991 coastal funds cannot be used to implement the Preservation Act. This makes any discussion of FY 1991 coastal zone management funds as a tool to implement the Preservation Act inappropriate. While there are efforts underway to integrate the Preservation Act into the Virginia Coastal Program, as discussed on page 19, we do not see how these efforts will affect the use of FY 1991 coastal funds.

3. We are puzzled over the display of funding information in the Appendix. First, all tasks for which funds were requested from the Department are not shown; only tasks the Department decided to fund, in whole or in part, are shown. A quick survey of the Richmond region shows that over one half million dollars in additional funds were requested from the Department in this region alone. The typical reader would not be aware of this discrepancy.

Second, the Department included coastal zone management funds with Preservation Act funds in the Appendix. As stated before, coastal funds cannot be used to implement the Preservation Act. In addition, the Department included coastal funds received without including the amount requested. The result of these actions is to greatly understate the true funding needs of each locality while overstating the funds available.
The information presented for Chesterfield County illustrates how misleading the report is. The typical reader would assume that the County requested $28,750 in assistance and received $40,500, over 40 percent more than requested. In actuality, the county requested approximately $228,000 from the Department and $40,000 from the coastal program. Total funding from both sources is $40,500, 17 percent of the total requested. We are concerned that misinformation such as this will be used by some to assert that the State is meeting the financial needs of local governments.

Based on the above comments, the RRPDC would like to request an amendment to the quarterly report be prepared and distributed to each individual or organization which received the report. This amendment should address the following:

1. A new appendix should be prepared which correctly indicates all funds requested from the Local Assistance Department and deletes references to coastal zone management funds.

2. A clarification should be issued regarding the federal determination that FY 1991 coastal zone management funds are not to be used to implement the Preservation Act. If coastal funds are discussed, then reference should be made to all funds requested as well as funds received.

3. The comment regarding the State's commitment to using coastal funds to place an environmental planner in each PDC should be checked and if found to be invalid, it should be retracted.

The Commission's Chesapeake Bay Regional Advisory Committee has reviewed the above recommendations. The committee believes that action should be taken now to correct the misinformation presented in the quarterly report. In addition, the Committee desires to meet with you to discuss other issues related to your new position and the Department. Larry McCarty, on my staff, will be contacting you shortly regarding such a meeting.

We look forward to working with you in the future. Please feel free to call on this agency if you need any assistance.

Sincerely,

John P. Kidd

John P. Kidd, AICP
Executive Director

JPK/rf

pc: Chesapeake Bay Local Assistance Board
Chesapeake Bay Regional Advisory Committee
Mr. Rudolph V. Jones, Chairman
Richmond Regional Planning District Commission
Mr. Larry McCarty, Director of Planning
Richmond Regional Planning District Commission

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