

**DECISION AND FINDINGS  
IN THE  
CONSISTENCY APPEAL OF THE  
VIRGINIA ELECTRIC AND POWER COMPANY  
FROM AN OBJECTION BY THE  
NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT,  
HEALTH AND NATURAL RESOURCES  
MAY 19, 1994**

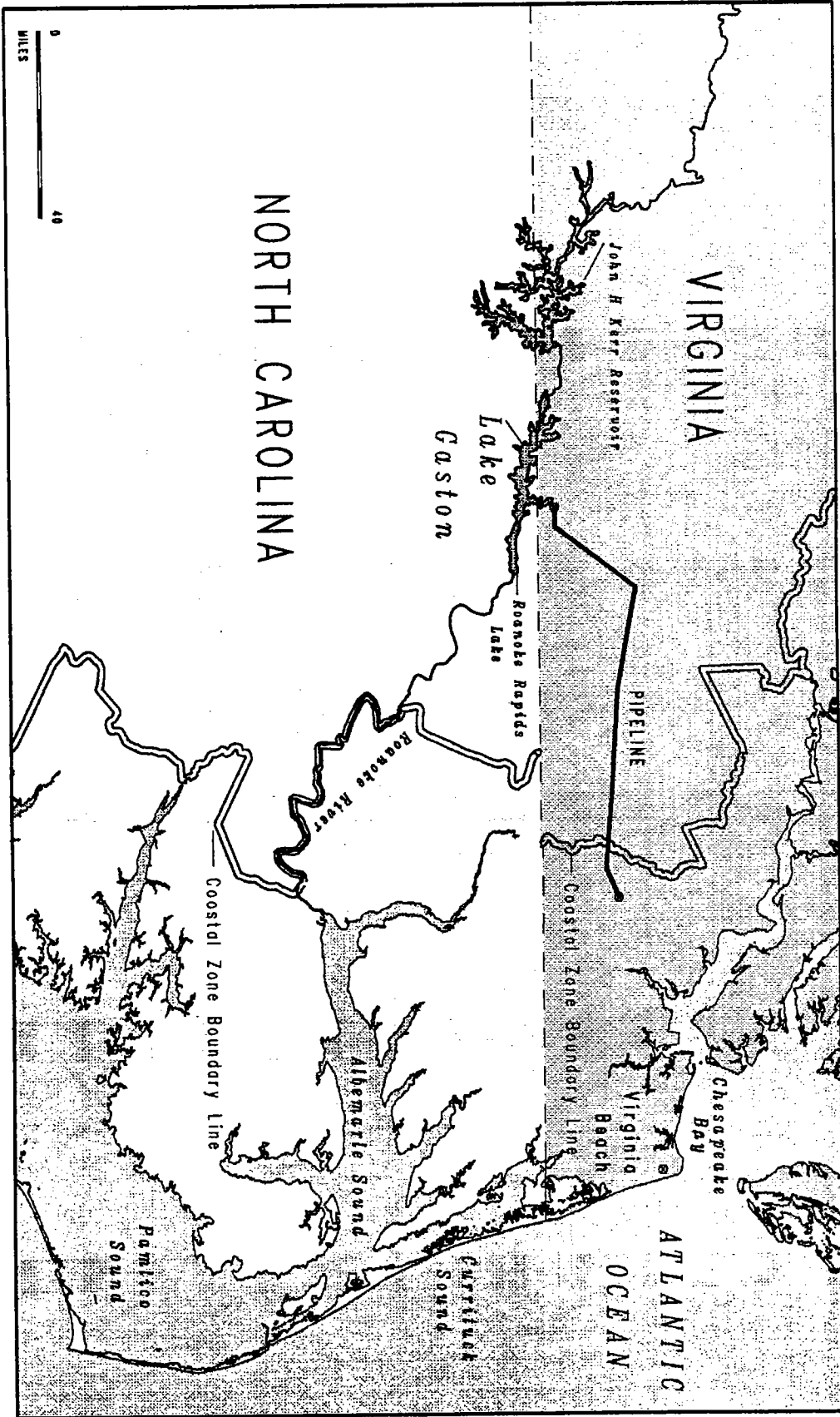


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## Executive Summary

### Introduction

The Virginia Electric and Power Company (VEPCO), on behalf of the City of Virginia Beach, Virginia, (City), has appealed to the Secretary of Commerce to override the State of North Carolina's objection to the City's proposal to withdraw water from Lake Gaston for the City's water supply needs. This issue has had a long and contentious history, and the decision was reached only after a thorough consideration of all the evidence in the record. As explained in more detail below, the Secretary overrides North Carolina's objection, thereby allowing the City to obtain federal permits to build a pipeline for the withdrawal of up to 60 million gallons a day (mgd) of water from Lake Gaston.

VEPCO's appeal arises under the Coastal Zone Management Act (CZMA), an act administered by the National Oceanic and Atmospheric Administration (NOAA), an agency within the Department of Commerce. Section 307 of the CZMA provides that any applicant for a required federal license to conduct an activity affecting any land or water use or natural resource of the coastal zone, shall provide to the permitting agency a certification that the proposed activity complies with the enforceable policies of a state's coastal zone management program.

VEPCO has requested approval from the Federal Energy Regulatory Commission (FERC) for the City's project. Because North Carolina has objected to the project, FERC may not grant a license or permit, unless the Secretary of Commerce finds that the activity is consistent with the objectives of the CZMA or is otherwise necessary in the interest of national security.

### Background

The City, located on the coast of southeastern Virginia, is the largest city in Virginia, with more than 400,000 residents. The City has no water supply of its own and, historically, has purchased all of its water from the adjacent city of Norfolk. A series of droughts plaguing southeastern Virginia over the past 15 years has caused water shortages throughout the area. In response, the City has adopted mandatory year round water restrictions and imposed a moratorium on extensions of its water system. Numerous water studies have shown that southeastern Virginia will need at least an additional 60 mgd of water by the year 2030.

More than a decade ago, after several years of study, the City embarked upon a project to withdraw potable water from Lake Gaston for the consumption of its residents and those of

neighboring cities. Lake Gaston, which lies approximately 80 miles west-southwest of the City, is a man-made lake formed by damming a portion of the Roanoke River. Lake Gaston is part of a hydroelectric project constructed in the 1950s by VEPCO, under a license granted by FERC. Lake Gaston lies partly in Virginia and partly in North Carolina. The proposed project involves the permanent, consumptive withdrawal of up to 60 mgd of water from Lake Gaston, which is the equivalent of 22 billion gallons per year.

To gain access to Lake Gaston, the City proposes to construct a pipeline. The proposed pipeline would originate in a branch of Lake Gaston in Brunswick County, Virginia, at a location approximately 400 yards north of the Virginia-North Carolina border, run 76 miles across southeastern Virginia, and end at Lake Prince in Isle of Wight County, Virginia. The proposed pipeline would be located entirely within Virginia.

In 1983, in order to construct the pipeline, the City applied to the U.S. Army Corps of Engineers (Corps) for a permit under two federal statutes, the Clean Water Act and the Rivers and Harbors Act. The Norfolk District Corps of Engineers issued the permit after conducting an environmental assessment pursuant to the National Environmental Policy Act (NEPA), and concluded that the project would have no significant environmental effects.

The State of North Carolina (State) challenged the adequacy of the Corps' NEPA review in the federal courts. A decision issued in July 1991, ultimately upheld the issuance of the Corps permit.

To install and operate its water intake facility for Lake Gaston, the City must also obtain permission from VEPCO, and VEPCO, in turn, must obtain approval from FERC. VEPCO applied to FERC on February 20, 1991, to obtain the necessary permit approval for the pipeline project. The State of North Carolina requested that the City and VEPCO submit a certification that the proposed project was consistent with North Carolina's coastal management program, a program which had been approved under the CZMA. The City and VEPCO jointly submitted such a certification.

On September 9, 1991, the State objected to the City's and VEPCO's consistency certification on the ground that the proposed project is inconsistent with several enforceable policies contained in the State's coastal management program. Specifically, the State alleged that the project is not consistent with its guidelines for estuarine waters and public trust areas because the proposed withdrawal of water would significantly increase the number of low flow days experienced by the lower Roanoke River system in coastal North Carolina. This increase, the State asserted, would cause significant adverse effects on its coastal zone, including the Roanoke River striped bass fishery.

Under the CZMA, the State's consistency objection precludes any federal agency from issuing any license or permit necessary for the City's proposed project, unless the Secretary of Commerce (Secretary) finds that the activity is either consistent with the objectives or purposes of the CZMA (Ground I) or is necessary in the interest of national security (Ground II).

On October 3, 1991, VEPCO, on behalf of the City, filed with the Secretary a notice of appeal from the State's objection to the City's proposed project. The City argued that the project satisfies both Ground I and Ground II and raised several threshold issues. On December 3, 1992, then-Secretary of Commerce Barbara Franklin, relying on a Department of Justice opinion, terminated the appeal on the basis that North Carolina lacked the authority under the CZMA to review a proposed project that would occur wholly within Virginia. In February, 1993, the Department of Justice was asked again whether its previous opinion still represented its view, and Justice responded affirmatively. Subsequently, the Department of Justice withdrew its opinion, and on January 7, 1994, the Department of Commerce reopened the appeal.

Upon consideration of the entire record, which included submittals by the City and North Carolina, written information from federal agencies and the public, and views given during a public hearing, the Secretary made the following findings.

#### Threshold Issues

##### A. Compliance With the CZMA and its Implementing Regulations

First, the City argued that the CZMA's consistency review provisions do not apply because VEPCO has not applied for a required federal license or permit. According to the CZMA, the City must first have applied for a federal license or permit in order to trigger the State's right to lodge a consistency objection. The Secretary found that because the regulatory definition of the term "license or permit" includes federal agency approvals, and because FERC approval is required for the project, VEPCO has applied for a required federal license or permit.

Second, the City argued that the CZMA's consistency review provisions do not apply because the proposed project is not an activity "affecting any land or water use or natural resource of the coastal zone." The Secretary found that there was enough evidence in the administrative record to establish that the State had made a prima facie showing of effects on the coastal zone.



Third, the City argued that the consistency review provisions of the CZMA do not apply because the policies cited by the State in its objection letter do not constitute "enforceable policies." The Secretary found that because the policies cited by the State are legally binding and provide the State with the authority to control land and water uses and natural resources in its coastal zone, they are enforceable policies as defined in the CZMA.

B. Interstate Consistency

The CZMA encourages coastal states to establish management plans for protecting their coasts from environmental damage. A threshold issue raised by the City is whether, under the CZMA, a state (North Carolina) has a right to review, i.e., comment on and possibly object to, a federally licensed or permitted activity occurring totally within another state (the Lake Gaston project in Virginia). The purpose of the review would be to determine if the activity has negative effects on the coastal environment of the reviewing state (North Carolina). This issue is referred to as "interstate consistency."

First, the City argued that the Corps of Engineers previously decided, in a 1984 application for a permit related to the proposed project, that the CZMA does not allow one state to review activities in another state, and that the Secretary is therefore precluded from considering this issue. The Secretary found that because the Corps' permit findings did not include a decision on whether the CZMA authorizes interstate review, he was not precluded from considering the issue.

Second, the State argued that the project partially occurs in North Carolina, and thus does not involve interstate consistency. The Secretary concurred with former Secretary Franklin's decision that this project occurs wholly in the Commonwealth of Virginia, where the pipeline will be built and where the extraction of the water will occur.

Third, the City argued that interstate consistency review is not authorized pursuant to the CZMA. Based upon the plain language of the CZMA and its legislative history, the Secretary found that the CZMA authorizes one state to review for consistency with its federally approved coastal management program activities which, although occurring totally within the boundaries of another state, affect any land or water use or natural resource of the coastal zone of the reviewing state.

C. Conclusions Regarding Threshold Issues

The Secretary determined that threshold issues raised by Virginia Beach and the State of North Carolina did not preclude him from considering the merits of this case.

Ground I: Consistent with the Objectives or Purposes of the CZMA

To find that the proposed activity satisfies Ground I, the Secretary must determine that the project satisfies all four of the elements specified in the regulations implementing the CZMA (15 CFR § 930.121). If the project fails to satisfy any one of the four elements, it is not consistent with the objectives or purposes of the CZMA and federal licenses or permits may not be granted. The four elements of Ground I are:

1. The proposed activity promotes one or more of the competing national objectives or purposes contained in the CZMA.
2. The proposed activity's individual and cumulative adverse effects on the coastal zone are outweighed by its contribution to the national interest.
3. The proposed activity will not violate any requirements of the Clean Water Act or the Clean Air Act.
4. There is no reasonable alternative available that would provide the 60 mgd of water needed in southeastern Virginia in a manner consistent with the State's coastal management program.

The Secretary made the following findings with regard to Ground I:

1. The proposed project will foster development of the coastal zone and coastal zone resources, and thus furthers more than one of the objectives or purposes of the CZMA.
2. The proposed project's individual and cumulative adverse effects on the coastal zone are outweighed by its contribution to the national interest.

While the record shows that the project's effects on water flow in the Roanoke River will have individual and cumulative adverse effects on striped bass, those effects will likely be small. The record shows that the project's effects on water quality will be minimal, and will minimally affect striped bass. The record shows that the project's effects on coastal wetlands and on other coastal resources and uses will be minimal.

The proposed project will contribute significantly to the national interest because it will allow the beneficial use of water resources of the coastal zone. Providing potable water for human consumption to a major metropolitan area constitutes a very high priority use among all beneficial uses of water. The record shows that the project will contribute significantly to the national interest because of the extent to which it will further and support economic development in the coastal zone, and the extent to which it will alleviate southeastern Virginia's projected water deficit.

In sum, although the project will affect the Roanoke River striped bass fishery, as well as other coastal resources and uses, the evidence shows that the individual and cumulative adverse effects of the project are outweighed by the national interest contribution of alleviating the City's water supply shortage and encouraging economic development.

3. The proposed project will not violate the Clean Water Act or the Clean Air Act.

4. There are no reasonable alternatives available which would permit the project to be conducted in a manner consistent with the State of North Carolina's coastal management program. The proposed alternatives failed for one or more reasons. The State failed to describe some alternatives with sufficient specificity. Some alternatives were unreasonable, i.e., environmental advantages of the alternative did not outweigh the increased cost of the alternative over the proposed project. Finally, some alternatives were found to be unavailable either because of technical or legal barriers or because an alternative did not meet the primary purpose of the project, which is to provide up to 60 mgd of additional water to southeastern Virginia.

## Ground II: Necessary in the Interest of National Security

Although southeastern Virginia is home to the largest naval complex in the world, the record demonstrates that there would be no significant impairment to a national defense or other national security interest if the City's project is not allowed to go forward as proposed. Therefore, the Secretary found that the requirements of Ground II have not been met.

## Conclusion

The Secretary found that the proposed project is consistent with the objectives or purposes of the CZMA (Ground I). Accordingly, the proposed project may be issued the necessary permits by federal agencies.

## GLOSSARY OF ABBREVIATIONS AND SHORT NAMES

AEC	Area of Environmental Concern
APES	Albemarle-Pamlico Estuarine Study
AR	Administrative Record
ASBCA	Atlantic Striped Bass Conservation Act
ASMFC	Atlantic States Marine Fisheries Commission
ASR	aquifer storage recharge
Board	North Carolina Striped Bass Study Management Board
CAA	Clean Air Act
CAMA	Coastal Area Management Act
CBOD	carbon biological oxygen demand
cfs	cubic feet per second
City	of Virginia Beach
CLUP	City of Virginia Beach Comprehensive Land Use Plan
Corps	Corps of Engineers
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DOJ	Department of Justice
DOS	Department of State
DUS	Deputy Under Secretary for Oceans and Atmosphere
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESBS	Emergency Striped Bass Study
FERC	Federal Energy Regulatory Commission
Flow Committee	Roanoke River Water Flow Committee
FOIA	Freedom of Information Act
FONSI	Finding of No Significant Impact
FWS	Fish and Wildlife Service
mgd	million gallons per day
mg/L	milligrams per liter
MIF	Minimum Instream Flow
1971 MOU	Memorandum of Understanding for Reregulation of Augmentation Flows for Fish from John H. Kerr Reservoir, 1971
NCCMP	North Carolina Coastal Management Plan and Final EIS, 1978, as amended
NCDCM	North Carolina Division of Coastal Management (a Division of NCDEHNR)
NCDEM	North Carolina Division of Environmental Management (a Division of NCDEHNR)
NCDMF	North Carolina Division of Marine Fisheries (a Division of NCDEHNR)
NCDNRCD	North Carolina Department of Natural Resources and Community Development (now NCDEHNR)
NCDEHNR	North Carolina Department of Environment, Health and Natural Resources (formerly NCDNRCD)

NCDWR	North Carolina Division of Water Resources (a Division of NCDEHNR)
NCGS	North Carolina General Statutes
NCWRC	North Carolina Wildlife Resources Commission
ND	Norfolk District Corps of Engineers
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRC	National Research Council
NSC	National Security Council
OCRM	Office of Ocean and Coastal Resource Management
RRBA	Roanoke River Basin Association
SEA	Supplemental Environmental Assessment
SOF	Statement of Findings
SSOF	Supplemental Statement of Findings
Secretary	Secretary of Commerce
State	State of North Carolina
US	Under Secretary for Oceans and Atmosphere
USGS	United States Geological Survey
VDEQ	Virginia Department of Environmental Quality (formally VSWCB)
VDOH	Virginia Department of Health
VDNR	Virginia Department of Natural Resources
VMRC	Virginia Marine Resources Commission
VEPCO	Virginia Electric and Power Company/Virginia Power
VMRC	Virginia Marine Resources Commission
VSWCB	Virginia State Water Control Board (now VDEQ)
WD	Wilmington District Corps of Engineers
1Q10	Lowest one-day average flow (or release) expected to occur in ten years
7Q10	Lowest seven-day average flow (or release) expected to occur in ten years

## **I. BRIEF SUMMARY**

Pursuant to the Coastal Zone Management Act (CZMA), I have been asked to override the objection of the State of North Carolina to the City of Virginia Beach's proposal to construct a pipeline to withdraw water from Lake Gaston, an artificial lake that lies partly in Virginia and partly in North Carolina. North Carolina objects to this project as being inconsistent with its CZMA coastal management program. Under the CZMA, federal permits required for the project may only be issued if I, the Secretary of Commerce, find that: (1) the activity is consistent with the objectives or purposes of the CZMA (Ground I), or (2) the activity is necessary in the interest of national security (Ground II).

Under Ground I, I find that the project is consistent with the objectives or purposes of the CZMA, and accordingly may be federally permitted. Specifically, I find that the project satisfies all four elements required under Ground I of the CZMA: (1) it furthers one or more of the national objectives or purposes of the CZMA; (2) its individual and cumulative adverse effects on the coastal zone are outweighed by its contribution to the national interest; (3) it will not violate any of the requirements of the Clean Air Act or the Clean Water Act; and (4) there is no reasonable alternative available that would permit the proposed activity to be conducted in a manner consistent with North Carolina's coastal management program.

Under Ground II, I find that the project is not necessary in the interest of national security based upon my evaluation of comments by interested parties, including agencies of the Defense Department. Only one of the two Grounds for a Secretarial override need be satisfied, however, in order for the project to be federally permitted.

In making these findings: 1) I reject Virginia Beach's contention that North Carolina had no authority to review the Lake Gaston project because that project is to take place solely within Virginia; 2) North Carolina had standing under the plain terms of the CZMA to review the project since the project affects North Carolina's coastal zone; and 3) the CZMA employs an effects test as the basis for a state's consistency review, regardless of a project's location.

## **II. FACTUAL BACKGROUND**

The City of Virginia Beach (City), located on the coast of southeastern Virginia, is the largest city in Virginia, with more

than 400,000 residents.<sup>1\*</sup> The City has no water supply of its own and, historically, has purchased all of its water from the adjacent City of Norfolk.<sup>1</sup> A series of droughts plaguing southeastern Virginia over the past 15 years has caused water shortages throughout the area.<sup>2</sup>

In response, the City has adopted mandatory year-round water restrictions and imposed a moratorium on extensions of its water system.<sup>3</sup> More than a decade ago, after several years of study, the City also embarked on a project to withdraw potable water from Lake Gaston for the consumption of its residents and those of neighboring cities.<sup>4</sup>

Lake Gaston lies approximately 100 miles west-southwest of Virginia Beach. (Figure 1.) Lake Gaston is a man-made lake formed by damming a portion of the Roanoke River, and is part of a hydroelectric project constructed in the 1950s by the Virginia Electric and Power Company (VEPCO),<sup>2\*</sup> under a license granted by the Federal Energy Regulatory Commission (FERC).<sup>5</sup> Lake Gaston lies partly in Virginia and partly in North Carolina, straddling the border between the two states.<sup>6</sup>

To gain access to the lake, the City proposes to construct a pipeline originating in a branch of Lake Gaston in Brunswick County, Virginia, at a location approximately 400 yards north of the Virginia-North Carolina border.<sup>7</sup> The pipeline would run 76 miles across southeastern Virginia and end at Lake Prince, a reservoir located in Isle of Wight County, near Virginia Beach.<sup>8</sup> The pipeline would be located entirely within Virginia.<sup>9</sup> The proposed project would withdraw up to 60 million gallons of water per day (mgd), which is the equivalent of 22 billion gallons per year.<sup>10</sup>

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<sup>1\*</sup> I have considered all of the evidence in the record in this appeal. Because of the size of the record, much of the material appears in footnotes and endnotes to this decision. Footnotes are indicated by a number, followed by an asterisk (\*). Endnotes are indicated by a number only.

A complete list of the administrative record is appended at Attachment A. The administrative record (AR) consists of all AR cites, Reconsideration AR cites (documents relating to North Carolina's request for reconsideration) and Supplemental AR cites (documents relating to the briefs and appendices filed after the record was reopened).

<sup>2\*</sup> VEPCO, which is now a subsidiary of Dominion Resources, is now known as Virginia Power. The majority of references in the administrative record use the term "VEPCO," so I use that term in this decision in order to avoid any potential confusion.

Virginia Beach has a few neighboring jurisdictions as partners in the proposed pipeline project. The City of Chesapeake has a contractual right to one-sixth (10 mgd) of the water drawn.<sup>11</sup> The City of Franklin and Isle of Wight County each has a right to 1 mgd.<sup>12</sup> Thus, Virginia Beach would have access to 48 mgd for its own use.

The proposed project has had a long and contentious history. Although state and local officials of both Virginia and North Carolina have discussed water management issues affecting the region since the 1970s, these officials have never been able to achieve a consensus.<sup>13</sup> Over the past decade, as the City has attempted to obtain the various permits required to construct and operate the pipeline, it has encountered strong opposition from North Carolina, which has argued, in part, that the withdrawal of the water will harm North Carolina's coastal resources and uses.<sup>14</sup>

In 1983, in preparation for constructing the pipeline, the City applied to the U.S. Army Corps of Engineers (Corps) for a permit<sup>15</sup> under two federal statutes, the Clean Water Act<sup>16</sup> and the Rivers and Harbors Act.<sup>17</sup> The Norfolk District Corps issued the permit<sup>3\*</sup> pursuant to the requirements of both acts, after conducting an environmental assessment which concluded that the project would have no significant environmental effects.<sup>18</sup>

Five days before the Corps issued the permit, North Carolina (the State) intervened, asking the Corps to require the City to submit to a "consistency" review pursuant to the Coastal Zone Management Act (CZMA).<sup>19</sup> The CZMA is a federal statute that encourages states to develop coastal management programs, and allows states to object to the issuance of federal permits for activities inconsistent with those programs.<sup>20</sup> "Federal consistency" is the term used to describe the mechanism by which a state reviews federal or federally permitted or funded projects to determine

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<sup>3\*</sup> While the City's permit application was being processed by the Corps, the Corps was completing a nine-year congressionally mandated study of water supply needs and sources for the Hampton Roads, Virginia area. See Norfolk District Corps of Engineers Water Supply Study, Hampton Roads, Virginia, Feasibility Report and Final Environmental Impact Statement, December, 1984, (1984 Water Supply Study), Appellants' Initial Brief App. III, at 1706, et seq., AR 11. The Corps issued its final report and an Environmental Impact Statement (EIS), pursuant to NEPA, in December 1984. Id.; Appellants' 2/15/94 Brief, App. Vol 1, Tab 32, at 15, fn. 5, Supplemental AR 6. The EIS recommended a project similar to the City's proposed project as an environmentally sound proposal among several alternatives reviewed by the Corps. Id.



whether they are consistent with the state's coastal management program. The Corps determined that a review by North Carolina for consistency with its state coastal program was not required for the Corps permit at issue.<sup>21</sup>

North Carolina subsequently challenged the adequacy of the Corps' environmental review in federal district court.<sup>22</sup> The published opinions in that litigation are part of the public record in this appeal.<sup>23</sup> The court, in a decision issued in July 1991, ultimately upheld the issuance of the Corps permit.<sup>24</sup>

Having obtained the Corps permit, the City sought permission from VEPCO to install and operate its water intake structure in Lake Gaston.<sup>25</sup> The City needed VEPCO's permission because VEPCO operates the lake, and owns the adjacent property.<sup>26</sup> Further, VEPCO's FERC license provides that VEPCO may not transfer any interests in the property without prior FERC approval.<sup>27</sup>

Accordingly, in February 1991, VEPCO applied for FERC approval to transfer easements to the City for the construction, operation and maintenance of the project and withdrawal up to 60 mgd of water per day from Lake Gaston.<sup>28</sup> VEPCO filed for the FERC approval on behalf of Virginia Beach because only the hydropower licensee, VEPCO, may file such an application with FERC.<sup>29</sup>

After VEPCO submitted the application to FERC, North Carolina notified VEPCO that it would review the City's proposed project to ensure it was consistent with North Carolina's coastal program.<sup>30</sup> The City and VEPCO submitted the required certification,<sup>4\*</sup> and the State objected to it.<sup>31</sup> In its objection letter, North Carolina stated that the proposed project is inconsistent with several of its coastal program policies.<sup>32</sup> Specifically, the State alleged that the proposed withdrawal of water from Lake Gaston would increase the number of days of reduced water flow in the lower Roanoke River system in coastal North Carolina, thereby causing significant damage to the State's coastal zone resources, including the Roanoke River striped bass fishery.<sup>33</sup> The State recommended that the City obtain the water from another source.<sup>34</sup>

According to the CZMA, which is administered by the National Oceanic and Atmospheric Administration (NOAA), an agency within the Department of Commerce, the State's objection precludes FERC from issuing its approval for the activity unless the Secretary of Commerce finds that the activity is either consistent with the

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<sup>4\*</sup> It is the position of both VEPCO and the City that federal consistency does not apply in this matter. Appellants' Initial Brief at 5-6. Accordingly, the City submitted the consistency certification under protest. Id.

objectives or purposes of the CZMA (Ground I), or necessary in the interest of national security (Ground II).<sup>35</sup>

### III. APPEAL TO THE SECRETARY OF COMMERCE

After North Carolina notified Virginia Beach that it objected to the proposed project, VEPCO, on behalf of the City,<sup>5\*</sup> filed a notice of appeal with then-Secretary Barbara Franklin on October 3, 1991, asking Secretary Franklin to override the State's objection.<sup>36</sup>

As provided by its regulations, NOAA asked federal agencies<sup>6\*</sup> and the National Security Council (NSC) to present their views regarding the merits of the appeal.<sup>37</sup> The majority of the 15 agencies contacted and the NSC filed comments. In addition to the briefs and supporting documentation provided by the City and the State, Secretary Franklin also received comments from the Governors of Virginia and North Carolina, congressional representatives, local public officials, various interest groups and the general public.<sup>38</sup> It is the practice of the Secretary of Commerce to consider carefully all comments in the record, in addition to the pleadings filed by the objecting state and the project's proponent.<sup>39</sup>

During the course of this appeal, the City filed with Secretary Franklin a motion for the expeditious termination of the review process for lack of jurisdiction.<sup>40</sup> The motion was based on an opinion of the U.S. Department of Justice (Justice) that the CZMA

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<sup>5\*</sup> During the course of this appeal, the City was granted the status of intervenor. Letters of Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, Department of Commerce, to Arnold H. Quint, Esquire, Samuel Brock, III, Esquire, and Alan S. Hirsch, Esquire, April 3, 1992, AR 80. While the City and VEPCO joined in submitting briefs for this appeal, the information and analysis provided in those briefs were apparently prepared by the City. See Appellants' Initial Brief at 2. I will refer to arguments made in those briefs as those of the City.

<sup>6\*</sup> Comments were solicited from the Department of Justice, Department of Defense, Department of the Treasury, Department of State, Department of Transportation, Department of Energy, Department of the Interior, Fish and Wildlife Service, National Park Service, Minerals Management Service, Environmental Protection Agency, Federal Energy Regulatory Commission, National Marine Fisheries Service, Army Corps of Engineers and the Coast Guard. Although the National Marine Fisheries Service is a component of NOAA, which is an agency of the Department of Commerce, for purposes of consistency appeals it is treated as any of the agencies from which comments are solicited.

does not authorize a state to object to a project located wholly within another state.<sup>41</sup> On December 3, 1992, Secretary Franklin granted the City's motion for termination.<sup>42</sup> Secretary Franklin found that the proposed activity would occur wholly in Virginia, and, deferring to an opinion she had requested from Justice, found that North Carolina lacked the authority to object to the City's consistency certification.<sup>43</sup> Following Secretary Franklin's decision to terminate the appeal, FERC resumed processing VEPCO's application.<sup>44</sup>

On February 3, 1993, the State asked me to reconsider Secretary Franklin's decision, arguing in large part that the decision was politically motivated and lacked merit.<sup>45</sup> I directed the Department of Commerce General Counsel to ask Justice whether its previous opinion still represented its view. Justice responded in the affirmative, and based on that opinion, I denied the State's request.<sup>46</sup>

On September 2, 1993, the State filed suit in the U.S. District Court for the District of Columbia, asking that Secretary Franklin's termination of the appeal, and my refusal to reconsider, be set aside as arbitrary and capricious and unsupported by legal authority.<sup>47</sup> The City intervened as a defendant in that action.<sup>48</sup>

On December 14, 1993, then-Associate Attorney General Webster Hubbell withdrew the Justice opinion that interstate consistency review is not authorized by the CZMA.<sup>49</sup> Instead, he stated that the issue of interstate consistency (i.e., whether one state has a right to review an activity occurring in another state to ensure that it is consistent with its own plan) should be decided by the Secretary of Commerce, who has the statutorily assigned responsibilities for administering the CZMA.<sup>50</sup> Following Associate Attorney General Hubbell's withdrawal of the Justice opinion, I sought and obtained the opinion of NOAA,<sup>51</sup> which advised that, the earlier Justice opinion having been withdrawn, the Department of Commerce should revert to the original NOAA interpretation that interstate consistency is authorized by the CZMA.<sup>52</sup> I fully accepted NOAA's recommendation. On January 7, 1994, the Department of Commerce reopened the appeal.<sup>53</sup>

Before proceeding with my determination of whether the grounds for a Secretarial override have been satisfied, I now examine threshold issues raised by the parties, based on all relevant information in the administrative record.

#### **IV. THRESHOLD ISSUES**

In accordance with prior consistency appeals, I have not considered whether the State was correct in its determination

that the proposed activity was inconsistent with its coastal management program.<sup>54</sup> Rather, the scope of my review<sup>55</sup> of the State's objection is limited to determining whether the objection was properly lodged, i.e., whether the State complied with the requirements of the CZMA and implementing regulations in filing its objection.<sup>56</sup>

**A. Compliance with the CZMA and its Implementing Regulations**

The City has raised certain threshold issues related to whether the State's objection complies with the requirements of the CZMA.<sup>57</sup> The City argues that because certain key provisions of the CZMA do not apply to the proposed pipeline project, the project is not subject to consistency review.

In sum, the City asserts that the State has failed to prove that: (1) VEPCO has applied for a required federal license or permit; (2) the proposed pipeline project will affect any land or water use or natural resource of North Carolina's coastal zone; and (3) the policies cited by the State are enforceable. I address each of the City's arguments in turn.

**1. The City argues that because VEPCO has not applied for a federal license or permit the right to review is not triggered.**

According to the CZMA, the City must first have applied for a federal license or permit in order to trigger the State's right to review an activity for consistency purposes.<sup>58</sup> The City contends that VEPCO has not applied for any such required federal license or permit.<sup>59</sup> The City admits, however, that VEPCO, on the City's behalf, must obtain FERC's approval to transfer easements to the City.<sup>60</sup> NOAA regulations define the term "license or permit" to include approvals.<sup>61</sup> Nonetheless, the City argues that these regulations should not be given effect because they exceed the authority of the CZMA.<sup>62</sup>

I reject the City's argument. NOAA's consistency regulations constitute a reasonable interpretation of the term "license or permit" and thus are entitled to substantial deference.<sup>63</sup> In addition, Congress has endorsed the regulations at issue.<sup>64</sup> NOAA's interpretation is also consistent with other federal statutes, including the Administrative Procedure Act, which define the term "license" to include agency approvals.<sup>65</sup> Therefore, I find NOAA's regulations interpreting the term "license or permit" to include approvals are valid and should be given effect. Because the City admits that FERC approval is

required for the project at issue, I find that VEPCO has applied for a required federal license or permit.

**2. The City argues that the activity will not affect any land or water use or natural resource of North Carolina's coastal zone.**

The City contends that the proposed pipeline project will not affect any land or water use or natural resource of the coastal zone of North Carolina, and therefore the State's objection should be dismissed.<sup>66</sup> In response, the State argues that at least three federal agencies and several state agencies have stated that the proposed project will have significant and highly detrimental effects on North Carolina's coastal zone.<sup>67</sup>

Based on my review, I find that there is substantial evidence in the administrative record of the proposed project's effects on the coastal zone. This evidence, which includes comments by the various federal and state agencies that have reviewed the project, establishes that the State has made a prima facie showing of effects on its coastal zone. I therefore find that the City's argument fails. (The threshold case for environmental effects having been made, I will consider the specific effects of the project under Element 2 of Ground I.<sup>68</sup>)

**3. The City argues that the policies cited by the State are not "enforceable."**

For a state policy to be enforceable under the CZMA, a state must be able to enforce the policy under state law with respect to private and public land and water uses and natural resources in its coastal zone.<sup>69</sup> The City contends that the policies cited by the State do not constitute "enforceable policies" applicable to the City's project.<sup>70</sup> Specifically, the City argues that the State's objection letter identifies numerous general goals and objectives contained in its coastal management program that are not "enforceable policies" as that term is defined by the CZMA.<sup>71</sup> Further, the City argues that even the policies cited by the State that are enforceable do not apply to the project because those policies only apply to permits for development in Areas of Environmental Concern (AEC)<sup>72</sup> in the State, and the City's project is not located in such an area.

Contrary to the City's contention, I find that the policies cited by the State constitute "enforceable policies" and that those policies apply to private and public projects located within the State's coastal zone, both within and outside AECs. First, with regard to private projects located within AECs, I find that the AEC and General Policy Guidelines, and the enforcement provisions of the State's Coastal Area Management Act (CAMA) cited by the State, can be enforced through the permitting system established

by CAMA.<sup>73</sup> Further, for private activities occurring outside of AECs but within the coastal zone of North Carolina (including activities that affect AECs), classified in the State's coastal management program as critical uses, the State can enforce the cited AEC and General Policy Guidelines through direct state regulation under existing State regulatory programs.<sup>74</sup>

Second, with regard to public projects within the coastal zone, I find that the AEC and General Policy Guidelines are binding under state law pursuant to CAMA and State Executive Order.<sup>75</sup> Interested private persons may bring judicial action to enforce the Executive Order's requirements.<sup>76</sup>

Finally, with respect to both private and public projects within the coastal zone, the cited policies can be enforced through the injunctive and civil and criminal penalty provisions of CAMA.<sup>77</sup>

Therefore, because the policies cited by North Carolina are binding under state law and provide the State with the authority to control private and public land and water uses and natural resources in its coastal zone (both within and outside AECs), I find that they constitute enforceable policies under the CZMA.<sup>78</sup>

In sum, the record demonstrates that the State has complied with the requirements of the CZMA and its implementing regulations for properly lodging an objection.<sup>79</sup> Specifically, I find that the State has proven that (1) VEPCO has applied for a required federal license or permit; (2) the proposed activity will affect land or water uses or natural resources of North Carolina's coastal zone; and (3) the policies cited by the State are enforceable under the CZMA.

#### **B. Interstate Consistency**

The second threshold issue raised by the City is that of interstate consistency. As discussed earlier, the Coastal Zone Management Act (CZMA) encourages coastal states to establish management plans for protecting their coasts from environmental damage. "Federal consistency" is the term used to describe the mechanism by which a state can review federal activities, including federally licensed or permitted activities, to determine whether they are consistent with the state's coastal management program. The issue raised by the City is whether, under the CZMA,<sup>80</sup> a state (North Carolina) has a right to review, i.e., comment on and possibly object to, a federally licensed or permitted activity occurring totally within another state (the Lake Gaston pipeline in Virginia) in order to determine if the activity has negative effects on the coastal environment of the reviewing state (North Carolina). This issue is referred to as "interstate consistency."

The two parties have raised three issues regarding interstate consistency. First, Virginia Beach argues that interstate consistency is not authorized by the CZMA. Thus, North Carolina cannot review the Lake Gaston project even if that activity affects its coastal zone, because the project is located in Virginia.<sup>81</sup> Contrarily, North Carolina believes that interstate consistency is authorized by the CZMA and that it can therefore review the Lake Gaston project if that project affects its coastal zone. Second, in addition to asserting that North Carolina has no right to review activities occurring outside its borders, the City also asserts that I am precluded from considering the interstate consistency issue because that issue was already decided when the Corps considered Virginia Beach's application for a permit related to this project.<sup>82</sup> Finally, the State argues that whether interstate consistency is authorized does not have to be reached in this case because the project occurs within its own borders and thus is not an interstate application of federal consistency.<sup>83</sup> Several non-party commentators submitted comments to me in this appeal supporting the positions of both North Carolina and Virginia Beach on the issue of interstate consistency.<sup>84</sup>

I will address these arguments in the following order:

- 1) the City's argument on preclusion;
- 2) the State's argument regarding the location of this project; and
- 3) whether the CZMA authorizes interstate consistency.

**1. Is the Secretary precluded from considering whether the CZMA authorizes interstate consistency review?**

The City argues that I am precluded from even considering the issue of whether the CZMA authorizes interstate consistency, because, the City claims, the Army Corps of Engineers (Corps) previously decided the issue in its 1984 findings on a permit related to this project. The Corps stated in those findings that a consistency certification from North Carolina was not required for the permit at issue. The City argues that the Corps' determination forecloses any consideration of whether the CZMA authorizes one state to review for consistency the activities of another state. The basis for precluding further consideration, the City argues, is the legal doctrine of res judicata.<sup>85</sup>

The term "res judicata" means that a matter has already been decided. The doctrine provides that if a judgment on the merits of a case has been reached in a prior suit or administrative action, the matter cannot be argued again in a later action.<sup>86</sup>

North Carolina counters the City's res judicata argument by asserting that while the Corps did state in its 1984 findings that consistency certification was not required for the permit at issue, that statement did not necessarily rest on a finding that the CZMA does not authorize interstate consistency. Indeed, the State argues, the Corps' findings did not even mention interstate consistency.<sup>87</sup>

The Corps did not, in its findings on the City's permit, specifically state a reason for denying North Carolina's request to review the project for consistency.<sup>88</sup> There are several reasons, other than interstate consistency, why the Corps might have denied consistency review. For example, the Corps stated in a letter that a consistency certification from North Carolina was not required for another Corps approval related to this project, because the action at issue there did not directly or significantly affect the coastal zone of North Carolina.<sup>89</sup> In the same letter, the Corps also stated that it believed that North Carolina's request for review failed to meet certain procedural deadlines.

I find that there is not enough evidence in the record to determine why the Corps decided that a consistency certification from North Carolina was not required for the 1984 permit. Therefore, the doctrine of res judicata does not apply and I may consider the issue of interstate consistency.<sup>90</sup>

## **2. Does this project occur in Virginia only, or in both Virginia and North Carolina?**

The State argues that the project does not involve interstate consistency because the project will occur in both North Carolina and Virginia. That is to say, the State argues that I need not decide whether it has a right to review an activity occurring in another state, because the activity is also occurring within its own borders. The State asserts that the largest part of the reservoir is in North Carolina, and that the removal of water from Lake Gaston is itself part of the project.<sup>91</sup> In contrast, the City argues that the project will occur totally within the state of Virginia, but concedes that there may be only minimal effects in North Carolina.<sup>92</sup>

This is a question of first impression for a consistency appeal decision. In practice, however, NOAA has considered projects to be occurring at the site where the physical activity required for the project takes place, i.e., the site of construction, the site of a discharge pipe, or the site of dredging and disposal of dredged material. This is true even for projects affecting water bodies shared by two or more states, as evidenced by NOAA's handling of several past consistency appeals (which were withdrawn for other reasons before decisions were reached).<sup>93</sup>



The State has, however, confused the effects of the project with the location of the project. If the FERC permit is issued, the City will be granted easements to allow it to build a pipeline and intake pipe in Virginia, from which it will extract water from the Virginia portion of Lake Gaston.

The State's request would, in effect, have me determine as a threshold matter that because the pipeline may cause detrimental effects in North Carolina, the project therefore occurs in North Carolina, and thus it can be reviewed without implicating interstate consistency. Like former Secretary Franklin, I decline to accept this argument.<sup>94</sup> A project does not "occur" in a state merely because its effects might be felt there. I concur with Secretary Franklin's decision that "the proposed activity will occur wholly within the boundaries of the Commonwealth of Virginia."<sup>95</sup>

Having made this threshold determination, I will, however, subsequently consider the effects of the pipeline when I balance the effects against the national interest in the project. The project's effects are thoroughly considered in Element 2 of Ground I of this decision.

**3. Does the CZMA authorize one state to review for consistency with its coastal management program an activity occurring totally within another state?**

Having decided that 1) I am not precluded from considering whether interstate consistency is authorized and 2) this project is occurring totally within Virginia, I now turn to the larger issue of whether interstate consistency review is authorized by the CZMA. I have reviewed the entire record and, as explained below, find that, based on the plain meaning of the statute and the legislative history of the Act, interstate review is authorized by the CZMA. Thus, in this appeal the State can review the Lake Gaston project, although it occurs totally within Virginia.

a. Plain Meaning of the Statute

Interpretation of any statute begins with the plain language of that statute.<sup>96</sup> The CZMA, as amended by the 1990 Coastal Zone Act Reauthorization Amendments (hereinafter CZARA),<sup>97</sup> makes it clear that Congress meant to place no geographical boundaries upon the states' use of federal consistency.

Two terms are particularly significant for purposes of my examination of the plain meaning of the CZMA: "affect" and "that state." At issue regarding the word "affect" is whether an activity occurring totally within one state, which will affect the coastal zone of another state, can be reviewed for

consistency by the state that will be affected. Section 307(c)(3)(A) of the CZMA reads, in pertinent part:

After final approval by the Secretary of a state's management program, any applicant for a required federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. (emphasis added).<sup>98</sup>

The fact that Congress used the term "in or outside of the coastal zone" to describe activities "affecting" the coastal zone indicates that the only test for determining whether a state can review a federal activity for consistency is whether that activity affects the reviewing state's coastal zone.<sup>7\*</sup> In other words, the focus is not on the activity's location, but rather on its effects. The activity's location is irrelevant to the analysis of the activity's effects on the coastal zone. "Affecting" is the limiting factor in this section of the CZMA, not political and/or geographical lines.

The second significant term for purposes of my analysis is "that state." The section cited above provides that an applicant for a federal permit for an activity affecting the coastal zone of "that state" shall provide a consistency certification. The City argues that the term "that state" refers only to the state in which the activity is being conducted (in this case, Virginia), and therefore, the statute does not authorize interstate consistency review.<sup>399</sup>

I decline to adopt the City's narrow reading of "that state." Rather, I find that the more reasoned approach to interpreting the term is to refer to the beginning of the sentence, where the term "state" is first used. The sentence begins with the phrase, "After final approval of a state's coastal management program, any applicant...." Reading this phrase in conjunction with the

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<sup>7\*</sup> Use of the word "affecting" along with the term "in or outside of the coastal zone" clarifies that the test for determining whether a state can review a federal activity for consistency is whether that activity impacts on the reviewing state's coastal zone. The geographical location of the activity itself is irrelevant to this determination. "In or outside the coastal zone" is modified by the clause "affecting any land or water use or natural resource of the coastal zone."

use of the term "that state" later in the sentence convinces me that "that state" refers to any state with an approved coastal zone management program. This is consistent with the legislative history and the policies and purposes of the CZMA discussed below.

Therefore, based on the plain language of the statute, I find that the CZMA authorizes interstate consistency review.

b. Additional Statutory Arguments

The City also argues that allowing interstate consistency review would diminish states' "jurisdiction, responsibility, [and] rights" regarding water resources.<sup>100</sup> It asserts that North Carolina, by its objection to the City's consistency determination, uses a federally delegated authority in an area that should be left to the state of Virginia.<sup>101</sup> This argument erroneously suggests that the CZMA gives a state with a federally approved coastal management program direct authority over activities occurring within another state.

While the CZMA does not give one state direct authority to control activities in another state, the CZMA does grant to states with federally approved coastal management programs the right to seek conditions on or prohibit the issuance of federal permits and licenses that would "affect" their state.<sup>8\*</sup> Thus, Congress has, in effect, granted to states with a federally approved coastal management program, in exchange for their protecting the nation's coasts, the right to ensure that federal permittees and licensees will not further degrade those coasts. The ability to prevent the granting of federal permits and licenses is a federal authority which has been granted to coastal states, not a state authority which has been usurped from the states.<sup>102</sup> However, as a safeguard to a state's unrestrained use of this authority, an applicant can, as the City has, appeal for an override by the Secretary of Commerce.

The City has also advanced the argument that Congress has by adding the term "enforceable policies" to section 307 of the CZMA limited a state's review to the geographical area where, under state law, the reviewing state's enforceable policies are in effect.<sup>103</sup> Thus, the City argues that the definition of

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<sup>8\*</sup> While the statute speaks only in terms of a federal agency not granting a permit 1) unless the state has concurred with the applicant's consistency determination or 2) the state's objection has been overridden by the Secretary, the effect in the vast majority of instances is to bring the applicant and the state to the table to discuss and work out conditions that make the requested federal permit acceptable to the state.

enforceable policies limits a state's objection to activities occurring within the reviewing state because that is the only place the reviewing state's enforceable policies would have effect under state law.

The City's interpretation of "enforceable policies" is incongruous with the language of section 307. Where possible, one must read various parts of a law consistently; and one must read the term "enforceable policies" in the context of the section in which it appears. As discussed above, in its 1990 amendments to section 307, Congress explicitly clarified that federal consistency under section 307 applies to activities both "in and outside" a state's coastal zone. It is thus illogical that Congress meant to limit this explicit recognition of the broad scope of federal consistency review merely by using the term "enforceable policies."

Furthermore, the City's argument is contrary to the spirit of the CZMA provisions enacted by Congress. By granting states the authority to review federal licenses and permits, Congress has deliberately given states broader authority than they would otherwise have. Similarly, Congress also made clear that enforceable policies included in a state's federally approved coastal management plan should apply, through federal consistency, to activities occurring both "in and outside" of the coastal zone. Congress thereby ensured the broadest possible protection for federally sanctioned activities that might harm a state's coastal zone.<sup>104</sup>

Finally, at the same time that Congress added the term "enforceable policies" to section 307, it made it clear that the amendments to sections 307(c)(3)(A) and (B) were made "solely for the purpose of conforming these existing provisions with the changes to section 307(c)(1) made to overturn the [Secretary of Interior v. California<sup>105</sup>] Supreme Court decision" and "to codif[y] the existing regulatory practice [15 C.F.R. 930.39(c) and 930.58(a)(4).]".<sup>106</sup> Thus, the term "enforceable policies" should not be construed to change NOAA's long-standing position that the CZMA authorizes interstate consistency.<sup>107</sup>

I find, therefore, that contrary to the City's contention, the addition of the term "enforceable policies" in the 1990 CZARA amendments does not preclude interstate consistency review.

### c. Legislative History

While I have found that the plain language of the CZMA supports interstate consistency, the parties have extensively quoted the legislative history of the CZMA to support their positions. Before addressing their arguments, a review of some of this history may be instructive.

As mentioned above, on May 2, 1989, Timothy R.E. Keeney, then General Counsel of NOAA, issued a legal opinion<sup>9\*</sup> concluding that interstate consistency is authorized by the CZMA (See Attachment B). That opinion gives a long and thorough legislative and regulatory history<sup>10\*</sup> of the CZMA on this issue. In 1992, after the CZMA was amended, NOAA General Counsel Thomas Campbell again reviewed this issue in light of the amendments and concluded, after a thorough review of the legislative history of the amendments, that the amendments "confirm that the 'affects' test of the CZMA consistency provision is not subject to geographic limitation." Campbell Opinion, August 4, 1992 I thoroughly agree with that conclusion and hereby incorporate that opinion by reference. (See Attachment C)

d. Comparison to Clean Water Act and Clean Air Act

The City argues that the CZMA does not apply to interstate situations<sup>108</sup> because, unlike the Clean Air Act (CAA) and the Clean Water Act (CWA), the CZMA does not have an explicit mechanism for resolution of interstate disputes.<sup>109</sup> Contrary to the City's claim, the CZMA, although not containing a provision labeled specifically as an interstate dispute mechanism, does

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<sup>9\*</sup> Congress, in the CZMA, has authorized the Secretary of Commerce to implement the CZMA. (See CZMA, § 304(16)). The Secretary, as discussed previously, has in turn delegated, with the exception of authority for making consistency appeal decisions, implementation of the CZMA to the Under Secretary of NOAA (Department of Commerce Organization Order 10-15), who has further delegated that authority. Therefore, actions by NOAA in implementing the CZMA are done pursuant to lawfully delegated authority from the Secretary.

<sup>10\*</sup> The regulatory history, as discussed extensively in the Timothy Keeney opinion, shows that NOAA, the agency delegated the authority to implement the CZMA, has consistently, when promulgating regulations, expressed the position that interstate consistency is authorized under the CZMA. Keeney Opinion at 9 - 15. The regulations implementing the CZMA presently include, at 15 C.F.R. section 930.53(b), a method for states, in their coastal management programs, to indicate their intent to review for consistency activities occurring in areas outside of their coastal zone where the reviewing state believes the activities are likely to affect their coastal zone. As noted above, another way for a state to review an activity outside its coastal zone, including in another state, is to request permission of OCRM to review the activity as an unlisted activity. 15 C.F.R. 930.54.

have a general method for addressing disputes, including interstate disputes.

The CWA and CAA require that an activity in one state be consistent with the policies of a neighboring state if there will be effects in the neighboring state.<sup>110</sup> If the activity is inconsistent, those statutes prohibit the activity without a finding by the Administrator of EPA that the activity is permissible. Likewise, under the CZMA, a federal agency is prohibited from issuing a license in the face of a state's consistency objection unless the Secretary of Commerce decides that, despite the state's objection, the activity is consistent with the objectives of the CZMA (Ground I) or otherwise necessary in the interest of national security (Ground II).<sup>111</sup> Input from neighboring states is allowed under all three statutes.<sup>112</sup>

Further, the CWA and CAA regulatory schemes are distinguishable from that of the CZMA. Pursuant to the CAA and CWA, the federal government establishes minimum national standards and the states are granted authority to achieve those standards through their laws and policies. Because one state's actions under those laws could prevent a neighboring state from achieving the minimum federal standards, states are given the ability to review the laws and policies of other states.

The CZMA envisions a different type of federal/state partnership. There are no national standards under the CZMA. Instead, because of the unique coastal resources of each state, the CZMA encourages each state to develop its own standards, with enforceable policies, to implement the policies and goals of the Under the CZMA States do not have the ability to review other State's (laws and policies or the object to approvals granted under those state laws.) There is no delegation of federal authority for the development of those programs. However, as discussed above, a type of federal authority is granted to the states in that states are able to review federal actions, such as the granting of federal permits and licenses, for consistency with their state programs.

Thus, I find that while there are important differences between the regulatory schemes of the CZMA and the CWA and CAA, Congress provided resolution mechanisms for interstate conflicts under all three acts. For CZMA section 307(c)(3)(A) conflicts, Congress provided Secretarial override of a state's objection as a mechanism for resolution of a state's objection.

#### Conclusion for Interstate Consistency

For the reasons stated above, including the plain language of the statute and legislative history, I find that the CZMA authorizes North Carolina to review for consistency with its federally

approved coastal management program Virginia Beach's proposed Lake Gaston project, although that activity occurs totally within Virginia, if that project affects any land or water use or natural resource in North Carolina's coastal zone.

Further, a proper reading of the policies and goals of the CZMA supports my conclusion. Congress enacted the CZMA in order to more effectively protect the nation's coasts by encouraging states to exercise their full authority over the lands and waters of the coastal zone, both for the state and for the national interest.<sup>113</sup> This congressional objective is expressed in a number of policies in the CZMA.<sup>114</sup>

To implement these policies, states were encouraged to develop management plans for their coasts which were to give "full consideration to ecological, cultural, historic, and esthetic values as well as the needs for compatible economic development...."<sup>115</sup>

The City's view that interstate consistency is not authorized under the CZMA is a narrow interpretation of the CZMA that would thwart or make incomplete the implementation of CZMA policies. Just as the beauty of the coast knows no boundaries, neither does the ecology of the coast, nor the threats to the coast.<sup>116</sup> An interpretation that restricts consistency review to the state where the activity is taking place undermines the policies of the CZMA by eliminating states' abilities to consider transboundary effects on their coastal zones.

It is difficult to believe that if Virginia thought its coastal zone was being threatened by an activity requiring a federal license or permit occurring in a neighboring state, it would not at that point appreciate the ability, pursuant to the CZMA, to review that activity for consistency with Virginia's coastal management program. One's view of using the CZMA in an interstate situation will often depend on where one stands in the particular matter under consideration.

#### **V. GROUNDS FOR OVERRIDING A STATE OBJECTION**

Having found that North Carolina's objection was properly lodged, I now examine the grounds provided in the CZMA for overriding the State's objection. I will override North Carolina's objection if I find that the City's proposed project is consistent with the objectives of the Coastal Zone Management Act (CZMA) (Ground I), or otherwise necessary in the interest of national security (Ground II).<sup>117</sup>

The four elements of Ground I are:

1. The proposed activity promotes one or more of the competing national objectives or purposes contained in

the CZMA.<sup>118</sup>

2. The proposed activity's individual and cumulative adverse effects on the coastal zone are outweighed by its contribution to the national interest.<sup>119</sup>
3. The proposed activity will not violate the Federal Water Pollution Control Act (Clean Water Act) or the Clean Air Act.<sup>120</sup>
4. There is no reasonable alternative available that would permit the proposed activity to be conducted in a manner consistent with the State's coastal management program.<sup>121</sup>

To find that the proposed activity satisfies Ground I, I must determine that the activity satisfies all four of the above elements.<sup>122</sup> If the project fails to satisfy any one of the four elements, I must find that the project is not consistent with the objectives or purposes of the CZMA. To find that the proposed activity satisfies Ground II, I must determine that a national defense or other national security interest would be significantly impaired if the activity were not permitted to go forward as proposed.<sup>123</sup>

The City based its appeal on both Ground I and Ground II. I will address each of these grounds, in turn.

**A. Ground I: Consistent with the Objectives or Purposes of the CZMA**

**1. Element 1: Activity Furthers One or More Objectives of the CZMA**

To satisfy Element 1 of Ground I, I must find that the proposed activity fosters one or more of the competing national objectives or purposes contained in the Coastal Zone Management Act (CZMA).<sup>124</sup> I find that the proposed project fosters more than one of the objectives and purposes of the CZMA, and therefore Element 1 is satisfied.

Congress has broadly defined the national interest in coastal zone management to include both the protection and the development of the coastal zone and coastal resources.<sup>125</sup> In past consistency appeal decisions, the Secretary has found a wide range of activities that satisfy these competing goals.<sup>126</sup>

The City of Virginia Beach (City) argues that Element 1 is clearly satisfied because the proposed project readily meets the CZMA goals of development and protection.<sup>127</sup> The City's primary arguments are that the water will be used for human consumption, which represents a highly beneficial use<sup>128</sup> and that the



resulting development includes coastal-dependent uses, i.e., those uses dependent on coastal resources.<sup>129</sup>

North Carolina (State), on the other hand, argues that the City seeks only to use and consume, not develop, coastal resources,<sup>130</sup> and that the project is not coastal-dependent, contrary to the City's claim.<sup>131</sup>

Most of the public comments contained in the administrative record did not specifically address the objectives defined in the CZMA. Comments supporting the project generally concurred that the activity would protect and develop the coastal zone and resources, particularly given the need for a reliable source of potable water.<sup>132</sup> Comments opposing the project generally protested that the activity would promote unmitigated growth, distinguishable from the kind of judicious development contemplated by the CZMA.<sup>133</sup>

I am not persuaded by the State's argument that the proposed project may be characterized only as a use and consumption, and not a development, of resources. To the contrary, the proposed activity involves supplying water for human consumption in the southeastern Virginia coastal zone, which is necessary in order to sustain the quality of life, as well as future economic growth and development.

The State's argument that the City's proposed project is not coastal-dependent is similarly unpersuasive. The State relies upon previous consistency appeal decisions that held that non-coastal-dependent projects, particularly residential construction, do not promote the national interest and objectives of the CZMA.<sup>134</sup> However, those previous decisions involved limited residential projects, which are readily distinguishable from the activity under consideration in this case.<sup>135</sup> This appeal involves a proposal for a safe and sufficient municipal water supply for the southeastern Virginia coastal region. While the proposed project is not itself a coastal-dependent use, it will indirectly promote the development of coastal and non-coastal-dependent uses in the southeastern Virginia coastal zone.

I am persuaded by the evidence in the record that the City's project will foster development of both the coastal zone and coastal resources in southeastern Virginia, and will thereby indirectly promote coastal-dependent uses in the region. The CZMA recognizes development as one of the competing uses of the coastal zone and its resources.<sup>136</sup> Any negative impacts or reasonably foreseeable future harm from that development are more properly considered under Element 2 of Ground I, rather than under this element.<sup>137</sup>

The proposed project need only promote one of the competing national objectives or purposes of the CZMA. I have found that the proposed activity fosters more than one of these objectives or purposes. The proposed activity satisfies Element 1 of Ground I.

2. **Element 2: The Activity's Individual and Cumulative Adverse Effects on the Coastal Zone are Outweighed by Its Contribution to the National Interest**

In order for the City of Virginia Beach (City) to satisfy this element, I must find that the proposed project's adverse effects on the coastal zone are outweighed by the project's contribution to the national interest.<sup>138</sup> To do so, I must first determine what adverse effects the project will have on the coastal zone and what the project will contribute to the national interest.<sup>139</sup> I then balance to see whether the project's adverse effects outweigh the national interest contribution.

I conclude that the project will have some adverse effects on the coastal zone, but that those effects are outweighed by the project's beneficial contribution to the national interest. Accordingly, the project satisfies Element 2 of Ground I.

The record contains a voluminous amount of information pertinent to the Element 2 analysis. Sources of information include comments from the public, the City and the Virginia Electric and Power Company (VEPCO), the State of North Carolina (State), federal agencies, the Roanoke River Water Flow Committee and the North Carolina Striped Bass Study. In addition, the record contains comments on the U.S. Army Corps of Engineers' (Corps') and the Federal Energy Regulatory Commission's (FERC's) NEPA analyses of the City's project,<sup>140</sup> and information on the more general issue of water resource needs. While the record contains many comments directed at other agencies for other purposes, these comments are relevant to the extent they assist my CZMA analysis of the project.

This case comes before me because North Carolina is concerned about the effects of the project on its coastal resources and uses. The Commonwealth of Virginia did not object to the project's effects on its own coastal zone. The CZMA requires, however, that I look at the project's effects on the relevant portions of the coastal zone within both North Carolina and Virginia.

a. **Adverse Effects on Coastal Resources and Uses**

The adverse effects of the proposed project must be analyzed both in terms of the project itself, and in terms of its cumulative

effects.<sup>141</sup> That is, I must look at the project in combination with other past, present and reasonably foreseeable future activities affecting the coastal zone.<sup>142</sup>

The adverse effects that North Carolina and other commentators allege will result from this project fall generally into four categories. The discussion of each of these adverse effects is centered on water flows in the Roanoke River. Because an understanding of the factors influencing water flows is crucial to understanding the adverse effects discussion, I have divided my discussion on adverse effects into five sections:

1. Roanoke River Water Flow Implications
2. Fishery Resources and Uses
3. Water Quality
4. Wetlands
5. Other Resources and Uses

#### 1. Roanoke River Water Flow Implications

**I conclude that the project will not substantially affect Roanoke River water flows.**

The Roanoke River follows the boundary of North Carolina's coastal zone for a distance and flows into the Albemarle Sound, in North Carolina's coastal zone. (Figure 1.) In addition to contributing to the system's biological habitat, uses of Roanoke River water include agricultural, municipal, and industrial purposes.<sup>143</sup> Over time, the competition for this water has increased.

The river has a regulated, and highly variable, water flow.<sup>11\*</sup> The flow is largely controlled by the operation of three impoundments: Kerr Reservoir, Lake Gaston, and Roanoke Rapids Reservoir.<sup>144</sup> The Corps controls Kerr Reservoir, the largest impoundment.<sup>145</sup> Lake Gaston and Roanoke Rapids Reservoir are controlled by FERC through its license to VEPCO. VEPCO and the Corps increase water releases from this three-reservoir system for a limited period each year, primarily for the benefit of striped bass, which travel up the river every year to spawn.

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<sup>11\*</sup> The lowest average annual flow on record is 3,095 cubic feet per second (cfs) in 1981, and the highest average annual flow is 13,220 cfs in 1979. The overall average river flow is about 8,100 cfs.

These increases in water flow are known as "flow augmentation regimes," or "flow regimes,"<sup>12\*</sup> and they are discussed in greater detail in the section on Fishery Resources and Uses.

In 1971, the Corps and VEPCO entered into a Memorandum of Understanding (1971 MOU) with the North Carolina Wildlife Resources Commission (NCWRC) providing for a 51-day flow regime.<sup>146</sup> Under the 1971 MOU, the Corps and VEPCO increased water flow for the benefit of striped bass for about 51 days each year, generally between April 26 and June 15.

In 1988, the Roanoke River Water Flow Committee (Flow Committee), a committee of state and federal agency representatives and university scientists, negotiated an experimental 76-day flow regime, which calls for increased water flow between April 1 and June 15. The Corps and VEPCO agreed to implement the experimental 76-day flow regime through the year 2000. This 76-day flow regime includes minimum, maximum, and target flows for striped bass.<sup>147</sup>

In 1993, the NCWRC recommended extending the 76-day flow regime by two weeks, creating a 90-day flow regime, which would run from April 1 to June 30.<sup>148</sup> Although the Corps and VEPCO have not formally agreed to implement the proposed 90-day regime, they have informally indicated that they will provide the additional flows when possible in order to provide the full 90 days of increased river flow.<sup>149</sup>

As stated above, I must evaluate the effects of the City's project in combination with other reasonably foreseeable activities affecting the coastal zone. I am persuaded that it is reasonably foreseeable that the Corps and VEPCO will implement the proposed 90-day flow regime. I have evaluated the impacts of the City's project in the context of the Corps' and VEPCO's implementation of the 51-day, the 76-day, and the 90-day flow regimes.<sup>150</sup>

I must note, however, that other factors may disrupt the flow augmentation regime in any given year. The Corps and VEPCO implement flow augmentation regimes subject to the limitations of the weather and hydropower demands. The Corps has not guaranteed that any of these flow augmentation regimes can be met under

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<sup>12\*</sup> The record of this appeal contains recommendations to the Corps and FERC that the City's project be evaluated against different flow augmentation regimes as a part of a NEPA analysis. Any conclusion I may reach as to the foreseeability of the Corps' and VEPCO's implementation of a particular flow regime is unrelated to whether a particular flow regime is necessary for Roanoke River resource management.

flood or drought conditions.<sup>151</sup> In extremely wet or extremely dry years, the Corps will attempt to meet the flow regime as well as possible,<sup>152</sup> but there is no guarantee that these flow regimes can be met in certain weather situations. In addition, these regimes cannot be met when VEPCO experiences severe power shortages. Thus, regardless of whether the City's project proceeds or not, the Corps' and VEPCO's commitment to provide specified striped bass flows is limited.

While the significance of the City's proposed withdrawal increases as the river flow decreases, I am nonetheless persuaded that the proposed withdrawal is small in the context of river flows. The withdrawal is 0.9 percent of the natural variation, and 1.2 percent of the average annual flow.<sup>153</sup> According to a study, flow measurements are considered to have an accuracy of no better than five percent.<sup>154</sup> Thus, at times, actual flow measurements would not even detect the withdrawal. The Corps found the amount of the proposed withdrawal insignificant.<sup>155</sup>

The State, however, alleges that the project would significantly increase the number of minimum low flow days in the Roanoke River.<sup>156</sup> The record lacks evidence to support this allegation. In 1983, North Carolina modeled the effects of a 60 mgd withdrawal<sup>157</sup> and stated that it found that a withdrawal of that size would have fairly minor effects on stream flow.<sup>158</sup> The State does not appear to have conducted any further modeling since that time.

The withdrawal is also small in comparison to augmented flows. Augmented flows, which I described above, are increased water flows released by the Corps and VEPCO for a certain number of days each year primarily for the benefit of striped bass. The various regimes that have been used or proposed involve releasing extra water for 51 days, 76 days, or 90 days.<sup>159</sup> The City modeled the effects of the project against both the 51-day and the 76-day flow augmentation regimes, and concluded that the increase in low flow days will be minimal.<sup>160</sup> The City found that a 60 mgd withdrawal would cause, at worst, 26 additional minimum flow days in 78 years.<sup>161</sup> The City also asserts that its Kerr Reservoir storage, as explained below, would provide complete mitigation if the Corps and VEPCO implement the proposed 90-day flow augmentation regime.<sup>162</sup>

Even though the City's proposed withdrawal is relatively small, the City will take mitigation measures to assist in maintaining the minimum augmented flows. The City will "store" extra water in Kerr Reservoir, which the Corps will release to replace any lost days of augmented flow that would otherwise be caused by the City's project.<sup>163</sup> No mitigation will be provided, however, if the river flow is already below the minimum required striped bass level. That is to say, the City's stored water will not be used

to compensate for lost days of augmented flow not caused by the City's project, such as lost days due to drought or hydropower demands. As stated above, the Corps' and VEPCO's commitment to provide specified striped bass flows is limited.

I am persuaded that the City's modeling adequately accounted for reasonably foreseeable future withdrawals of Roanoke River water.<sup>164</sup> The significance of the City's proposed withdrawal increases as competition for water increases. The evidence indicates that withdrawals of Roanoke River water are predicted to increase into the next century, although the precise increase is speculative.<sup>165</sup> The North Carolina Striped Bass Study Management Board (Board)<sup>166</sup> noted the range of predictions of increased future total water use and/or cumulative consumption in the Roanoke River basin,<sup>167</sup> and characterized the variation in predictions as slight.<sup>168</sup> In addition, the impact of other future withdrawals above Roanoke Rapids Dam on coastal resources and uses will be buffered by releases of impounded water.<sup>169</sup>

In summary, given the uncontroverted evidence in the record of the effects of the City's project on river flows, I am persuaded that the significance of the City's withdrawal is small in relation to river flows. The project will not affect the flows VEPCO must release under its hydropower license. The project will have minimal effects on augmented flows provided by the Corps and VEPCO under the 51-day, 76-day and 90-day flow regimes.<sup>170</sup> The City's modeling adequately accounted for reasonably foreseeable withdrawals of Roanoke River water.

Finally, the weight of evidence in the record indicates that the effects of the City's proposed withdrawal diminish further downstream as other water flows into the river, either from the downstream watershed or from Albemarle Sound.<sup>171</sup> I am persuaded that the project will have insignificant effects on water levels of the river at its mouth, because those levels are greatly influenced by water levels in Albemarle Sound.

## 2. Fishery Resources and Uses

**I conclude that the project will likely have small effects on the Roanoke River striped bass fishery, and that the project will not affect other Roanoke River fisheries.**

The Roanoke River/Albemarle Sound recreational and commercial fisheries represent a significant coastal zone resource. One of the principal fisheries is the anadromous striped bass fishery. In addition to the striped bass fishery, the Roanoke River/Albemarle Sound supports other fisheries, including largemouth bass, shad, catfish, perch and various sunfishes.<sup>172</sup> This ecosystem also supports a commercial shellfish industry. The health of these organisms depends on their physical

environment, including water flow and water quality. I turn now to the effects of the proposed project on the striped bass, the shortnose sturgeon, and other fisheries.

North Carolina has alleged that the proposed activity will adversely affect the Roanoke River fisheries,<sup>173</sup> and the striped bass fishery in particular. Among other things, the State alleges that the reduction in water flow will:

- harm the striped bass by interfering with spawning and by interfering with downstream transport of striped bass larvae and their zooplankton food supply.
- adversely affect fish nursery areas in the lower Roanoke and Albemarle Sound estuary.
- adversely affect wetlands which will in turn affect coastal fisheries.
- adversely affect water quality which will in turn hurt the fisheries.<sup>174</sup>

In this section, I consider only the State's first two arguments. The project's effects on water quality and wetlands are considered in the next two sections.

The Roanoke River population of striped bass has significantly declined for many years.<sup>175</sup> Pollution, overfishing,<sup>176</sup> and the operation of the reservoirs are the major contributors to this decline.<sup>177</sup> Striped bass depend on water flow and water quality in the Roanoke River<sup>178</sup> especially during pre-spawning, spawning, and post-spawning periods.<sup>179</sup> The striped bass rely less on Roanoke River water flow when they are at the mouth of the river or in Albemarle Sound.

As I discussed above, the Corps and VEPCO adjust the amount of water flowing in the Roanoke River for the benefit of striped bass. The current 76-day and the proposed 90-day augmented flow regimes were designed to include minimum, maximum, and target flows, in order to eliminate flow extremes. There is evidence that both high and low flows could harm striped bass. Augmented flow regimes are important in this appeal because when water is withdrawn from the river, as the City proposes to do, that withdrawal could conceivably reduce the ability of the Corps and VEPCO to provide these augmented flows, which might in turn affect striped bass. Therefore, the effects of the City's project on striped bass must be evaluated in light of these regimes.

The State has alleged that the City's project will harm striped bass by reducing the water flow in the river. While there appears to be a consensus that high water flows harm striped bass reproduction, the effects of low flows are a matter of some disagreement.<sup>13\*</sup> Some authorities, including the Roanoke River Water Flow Committee (Flow Committee), which includes representatives from two federal resource agencies [National Marine Fisheries Service (NMFS), and the Fish and Wildlife Service (FWS)], have concluded that low flows adversely affect Roanoke River striped bass.<sup>180</sup> The evidence in this appeal indicates that the low flows are one of the many contributors to the decline of striped bass.

The City and the Corps take issue with the conclusions drawn by NMFS, FWS, and North Carolina on the effects of low flow on striped bass. In 1988, the Corps found no correlation between low flows and the decline of the striped bass fishery.<sup>181</sup> While much of the work done by the Corps predates later studies contained in this record, I have considered the Corps' findings to the extent they are relevant to the issues in this appeal. The City, for its part, asserts that the decline in the striped bass population is attributable to overfishing, not water flows, and that the relationship between low water flows and striped bass repopulation is weak.<sup>182</sup>

The evidence does not support the City's argument that low water flows do not affect striped bass. I am persuaded by the work of the Flow Committee and the North Carolina Striped Bass Study Management Board, and by other information in the record, that reduced water flow adversely affects the striped bass fishery.

I therefore conclude that the City's project will have individual and cumulative adverse effects on striped bass when they are in the Roanoke River. The effects will be strongest at times of low flow. While the precise effects of the City's project on striped bass are unclear, I am persuaded by the evidence in the record, including reports from the Corps<sup>183</sup> and a team of outside experts convened by NMFS in 1990,<sup>184</sup> that the individual and cumulative effects will likely be small in the context of minimal flows, average flows, and striped bass needs.<sup>14\*</sup>

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<sup>13\*</sup> High river flows are those flows greater than about 10,000 cfs and low flows are those flows less than about 4,000 cfs.

<sup>14\*</sup> As I will discuss in greater detail in the section on water quality, the record indicates that the project's indirect effects on fisheries through effects on water quality, including dissolved oxygen concentrations, saltwater intrusion and temperature, are minimal.



In particular, the evidence indicates that the City's mitigation will assist in maintaining augmented flows for striped bass.<sup>185</sup> As discussed above in the section on river flows, the City will store water in Kerr Reservoir, which the Corps will release to eliminate the loss of any days of augmented flow caused by the City's project. The City states that even if the Corps and VEPCO implement the longer, 90-day augmented flow regime discussed in the section above, this stored water would provide complete mitigation.<sup>186</sup> Therefore, I am persuaded that with mitigation, the effects of the City's project on striped bass augmented flows under each of the three flow regimes discussed in the above section will be infrequent.

The project will have its greatest effects on river flows at times outside the augmented flow periods, when flows near the minimum set by FERC's hydropower license to VEPCO. At those times, however, the striped bass are expected to be at the river's mouth or in Albemarle Sound.<sup>187</sup> As previously discussed, the project will only minimally affect water levels at the river's mouth, because those levels are greatly influenced by water levels in Albemarle Sound. Therefore, I am persuaded that the activity will have minimal effects on water levels in the fish nursery areas in the lower Roanoke River basin and Albemarle Sound estuary.<sup>188</sup>

I have also considered the proposed project's effects on fish other than the striped bass. The record indicates that shortnose sturgeon, a federally listed endangered species, are found historically in North Carolina. I am persuaded by the evidence in the record that the shortnose sturgeon will not be affected by the City's project. Neither NOAA nor the Fish and Wildlife Service indicated that it is reasonably foreseeable that the project will affect this species.<sup>189</sup>

The City's project could also affect other fish though a decline in water flow. One report suggests that relative abundance has declined for many Roanoke River/Albemarle Sound fisheries, including white perch, yellow perch, blueback herring, channel catfish, striped mullet, and American eel.<sup>190</sup> Federal resource agencies, however, have expressed few specific concerns about Roanoke River fisheries other than the striped bass. It has been stated that, unlike the striped bass, other species are not restricted to spawning in the Roanoke River.<sup>191</sup>

One effect of the project will be to limit future Roanoke River fishery management options. The diminution in options will, however, be small, given the relatively small size of the water withdrawal in comparison to river flows and fishery needs.

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temperature, are minimal.

Increasing demands on the Roanoke River water supply will surely increase the competition among its uses, including resource protection. The river contains a limited amount of water, which must be allocated to competing uses, including natural resource management, hydropower, flood control, and agricultural, industrial, and municipal uses. Effective resource management will continue to require responsible choices and cooperation among resource managers and users.

In sum, reduced water flow in the Roanoke River will adversely affect striped bass, and the City's project will have individual and cumulative effects on striped bass when they are in the Roanoke River. These effects will, however, likely be small, and fish species other than striped bass will not be adversely affected by the City's project. Finally, the project will limit, to a small extent, future Roanoke River fishery management options.

### 3. Water Quality

**I conclude that the project will minimally affect Roanoke River water quality.**

Roanoke River resources and users of Roanoke River water depend on adequate water quality.<sup>15\*</sup> The State asserts that the project would exacerbate water quality problems in the lower Roanoke River Basin,<sup>192</sup> which would in turn hurt striped bass and other downstream resources.<sup>193</sup>

The evidence in the record indicates that the water quality of the lower Roanoke River is generally good,<sup>194</sup> with the exception of dissolved oxygen concentrations near the river's mouth at certain times of the year. The North Carolina Division of Environmental Management (NCDEM), the Flow Committee, the North Carolina Striped Bass Study Management Board and NMFS have stated that at certain times of the year, the lower river suffers from low dissolved oxygen concentrations, and is at its capacity to assimilate wastes.<sup>195</sup> This evidence also persuades me that low river flows in the Roanoke River adversely affect water quality.<sup>196</sup>

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<sup>15\*</sup> Water quality parameters may be physical (e.g., dissolved oxygen, temperature, Ph, conductivity, salinity, turbidity), chemical (e.g., nitrates, nitrites, phosphates, metals, organic compounds), or biological (e.g., chlorophyll *a*, phytoplankton, bacteria). Some of the information in the record of this appeal discusses water temperature and salinity separate from water quality. For the purposes of this appeal, I am considering those comments within the context of water "quality."

The City asserts that the lower Roanoke River is not at its assimilative capacity, and disputes the findings of the Flow Committee and North Carolina Striped Bass Study on river flows and water quality.<sup>197</sup> I recognize that there is disagreement as to the effects of low river flows on water quality.<sup>198</sup> Nevertheless, I am persuaded by the weight of the evidence in the record, including statements by the NCDEM, the Flow Committee and the North Carolina Striped Bass Study, that low flows affect Roanoke River water quality.

The record shows that diminished water quality adversely affects the striped bass fishery. Striped bass have been contaminated by dioxin pollution near Welch Creek.<sup>199</sup> In addition, striped bass suffer from changes in river temperature as well as inadequate concentrations of dissolved oxygen at certain times of the year when they are at the river's mouth or in Albemarle Sound.<sup>200</sup>

The City's project would have some effect on water quality through the removal of water which would otherwise influence the physical and chemical characteristics of downstream water.<sup>201</sup> However, the evidence in the record persuades me that the City's proposed project will have minimal effects on water quality,<sup>202</sup> which will in turn minimally affect striped bass. As indicated above, the City's withdrawal is small in relation to river flows and striped bass needs. Moreover, the record shows that the project will only minimally affect the problems of assimilative capacity and dissolved oxygen.<sup>203</sup> Similarly, the City's project will have minimal effects on other water quality problems near the river's mouth, such as dioxin pollution,<sup>204</sup> saltwater intrusion,<sup>205</sup> and increased temperature.<sup>206</sup>

In summary, due to the location and nature of the water quality problems, and their corresponding effects on striped bass, a 60 mgd withdrawal will have minimal individual and cumulative water quality effects. In making this finding, I have considered the cumulative impacts of the project, and I have considered that the project will have its greatest impacts on Roanoke River water quality during times of low flow.

#### 4. Wetlands

**I conclude that the project will minimally affect Virginia and North Carolina coastal wetlands.**

The relevant coastal areas in North Carolina and Virginia contain significant wetlands. In North Carolina, coastal wetlands border the Roanoke River before it flows into Albemarle Sound. The Roanoke River National Wildlife Refuge protects many of these wetlands. In Virginia, the pipeline will cross wetlands as it enters the coastal zone, and wetlands are located near the

pipeline terminus at Lake Prince. In addition, coastal wetlands are located near Virginia Beach.

The State asserts that the proposed project will have substantial adverse impacts on wetlands in North Carolina and in Virginia.<sup>207</sup> Within the North Carolina coastal zone, the State alleges that the water withdrawal will affect wetlands in the lower Roanoke River. Within Virginia, the State alleges that the pipeline construction will affect wetlands at the Lake Prince (Ennis Pond Channel) terminus.<sup>208</sup> The State also asserts that a foreseeable cumulative effect of the proposed project would be development of the southern half of Virginia Beach, an area that contains thousands of acres of wetlands.<sup>209</sup> The State asserts that development in this area could degrade the local wetlands.<sup>210</sup>

Upon reviewing the record of this appeal, and in light of my prior analyses of river flow implications and water quality, I am persuaded that the project will have minimal wetlands impacts, which will in turn minimally affect striped bass.<sup>211</sup> In making this finding I have considered the comments of relevant federal and state resource agencies. I will first address wetlands impacts in the North Carolina coastal zone, and then wetlands impacts in the Virginia coastal zone.

Through the removal of water from the Roanoke River, less water will be available for downstream coastal wetlands in North Carolina. The effects of the City's project on these wetlands will be greatest at times of low flow. I am persuaded, however, that the project will have minimal wetlands impacts in the lower Roanoke River due to the relatively small size of the withdrawal, overall river flows, and other factors such as tidal influence.<sup>212</sup>

Within Virginia, the pipeline for the water project would enter the coastal zone as it crosses the Blackwater River.<sup>213</sup> (Figure 1.) The comments of federal agencies on wetlands impacts persuade me that the coastal impacts of pipeline construction and water discharge into Lake Prince will be minimal, given the mitigation measures imposed on the City.<sup>214</sup> The comments of the Commonwealth of Virginia also indicate that the project will have minimal impacts in Virginia, including wetlands impacts.<sup>215</sup>

In addition, the record of this appeal reveals limited information on possible wetlands impacts in the Virginia Beach area as a result of the increased water supply that would be provided by this project. More importantly, the record of this appeal contains few specific concerns raised by relevant federal and state resource agencies on possible indirect impacts of the project near Virginia Beach.<sup>216</sup> While the population growth and development resulting from this project will, in turn, affect

resources and uses near the City, the nature of the resulting indirect impacts around Virginia Beach are speculative.<sup>217</sup> It is apparent from the record of this appeal that the City of Virginia Beach has developed without this project and will continue to do so to some extent regardless of this project.

In light of my prior analyses of Roanoke River water flow implications and water quality, the record shows that the project will have minimal impacts on coastal wetlands. In making this finding I have considered the cumulative impacts of the project, and I have considered that the project will have its greatest impacts on North Carolina wetlands during times of low flow on the Roanoke River.

##### 5. Other Resources and Uses

**I conclude that the project will minimally affect other coastal resources and uses.**

The coastal zone at issue in North Carolina and Virginia supports a variety of resources and uses in addition to fisheries, water quality and wetlands. The Roanoke River in North Carolina's coastal zone includes part of the largest intact, and least disturbed, bottomland forest ecosystem remaining in the Mid-Atlantic Region.<sup>218</sup> The river water serves many uses, including agricultural,<sup>219</sup> municipal and industrial uses,<sup>220</sup> in addition to contributing to the system's biological habitat. The coastal area within Virginia also contains significant natural resources and a variety of uses. I will address some of those uses when I discuss the project's contribution to the national interest.

North Carolina alleges that the project will not only adversely affect fisheries, water quality and wetlands, but also other coastal resources and uses, including downstream water uses.<sup>221</sup> As I stated above, downstream water is used for, among other things, agricultural,<sup>222</sup> industrial<sup>223</sup> and municipal purposes.<sup>224</sup> The State claims that there is already insufficient water in the river to meet the economic needs of North Carolina's coastal zone.<sup>225</sup> North Carolina further contends that the project will have indirect adverse effects on Virginia's coastal resources and uses, in addition to indirect wetlands effects, resulting from growth of Virginia Beach as a result of the project.<sup>226</sup>

In light of my prior analyses of river flow implications, water quality and wetlands, I am persuaded that the project's effects on other North Carolina coastal resources and uses will be minimal. While federal resource agencies have stated that a NEPA analysis should consider the effects of the project on other resources and uses in North Carolina, these agencies have expressed few specific statements as to effects that would assist

me in my CZMA analysis.<sup>227</sup> I will address in further detail the impacts on certain coastal resource and use issues raised by the State.

Resources of the relevant portion of North Carolina's coastal zone include its ecology as a whole, the Roanoke River National Wildlife Refuge, endangered species (other than the shortnose sturgeon, which I considered in the section on Fishery Resources and Uses), and air quality. The City's project will affect riverine/estuarine ecology to the extent that it affects the previously discussed resources which are a part of the ecosystem. The comments of the Fish and Wildlife Service (FWS) persuade me that the project will limit future management options of the Roanoke River National Wildlife Refuge to the extent that the project reduces water flow into the refuge.<sup>228</sup> The record lacks evidence of effects on endangered species in the coastal zone, as indicated by comments of FWS.<sup>229</sup> The evidence in the record also indicates that possible air quality impacts of the project are too speculative given the information in the record about the relatively small reduction in hydropower generating capacity.<sup>230</sup>

As discussed above, Roanoke River water is used for agricultural and industrial purposes. While I am persuaded that coastal agricultural uses of Roanoke River water are increasing,<sup>231</sup> I am unable to determine whether the proposed project will measurably reduce the amount of water that farmers may use.<sup>232</sup> The record shows that at times coastal industrial activities are limited, in part, due to limits on what these facilities may discharge into the river.<sup>233</sup> However, my prior analyses of the project's river flow implications and water quality impacts also persuade me that impacts on industrial uses will be minimal. In particular, I note that discharge permits are keyed to minimum flows, and major coastal industries using the river water, such as the Weyerhaeuser plant, are located in Plymouth, more than 100 river miles from the Roanoke Rapids Dam.

Finally, as I previously discussed in the section on wetlands impacts, the record of this appeal reveals limited information on the possible indirect effects on other resources and uses in the Virginia Beach area as a result of the improved water supply that this project will provide. More importantly, as indicated in the section on water quality, relevant federal and state resource agencies raised few concerns regarding possible indirect effects of the project near Virginia Beach.<sup>234</sup> While the population growth and development resulting from this project will, in turn, affect resources and uses near the City, the nature of the resulting indirect effects around Virginia Beach are speculative.<sup>235</sup> It is apparent from the record of this appeal that the City of Virginia Beach has developed without this project and will, to some extent, continue to do so regardless of this project.

In light of my prior analyses of Roanoke River water flow implications, water quality and wetlands, the record shows that the City's project will have minimal impacts on other coastal resources and uses. In making this finding, I have considered the cumulative impacts of the project, and I have considered that the project will have its greatest impacts on coastal resources in North Carolina during times of low flow on the Roanoke River.

#### **Conclusion on Adverse Effects**

I have evaluated the information contained in the record of this appeal in order to assess the project's individual and cumulative effects on coastal resources and uses, pursuant to the requirements of the CZMA. The record shows that low flows in the Roanoke River harm striped bass. The 76-day and 90-day flow augmentation regimes protect striped bass from this harm. The information in the record, in particular information that became available after the Corps completed its environmental analysis of the project in 1988, persuades me that the proposed project will have individual and cumulative adverse effects on the striped bass fishery. While the exact nature and extent of the effects are unclear, the effects will likely be small. In addition, the information in the record shows that impacts on other coastal resources and uses, including water quality and wetlands impacts, will be minimal. In conducting my CZMA analysis, I have considered the impacts of this project cumulatively with other reasonably foreseeable uses affecting the coastal zone.

Clearly, there is growing competition for Roanoke River water, which is a limited resource. As indicated by comments of federal resource agencies, there is a compelling need to establish an interstate and interagency planning group to help manage the shared resources of the Roanoke River system for all future uses. A cooperative effort is the only practical means to apportion water for the many future uses and users of the system as well as provide environmental protection for the natural resources of the area.

#### **b. Contribution to the National Interest**

I now turn to the proposed project's contribution to the national interest.<sup>236</sup> The national interests to be balanced in Element 2 are limited to those recognized in or defined by the objectives or purposes of the CZMA.<sup>237</sup> The CZMA identifies two broad categories of national interest to be served by proposed projects. The first is the national interest in preserving and protecting natural resources of the coastal zone. The second is encouraging development of coastal resources.<sup>238</sup>

I conclude that the project will contribute significantly to the national interest by permitting human consumption of water resources of the coastal zone, by furthering economic development of the coastal zone, and by alleviating southeastern Virginia's projected year 2030 water deficit of 60 mgd.

The record shows that the project will contribute significantly to the national interest in part because it will allow the beneficial use of water resources of the coastal zone.<sup>239</sup> The building of a large infrastructure project to provide potable water for human consumption to a major metropolitan area, which includes numerous military (Navy) facilities vital to the national defense, represents a very high priority use among all beneficial uses of water.<sup>240</sup>

I am also persuaded that the project will contribute significantly to the national interest in part because of the extent to which it will further and support economic development in the coastal zone.<sup>241</sup> It is axiomatic that water plays a vital role in supporting economic development and population growth.<sup>242</sup> It is reasonably foreseeable that the construction of a large conveyance facility to provide water to southeastern Virginia will further economic development in that area.

The extent of this project's contribution to the national interest becomes clear when the region's water deficit is considered. Specifically, the project will alleviate southeastern Virginia's regional water deficit, which the Corps of Engineers (Corps) determined will be 60 mgd by the year 2030.<sup>243</sup> After considering the record in this case, and prior court decisions,<sup>244</sup> I am persuaded that the Corps' 60 mgd deficit figure is reasonable and will use that projection to the extent necessary in this appeal.<sup>245</sup>

The State claims that Virginia Beach's need for water has vastly diminished since the 60 mgd figure was developed, because of military reductions.<sup>246</sup> The State also alleges that other communities have added water resources to the region's water supply, thus negating the need for the 60 mgd project.<sup>247</sup>

The City, on the other hand, claims that military downsizing world-wide will actually lead to a consolidation of forces in the southeastern Virginia area, resulting in net gains for employment and a greater need for water.<sup>248</sup> After reviewing the record, I find that the evidence as to whether Virginia Beach's water needs have diminished is both conflicting and inconclusive. Thus, I am not convinced that Virginia Beach's water needs have vastly diminished as claimed by the State.<sup>249</sup> The Corps' 60 mgd deficit figure is a reasonable projection even in view of military downsizing.



The State also argues that the project is not in the national interest because of the socioeconomic harm to Roanoke River basin communities resulting from the outbasin transfer of up to 22 billion gallons of water annually. I previously addressed the issue of adverse effects on coastal zone resources and uses. To the extent that the State's argument applies to Roanoke River basin communities outside of the coastal zone, I find the State's evidence cited to support the assertion of economic harm to be inconclusive and speculative.<sup>250</sup>

A final argument the State makes relating to the project's contribution to the national interest is that such interest requires that the City take steps toward conservation and restrictions during drought before removing water from the Roanoke River basin.<sup>251</sup> I agree that increased conservation of water resources of the coastal zone is in the national interest.<sup>252</sup> The record demonstrates that the City has made some efforts to conserve water.<sup>253</sup> However, such efforts do not diminish the proposed project's contribution to the national interest.

### **Conclusion on National Interest**

In conclusion, I am persuaded that the project will contribute significantly to the national interest by permitting the beneficial use (human consumption) of water resources of the coastal zone. The project will also make a significant contribution because of the extent to which it will further economic development of the coastal zone and because it will alleviate southeastern Virginia's projected year 2030 water deficit of 60 mgd.

### **c. Balancing**

In balancing the project's adverse effects on the coastal zone against its contribution to the national interest, I find that the project's adverse effects on the natural resources and uses of the coastal zone are outweighed by its contribution to the national interest. I note that while the project will affect the Roanoke River striped bass fishery, as well as other coastal resources and uses, the evidence shows that the individual and cumulative effects of the project are outweighed by the national interest contribution of alleviating the City's water supply shortage and encouraging economic development.

### **3. Element 3: Activity Will Not Violate the Clean Water Act or the Clean Air Act**

The Coastal Zone Management Act (CZMA) incorporates the requirements of the Federal Water Pollution Control Act (Clean Water Act or CWA) and the Clean Air Act (CAA)<sup>254</sup> into all state

coastal management programs.<sup>255</sup> To satisfy Element 3 of Ground I, the activity must not violate either of these federal statutes. I conclude that the project meets the requirements of the Clean Water Act and the Clean Air Act, and therefore satisfies Element 3 of Ground I.

I am persuaded that the City will not violate the Clean Water Act because the City cannot proceed with its project except in compliance with the CWA. The City has obtained the necessary CWA federal permit and state certification<sup>256</sup> and there is no evidence that the City intends to violate its CWA permit.<sup>257</sup> Previous consistency appeal decisions have concluded that the existence of necessary permits is sufficient to meet the requirements of Element 3.<sup>258</sup>

In addition, the record does not contain any evidence to suggest that the activity will violate the Clean Air Act. The only evidence in the record on air emissions is the City's claim that there may be emissions from a back-up diesel generator at the pumping station, a generator which the City intends to operate only one to two hours per month, after obtaining the necessary CAA permit.<sup>259</sup>

In its comments on this appeal, EPA stated that the proposed project will not violate the standards of the CWA or the CAA.<sup>260</sup> I accord great weight to EPA's comments on this issue.

The State requested reconsideration of the standard of review for Element 3,<sup>261</sup> arguing that the standard prevents examination of the effects of the proposed project under the Clean Water Act, and defers examination of any potential negative effects under the Clean Air Act to projects that may need to be built in the future to replace lost hydropower.<sup>16\*</sup> The State's request for reconsideration is essentially a request for an independent evaluation of the proposed project under the requirements of the CWA and the CAA. A recent consistency appeal decision addressed a similar request for an independent evaluation and found that if the permit applicant has complied, or must comply, with a permit or regulations issued by the appropriate regulatory agency, there will be no violation of the Clean Water Act or Clean Air Act for purposes of Element 3.<sup>262</sup>

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<sup>16\*</sup> The City argues that the standard does not prevent examination of the project's effects under the Clean Water Act and Clean Air Act because the decision maker may appropriately adopt the conclusions of the federal and state agencies having proper jurisdiction for issuing the necessary permits. Appellants' 7/28/92 Brief at 127-128; citing Chevron Decision at 57. In my Element 2 analysis I considered coastal effects of the project.

While I certainly retain the authority to reconsider a standard established in previous consistency appeal decisions, in this case, I decline to do so. The appropriate agencies authorized the necessary CWA permit and certification. Similarly, the project cannot operate without the necessary CAA permit.

I am persuaded by the evidence that the proposed project, if performed consistently with any required permits, will not violate the requirements of the Clean Water Act or the Clean Air Act. The proposed project therefore satisfies Element 3 of Ground I.

**4. Element 4: No Reasonable, Consistent Alternatives Available**

The fourth element of Ground I (Element 4) requires me to determine whether there are any available, reasonable alternatives to the proposed project that are consistent with North Carolina's coastal management program.<sup>263</sup> To make this determination, I must examine the alternatives proposed by North Carolina (State) to determine whether the alternatives are: (1) stated by the State to be consistent with its coastal management program; (2) described by the State with sufficient specificity; (3) reasonable; and (4) available.

**I conclude that because all the alternatives proposed by North Carolina fail to meet at least one of these requirements, there are no reasonable, available alternatives to the proposed project that are consistent with North Carolina's coastal management program.**

For a proposed alternative to be "available," the proponent of the proposed project must be able to implement the alternative and the alternative must achieve the primary or essential purpose of the project.<sup>264</sup> An alternative is not available, for instance, if the City is unable to implement it because of a technical or legal barrier, or the resources do not exist. In addition, a proposed alternative does not have to meet the exact specifications of the proposed project to be available.<sup>265</sup>

To determine whether a proposed alternative is "reasonable," I must consider the differences in environmental impacts and cost between the alternative and the proposed project. A proposed alternative is "reasonable" if the environmental advantages of the alternative outweigh the increased cost of the alternative over the proposed project.<sup>266</sup>

An alternative must also be consistent with the State's coastal management program.<sup>267</sup> I will find that an alternative is consistent with the State's coastal management program only if the State has asserted that the alternative is consistent.<sup>268</sup>

Before evaluating North Carolina's proposed alternatives, however, I will discuss the procedural requirements of CZMA appeals. First, an objecting state is required to propose alternatives that are consistent with its coastal management program.<sup>269</sup> These alternatives must be described with specificity; vague descriptions do not suffice.<sup>270</sup> The objecting state must describe the proposed alternatives with enough detail for the project's proponent and the Secretary to know how the proposed alternative could be implemented consistently with the objecting state's coastal management program and evaluate whether the alternative is reasonable and available.<sup>271</sup> If the objecting state describes one or more consistent alternatives with enough specificity, the burden shifts to the appellant to demonstrate that the alternative(s) is unreasonable or unavailable.<sup>272</sup>

The City raises four procedural arguments which I will address before evaluating the State's proposed alternatives. First, the City argues that I should not consider any alternatives that were raised by the State other than those that the State's Objection Letter indicates are consistent with the State's coastal management program.<sup>273</sup> Second, the City argues that I should not consider proposed alternatives that were asserted to be consistent with the State's coastal management program by the State's lawyers or consultants, rather than the State's coastal management agency.<sup>274</sup> Third, the City argues that the State must specifically describe its proposed alternatives in the State's Objection Letter.<sup>275</sup> Finally, the City argues that I should consider only proposed alternatives that allow water to be withdrawn from Lake Gaston, because those alternatives that do not allow water to be taken from Lake Gaston are not alternatives "which would permit the activity to be conducted," as required by the regulations.<sup>276</sup>

I reject the City's argument that I should consider only alternatives proposed in the State's Objection Letter. Because at the time the State filed its Objection Letter the Secretary allowed alternatives to be raised for the first time during the appeal, I find that alternatives that were raised by the State, either in its Objection Letter or during the appeal, may be considered in this appeal.<sup>277</sup>

I reject the City's second argument, in part. In this appeal, the State's lawyers are designated to represent, and to file briefs on behalf of, the State. Statements in these briefs, including statements that an alternative is consistent with the State's coastal management program, are binding on the State. Consultants are not accorded the same deference, since consultants are not designated to represent and speak on behalf of the State. To the extent that the State, through its lawyers, adopts the position of a consultant, however, that position is

deemed to be the position of the State as well. For example, in its Reply Brief, the State asks me to consider the report of one of its consultants as part of its Reply Brief.<sup>278</sup> Because this report, Analysis of Alternative Water Supplies for Virginia Beach (the Boyle Report), by Boyle Engineering Corporation, was adopted by the State, this report will be considered the position of the State.

Furthermore, I reject the City's third argument that alternatives must be specifically described in the State's Objection Letter. I find that specificity may be established during the course of the appeal.<sup>279</sup>

I also disagree with the City's fourth argument that I should consider only those proposed alternatives that allow water to be taken from Lake Gaston. An alternative need not meet the exact specifications of a proposed project. Rather, it must meet the primary purpose of the proposed project. I find that the primary purpose of the Lake Gaston project is to provide southeastern Virginia, including the City, with the quantity of water needed to alleviate its year 2030 water deficit. This has been determined in Element 2 to be at least 60 mgd in additional water for southeastern Virginia. Since this is a regional water deficit, I will evaluate the alternatives proposed by the State to determine whether they add water to the existing water supplies in southeastern Virginia.

#### North Carolina's Proposed Alternatives

The State proposes a number of alternatives in its Objection Letter and in the appeal. These alternatives are evaluated below to determine whether the alternatives are: (1) stated by the State to be consistent with its coastal management program; (2) described by the State with sufficient specificity; (3) reasonable; and (4) available.

The State proposes that the City meet its year 2030 water needs using a variety of water sources, rather than a single source such as Lake Gaston.<sup>280</sup> I agree that Virginia Beach need not obtain the water to alleviate the year 2030 water deficit from a single source. Therefore, when I evaluated the proposed alternatives to determine whether they met the primary purpose of the proposed project, I considered them individually and in combination with each other to determine whether they provided at least 60 mgd of additional water.<sup>281</sup>

After reviewing the alternatives proposed by the State, I have determined that all of the proposed alternatives fail to meet at least one of these requirements, as discussed below.

a. Alternatives That Were Not Stated with Sufficient Specificity

1. Balancing Program

The State proposes as an alternative to the Lake Gaston project "a program which balances Virginia Beach's needs against those of other users, particularly those in the Roanoke Basin, and with the needs of fish, wildlife, and estuaries."<sup>282</sup> The State asserts that this alternative has the potential to be consistent with the State's coastal management program, but would require "careful environmental and practical study."<sup>283</sup> In its 2/15/94 Brief, it appears that the State further describes this alternative as "a program which allows water to be taken [from Lake Gaston] only when conditions in the river allow it," and states that this alternative is consistent with the State's coastal management program.<sup>284</sup> The program described in the State's 2/15/94 Brief, however, is not sufficiently specific for me to be certain that it is the "balancing program" proposed in the State's Objection.

Regardless of whether these are two separate alternatives or the same alternative, the alternative(s) would fail for lack of specificity. The State did not adequately describe the structure of the balancing program or the program described in its 2/15/94 Brief. It did not describe how the City should determine who the other "users" are or how the differing needs would be balanced. Furthermore, it did not describe what "conditions in the river" would allow water to be taken from Lake Gaston. Therefore, it is not possible for me to determine whether the alternative(s) are reasonable or available.<sup>285</sup>

2. Purchase of Additional Kerr Reservoir Storage

As discussed under Element 2 above, the City's proposal provides for mitigation by storing extra water in Kerr Reservoir, a reservoir upstream from Lake Gaston, which will be released by the Corps to assist in maintaining augmented flows for the benefit of striped bass. The State proposes that the City purchase additional storage in Kerr Reservoir so that the stored water could be released to replace, gallon for gallon, the water the City withdraws from Lake Gaston.<sup>286</sup> The State asserts that Virginia Beach has purchased only "15 percent of the storage necessary to compensate for its withdrawal, and will actually release only a fraction of that."<sup>287</sup> It argues that "a well-designed and regulated program to store adequate water in Kerr reservoir and release it to fully compensate for the City's withdrawal, could eliminate the project's negative effects downstream on the coastal zone."<sup>288</sup>

North Carolina has not, however, described with sufficient specificity what constitutes "a well-designed and regulated

program." The State failed to provide significant details regarding the structure of the program, such as who would regulate the program, how the program would be designed so as to be consistent with the State's coastal management program, whether this alternative requires the City to buy enough permanent storage in the reservoir to release 60 mgd of water, and whether the water in Kerr Reservoir would be released simultaneously with the withdrawals from Lake Gaston.

Without such details, I can only speculate as to how the State envisions the implementation of this proposed alternative. Therefore, this alternative is not sufficiently specific for me to evaluate whether it is reasonable or available.

### 3. Pipeline to Return Adequately Treated Wastewater to Lake Gaston

The State proposes that the City include a return pipeline alongside the withdrawal pipe of the proposed Lake Gaston project, and return an equal volume of adequately treated wastewater to the Roanoke system.<sup>289</sup> As with the proposal to purchase additional Kerr Reservoir storage, the State does not provide sufficient detail concerning this alternative.

The Lake Gaston pipeline proposed by the City would terminate at a City of Norfolk reservoir located in Isle of Wight County, and the water would be treated in Norfolk.<sup>290</sup> The State does not explain whether the return pipeline would start at the Norfolk reservoir or in the City. If the return pipeline starts at the Norfolk reservoir, the State must provide details regarding the means by which the City could transport its wastewater to that site (e.g., would the City need to build a new pipeline to transport the water, or could the City make use of existing pipelines?). If the return pipeline is to begin in the City, the State must indicate the path of the return pipeline, particularly that portion of the return pipeline that would not parallel the proposed project's pipeline. Furthermore, the State does not indicate where the wastewater will be treated before being returned to Lake Gaston. Without such information, I find that this alternative is not sufficiently specific for me to evaluate whether it is reasonable or available.

### 4. Fresh and Brackish Groundwater

The State proposes that the City withdraw groundwater, which, combined with several other sources within the City, could provide 60 mgd of additional water.<sup>291</sup> The State asserts that "a well designed groundwater system would cause no harm to North Carolina, and would be consistent with [the State's coastal management program.]"<sup>292</sup>

The State does not elaborate, however, on what constitutes "a well designed groundwater system." For me to evaluate this alternative, the State would have to provide additional details regarding the structure of a "well designed groundwater system."

I do not know, for example, whether the State envisions limiting the number of groundwater wells, the location of the wells, or the amount of water that could be withdrawn. Without such specificity, I cannot evaluate whether this alternative is reasonable or available.<sup>293</sup>

#### 5. Additional Water Sources Mentioned in the Boyle Report

In addition to the alternatives that are discussed elsewhere in this decision, the Boyle Report mentions two potential water sources.<sup>294</sup> Neither of these sources, however, is described specifically enough for me to determine whether they are reasonable or available.

The first of these proposed sources is the James River in Virginia. The Boyle Report suggests that water could be pumped from the James River.<sup>295</sup> The State does not, however, provide necessary details on the structure of this proposed pipeline project, such as the path of the proposed pipeline.

The other proposal is to raise existing dams in existing reservoirs to create a seasonal or operational storage pool. North Carolina does not indicate, however, which existing dams are to be raised or how the storage pool would function.<sup>296</sup>

#### b. Alternatives That Are Unavailable

##### 1. Advanced Desalination Techniques

The State proposes advanced desalination techniques as alternatives to the proposed project.<sup>297</sup> The State specifically mentions electro dialysis reversing (EDR) as an option.<sup>298</sup>

Alone, however, EDR does not constitute an additional source of water which increases water supplies. EDR can only be properly evaluated in conjunction with a water source. EDR cannot, therefore, constitute a reasonable, available alternative to the proposed project unless I determine that there is an available water source, the use of which is both consistent with the State's coastal management program and reasonable when used in conjunction with this technology.



EDR technology requires a source of brackish surface water and/or groundwater.<sup>17\*</sup> I have already rejected brackish groundwater as a source of water.

Back Bay is identified in the Boyle Report as a possible source of brackish surface water for desalination.<sup>299</sup> Back Bay is a shallow estuary, which contains thousands of acres of marsh and wetlands. Endangered species, specifically the peregrine falcon, bald eagle, and brown pelican, can be found there.<sup>300</sup> Back Bay contains the Back Bay Wildlife Refuge, Mackay Island National Wildlife Refuge, and Virginia Waterfowl Management Areas.<sup>301</sup>

The Boyle Report states that Back Bay is considered a satisfactory supply source for a brackish water desalination project, and suggests developing in Back Bay a source in either North Bay or the more distant southern reaches of Back Bay.<sup>302</sup> The Boyle Report also states that it would be necessary to verify that implementing this alternative "would not have an adverse impact on Bay water clarity and aquatic habitats."<sup>303</sup>

Neither the State nor the State's Boyle Report specify, however, how Virginia Beach could implement this proposed alternative. For example, the State does not specify where water would be withdrawn from Back Bay, the manner in which water would be transported to the EDR plant, and the location of the EDR plant in relation to Back Bay. I find, therefore, that this proposed alternative is not specific enough for me to determine whether it is available or reasonable, particularly since this source appears to be environmentally sensitive.

The Boyle Report also states that "[d]esalination of Chesapeake Bay water is technically viable."<sup>304</sup> Neither the Boyle Report nor the State provide any details regarding how this suggestion could be implemented. Therefore, this alternative is also not specific enough for me to further consider it.

The State does not specify other sources of brackish water that would be suitable for advanced desalination techniques such as EDR. I have found that brackish groundwater is not an available source of water, and the Back Bay and Chesapeake Bay alternatives proposed in the Boyle Report, which are the only sources of brackish water specified in the State's submissions, are not described with sufficient specificity for me to determine whether they are reasonable and available. Therefore, I reject this proposed alternative.

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<sup>17\*</sup> Seawater desalination will be treated as a separate alternative below.

## 2. Norfolk

The State argues that the Norfolk system's water supply could be expanded. Specifically, the State proposes that the water system could be expanded by: (1) undertaking several small dredging projects to increase capacity;<sup>305</sup> (2) effectuating a systematic program to repair leaks and transmission losses; and (3) changing operational rules when long term weather forecasts indicate the potential for dry conditions.<sup>306</sup>

One aspect of the availability of an alternative is the ability of the project's proponent to implement the alternative. For example, proposed alternatives for which the technology and/or resources do not exist are unavailable alternatives.<sup>307</sup>

Accordingly, I find that this proposed alternative is unavailable because the City does not have the legal authority to implement the alternative. The decision to undertake any or all of the alternatives proposed by the State is the City of Norfolk's alone; Virginia Beach cannot compel Norfolk to implement any of these proposals. Thus, Virginia Beach has no ability to implement these proposed alternatives. It is possible that the City could attempt to negotiate with Norfolk to implement these proposed alternatives, but whether an agreement could be reached is pure speculation. Therefore, I find the alternatives described by the State to be unavailable.<sup>308</sup>

North Carolina also argues that Norfolk could continue to supply Virginia Beach with at least 15 mgd of its surplus water.<sup>309</sup> In Element 2 (Contribution to the National Interest), I found that, as regional water needs increase in southeastern Virginia, current water supplies will not be enough to satisfy regional water demands, and that in the year 2030 there will be a regional water supply deficit of at least 60 mgd. This alternative would provide no additional water, since it is a water supply that currently exists. Therefore, this proposed alternative is unavailable because it does not meet, in whole or in part, the primary purpose of the Lake Gaston project, which is to provide at least 60 mgd in additional water to southeastern Virginia.

## 3. Portsmouth

The Boyle Report also found that the Portsmouth system has a current surplus of 10 mgd over Portsmouth's existing demand, and that Portsmouth has the capability to expand its water supply by two mgd.<sup>310</sup> The Boyle Report concludes that, depending on the level of contractual commitments Portsmouth undertakes and the level of resource implementation, the system could supply up to 10 mgd to the Norfolk or Virginia Beach area systems.<sup>311</sup> The

State also cites a newspaper article which indicates that, in 1992, Portsmouth offered to sell the City surplus water for the following eight years.<sup>312</sup>

First, it must be noted that the water that Portsmouth offered to the City cannot be applied towards offsetting the year 2030 regional deficit of 60 mgd. Portsmouth's current surplus water, some of which it offered to sell to the City for eight years, is an existing water supply. In Element 2 (Contribution to the National Interest), I found that, as regional water needs increase in southeastern Virginia, current water supplies will not be enough to satisfy regional water demands, and that in the year 2030 there will be a regional water supply deficit of at least 60 mgd. While the water Portsmouth offered to the City could be used to alleviate Virginia Beach's short term water shortages, it does not add any water to the current regional water supply for southeastern Virginia. Therefore, since using Portsmouth's surplus water does not meet, in whole or in part, the primary purpose of the Lake Gaston project, I find the alternative of the City's obtaining surplus water from Portsmouth to be unavailable.

Second, as to the Boyle Report's point that the Portsmouth system could be expanded by two mgd, the Report found that this expansion could be accomplished by relocating an existing intake structure in one reservoir.<sup>313</sup> Similar to the Norfolk proposed alternative, because the City has no legal authority to compel Portsmouth to relocate an existing intake structure in one of its reservoirs, it does not have the legal authority to implement this alternative. Therefore, I find this alternative to be unavailable.

4. Groundwater Exchange with Union Camp, Non-Potable Industrial Reuse, Interconnection and Coordinated Management

The Boyle Report also suggests a variety of additional alternatives which I find to be unavailable, because all require implementation by the Union Camp paper mill or municipalities other than Virginia Beach. One suggestion for a possible water source is groundwater exchange with the Union Camp paper mill.<sup>314</sup> Groundwater exchange would require regional cooperation between Union Camp paper mill and municipalities other than the City.<sup>315</sup>

The Boyle Report further suggests non-potable industrial reuse as an alternative, stating that it is technically feasible to convey, and provide treatment of, approximately seven mgd of effluent wastewater from the cities of Suffolk and Franklin to Union Camp.<sup>316</sup>

In addition, the State proposes that coordinated management techniques, including the interconnection of the water systems in the Hampton Roads area, could substantially add to the effective yield of the system.<sup>317</sup> There are currently a limited number of connections between water systems in the Hampton Roads Area.<sup>318</sup>

As discussed in Norfolk, however, Virginia Beach has no legal authority to compel Union Camp or other municipalities to implement these alternatives. In addition, it is speculative as to whether the City could successfully negotiate an agreement with these entities. Therefore, I find these alternatives unavailable.

##### 5. Aquifer Storage and Recovery

The State specified several alternatives which utilize aquifer storage and recovery (ASR) as one of their components.<sup>319</sup> ASR is a process in which water is stored underground by injecting it into an aquifer, and when the water is later needed it is withdrawn from the ground.<sup>320</sup> The State argues that ASR is an accepted technology in southeastern Virginia and that surplus water supplies exist which can be stored in the aquifer.<sup>321</sup> The City responds that ASR technology is still experimental in southeastern Virginia and that no water source capable of supplying an ASR system exists.<sup>322</sup>

There are no operational ASR systems in Virginia.<sup>323</sup> The only experiments to determine the feasibility of ASR in southeastern Virginia were studies conducted by United States Geological Survey (USGS) and Chesapeake's attempt to establish an ASR system.<sup>324</sup>

The USGS studies were inconclusive as to whether an ASR system could be successfully implemented in southeastern Virginia.<sup>325</sup> Beginning in 1987, Chesapeake attempted to implement an ASR system that would yield between 10 and 14.4 mgd.<sup>326</sup> The ASR project was abandoned, however, before reaching completion due to the high cost of treating the water that was to be injected.<sup>327</sup> Chesapeake completed one 3 mgd ASR well before deciding not to proceed further.<sup>328</sup>

Chesapeake's ASR water system is not yet fully functional.<sup>329</sup> Furthermore, the record indicates that it is unclear how much water could be stored in Chesapeake's ASR system if it becomes fully functional.<sup>330</sup> The lack of verification of effectiveness for this proposed alternative persuades me that additional studies would be required to determine whether this alternative is technologically viable for southeastern Virginia. For these reasons, I find this alternative to be unavailable.<sup>331</sup>

## 6. Emergency Wells

The State argues that the City's five emergency wells should be included as part of its water supply.<sup>332</sup> The Virginia State Water Control Board (VSWCB), on the other hand, stated that emergency wells should not be counted toward the amount the system can safely yield.<sup>333</sup> Furthermore, "[a]n extreme drought emergency must be declared and mandatory water conservation measures must be instituted before emergency wells can be pumped for water supply."<sup>334</sup>

I find that this proposed alternative does not meet the primary purpose of proposed project, which is to provide at least 60 mgd in additional water supply to alleviate the regional water deficit. This alternative would not be available at times when extreme emergency drought has not been declared and mandatory water conservation has not been implemented. Therefore, I find that this proposed alternative does not alone, or in combination with other alternatives, meet the primary purpose of the proposed activity. Thus, I find this proposed alternative to be unavailable.

## 7. Drought Restrictions

The State proposes as an alternative to the Lake Gaston project that the City impose reasonable water restrictions during droughts.<sup>335</sup> The State argues that 32-36 mgd of the City's 60 mgd need is solely for "the purpose of avoiding mandatory conservation during severe drought."<sup>336</sup>

This alternative would provide no additional water. Therefore, this proposed alternative is unavailable because it does not meet, in whole or in part, the primary purpose of the Lake Gaston project, which is to provide at least 60 mgd in additional water to southeastern Virginia.

## 8. Water Conservation and Wastewater Reuse

The State proposes that the City could save water by retrofitting residences in the City with inexpensive water-saving devices.<sup>337</sup> The State indicates that retrofitting water-saving devices could reduce water demand by between six and nine mgd, although the State's Boyle Report concludes that demand can be lowered by only approximately two mgd through water conservation.<sup>338</sup>

I find that the City is able to implement this alternative, as is evident by the City's adoption of regulations which provide for the installment of such water saving devices.<sup>339</sup> While this alternative is not a source of additional water, adopting this alternative would have the same effect as increasing the water supply by the amount of water that is saved. I will therefore

consider the decrease in water demand resulting from implementation of this alternative as if it were an increase in water supply.

The State also proposes wastewater reuse, by landscape irrigation or dual systems, as an alternative source of water to the Lake Gaston project.<sup>340</sup> The State argues that southeastern Virginia produces more than 100 mgd of treated wastewater, all of which is discharged and never again used. The State argues that treated wastewater could be used for non-potable applications, thereby saving substantial quantities of potable water for use by the City.<sup>341</sup> The State also claims that millions of gallons of high quality groundwater that is now being used for watering golf courses and other outdoor areas in Virginia Beach could be added to the City's water supply if treated wastewater were substituted. For example, the State asserts that if the City were to provide treated wastewater to only five golf courses, it could then add two mgd of the high quality groundwater now used for watering greens and fairways to its municipal supply.<sup>342</sup> Thus, while the State concedes that the City cannot meet all of its water needs from reclaimed water, the State claims that the City can substantially reduce its need for fresh water through wastewater reuse.<sup>343</sup>

The State's Boyle Report concludes that the initial yield for wastewater reuse would not be substantial, as there is a limited perceived market in the City at this time.<sup>344</sup> The Boyle Report estimates the initial yield as two to five mgd, and asserts that "[o]ver time, and following an extensive public information program, water reuse could become a key element in the City's water resources management program."<sup>345</sup> The City, however, argues that there is no market at all for this technology for municipal water supply because no such areas (landscape irrigation for golf courses, parks, and other large turf areas) in the City are irrigated with municipal water.<sup>346</sup> Furthermore, the City argues, only six golf courses in the City use groundwater, and the total average groundwater withdrawals in 1993 for all six was 0.127 mgd.<sup>347</sup>

I am persuaded by the evidence in the record that non-potable wastewater reuse is well established in the United States and could be implemented by the City.<sup>348</sup> Even if I find that wastewater reuse could add up to five mgd, however, wastewater reuse alone will not meet the primary purpose of the proposed project, which is the provision of an additional 60 mgd of water.<sup>349</sup> Nor would water conservation, which at most would decrease water consumption by nine mgd, meet the primary purpose of the proposed project. These alternatives, therefore, are only available alternatives if, when implemented in connection with other proposed alternatives, they add 60 mgd of water to current supplies. Water conservation and wastewater reuse are the only

alternatives that are reasonable and otherwise available. When combined, however, the two alternatives do not meet the primary purpose of the proposed project. At most, the two alternatives add 14 mgd of water (five mgd from wastewater reuse, nine mgd from water conservation). Therefore, I find these alternatives unavailable.

c. Alternatives That Are Unreasonable

1. New Reservoirs

The State proposed Lake Genito as an alternative to the Lake Gaston project.<sup>350</sup> If built, Lake Genito would be a new reservoir on the Appomattox River, more than 100 miles from the City. The Boyle Report also mentions another potential source, the construction of a new reservoir on the Blackwater River.<sup>351</sup>

The Boyle Report acknowledges that the construction of Lake Genito and/or the Blackwater River reservoir would affect large areas of wetlands.<sup>352</sup> For a proposed alternative to be reasonable, I must find that the alternative has environmental advantages over the proposed alternative. Because I find that large adverse impacts on wetlands would result from the construction of Lake Genito, and/or a Blackwater River Reservoir, I find that this proposed alternative does not have environmental advantages over the proposed project. This alternative is, therefore, not reasonable.<sup>353</sup>

2. Lake Chesdin

The Boyle Report suggests an interbasin transfer from Lake Chesdin, which lies along the Appomattox River, as a possible alternative water source.<sup>354</sup> Under this proposal, Lake Chesdin water would be transported through a pipeline into a tributary of either the Nottoway or Blackwater Rivers, which would be used to convey the water to the Norfolk system's reservoirs during average river flow conditions.<sup>355</sup>

The Boyle Report states that there are minimal environmental impacts associated with this alternative.<sup>356</sup> For a proposed alternative to be reasonable, I must find that it would have environmental advantages over the proposed project. Because implementation of this proposed alternative would result in minimal environmental effects, I find that this alternative does not have environmental advantages over the proposed Lake Gaston project. Consequently, I find this alternative to be unreasonable.<sup>357</sup>

### 3. Seawater Desalination

The State proposes seawater desalination as an alternative to the Lake Gaston project.<sup>358</sup> The State argues that seawater desalting is environmentally acceptable, and that seawater is available in virtually unlimited quantities.<sup>359</sup> The City concedes that seawater desalting is possible and that it can supply all the water the City needs.<sup>360</sup> The City argues, however, that there are adverse environmental effects associated with seawater desalination, and that seawater desalting is two-and-one-half to three times as expensive as water from the Lake Gaston project.<sup>361</sup>

In the appeal, the State provides details on seawater desalination, most notably in a study which provides a framework for implementing this alternative by reverse osmosis. The study also compares the cost of desalination by reverse osmosis with the cost of the Lake Gaston project.<sup>362</sup> I find that this alternative was described with sufficient specificity with respect to seawater desalination using reverse osmosis technology.<sup>363</sup>

The City and the State disagree as to the adverse environmental effects associated with reverse osmosis.<sup>364</sup> The State's Boyle Report considers seawater desalination by reverse osmosis and finds that "[s]eawater desalination would have the advantages of . . . minimal environmental impacts."<sup>365</sup> Because implementation of this proposed alternative would result in minimal environmental impacts, I find that this alternative does not have environmental advantages over the Lake Gaston project. Consequently, I find this alternative is not reasonable.

In addition, although I do not need to compare the cost of the Lake Gaston project and seawater desalination to reach my conclusion, I have done so and am persuaded by the evidence in the record that seawater desalination through reverse osmosis is more expensive than the proposed project.<sup>366</sup> Further, even if there were no adverse environmental impacts associated with this alternative, I would find that the increase in cost is not outweighed by the environmental advantages that would result from implementing this alternative rather than the Lake Gaston project.

The State also provided information on another type of seawater desalination technology<sup>18\*</sup> which requires the use of a cogeneration plant.<sup>367</sup> A cogeneration plant produces electric power and utilizes some of the exhaust heat to operate a seawater

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<sup>18\*</sup>For reasons of clarity and convenience, I discuss all seawater desalination alternatives in this section.



reverse osmosis unit. The State does not describe how the City could utilize the cogeneration concept, such as where a plant could be located or the capacity of the plant. Such descriptions are necessary for me to evaluate seawater desalination using a cogeneration plant, particularly since there are currently no power plants in the City.<sup>368</sup> I find that the alternative of seawater desalination using a cogeneration plant is not specific enough for me to determine whether it is reasonable or available.

The State also submitted articles which discuss recent technological advances in reverse osmosis systems.<sup>369</sup> These articles reflect, however, that these new technologies have not been tested except on a prototype scale or in a computer simulation. The evidence does not show that the technologies have been tested in reverse osmosis plants. Therefore, I find these technologies to be unavailable, as there is a lack of verification of effectiveness in operational reverse osmosis plants.<sup>370</sup>

#### Conclusion for Element 4

After evaluating the alternatives proposed by the State, both individually and in combination with each other, I find that there are no reasonable, available alternatives which would permit the City's proposed project to be conducted in a manner consistent with the State's coastal management program.

#### Conclusion for Ground I

In summation, I made the following findings on Ground I. First, the City's proposed project will foster development of the coastal zone and coastal zone resources, and thus furthers one or more of the competing national objectives or purposes of the CZMA. Second, in considering the cumulative impacts of the project with other reasonably foreseeable uses, the activity will have adverse effects on resources and uses of the coastal zone. The project's effects on fishery resources are unclear, but likely small. The project's effects on other coastal resources and uses are minimal. These effects are outweighed by the substantial national interest in providing an adequate municipal water supply to the southeastern Virginia coastal zone. Third, the proposed project will not violate the requirements of the CWA and the CAA. Finally, there is no reasonable alternative, whether considered alone or in combination with other alternatives, available to the City that would meet the primary purpose of the activity and permit it to be conducted in a manner consistent with North Carolina's coastal management program. Based on these conclusions, I find that the City has satisfied the four elements of Ground I. Accordingly, the proposed project is consistent with the objectives or purposes of the CZMA.

B. Ground II: Necessary in the Interest of National Security

I conclude that the proposed project is not necessary in the interest of national security.

The second statutory ground (Ground II) for override of a state objection to a proposed project is to find that the activity is "necessary in the interest of national security."<sup>371</sup> To make this finding, I must determine that a "national defense or other national security interest would be significantly impaired if the activity were not permitted to go forward as proposed."<sup>372</sup> In conducting my analysis, I must seek and accord considerable weight to the views of the Department of Defense and other federal agencies in determining the national security interests involved in the project, although I am not bound by such views.<sup>373</sup> Past decisions have established that "the regulatory criteria for an override based on Ground II establishes a difficult test."<sup>374</sup>

As explained in more detail below, I have concluded that the City has not met the test established for Ground II. Although the Department of Defense had three opportunities to find that a national defense or other national security interest would be significantly impaired if the project were not permitted to go forward as proposed, it declined to do so.<sup>375</sup>

The Navy is the primary military service located in the Virginia Beach area. The Navy stated that the Department of Defense has a vital interest in efforts of the City to establish a water system that supplies installations and supports activities in the Hampton Roads area with a safe, adequate and dependable municipal water supply for three reasons: (1) operational readiness; (2) quality of life; and (3) support of local economy supplying military needs. In addition, the Navy stated that during the drought of 1980-81, when a 25 percent curtailment on water use was imposed, operations and readiness were impaired. Also, the Navy stated that readiness would be significantly impaired if uninterrupted usage of a safe, adequate and dependable water supply could not be assured.

However, the Navy did not specifically state or find that a national security or defense interest would be "significantly impaired" if the Lake Gaston pipeline project did not go forward as proposed. General statements about the military's need for an adequate municipal water supply, and the likely adverse effects if such a supply is not available, do not meet the criteria for Ground II, which requires a finding specific to the particular project at issue in the appeal.<sup>376</sup> The arguments presented in the various public comments were not of sufficient weight to overcome the failure of naval officials to link significant

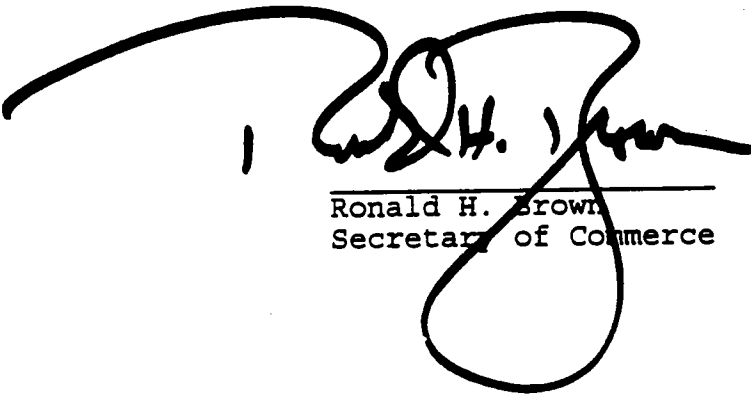
impairment of a national defense interest to the project's not going forward as proposed.

**Conclusion for Ground II**

Neither the City, nor any federal agency commenting on Ground II, has substantiated that a national defense or other national security interest will be significantly impaired if the activity is not allowed to proceed as proposed. Based on the record, I find that the requirements for Ground II have not been met.

**VI. CONCLUSION AND SECRETARIAL DECISION**

I hereby find, for the reasons stated, that the proposed project is consistent with the objectives and purposes of the CZMA, thereby meeting the requirements of Ground I. Accordingly, the proposed project may be permitted by federal agencies.



Ronald H. Brown  
Secretary of Commerce

May 19, 1994  
Date

## ENDNOTES

1. 2/15/94 Submittal to Commerce Department by Appellants (Appellants' 2/15/94 Brief, App.) at Vol. 1, Tab 32 at 8-9, Supplemental AR 6.
2. Appellants' Statement of Reasons in Support of an Override and Supporting Data and Information (Appellants' Initial Brief) at 14.
3. Id. at 14-16; Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 9, Supplemental AR 6.
4. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 9, Supplemental AR 6.
5. Id. at 6; Appellants' Initial Brief at 8.
6. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 11, Supplemental AR 6.
7. Id. at 13-14; North Carolina Response (State's Initial Brief) at 1.
8. Appellants' Initial Brief at 13-14; Appellants' Supplemental Brief, February 15, 1994, (Appellants' 2/15/94 Brief) at 13-14; Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 13-14, Supplemental AR 6.
9. Appellants' Initial Brief at 14.
10. Id. at Executive Summary 1; State's Initial Brief at 1.
11. Appellants' Initial Brief at 15, fn. 11.
12. Id. at 151, fn. 97.
13. Appellants' Appendices to Statement of Reasons (Appellants' Initial Brief, App.) App. III at 2655, AR 12.
14. See Appellants' Initial Brief at 32-41.
15. Id. at 3.
16. Clean Water Act, section 404, 33 U.S.C. § 1344.
17. Rivers and Harbors Act, section 10, 33 U.S.C. § 403.

18. See Department of the Army Permit issued by the Norfolk District Corps pursuant to section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act, January 9, 1984, (CWA § 404 Permit), Appellant's Initial Brief, App. I at 64, AR 7; Appellants' 2/15/94 Brief, App. Vol. 1, Tab 6 and Tab 32 at 14, Supplemental AR 6.
19. See Letter of the Hon. James B. Hunt, Jr., Governor, State of North Carolina, to Colonel Hudson, District Engineer, Corps, (January 1984, Hunt Letter), Appellants' Initial Brief, App. IV at 3121-3122, AR 14.
20. See section 307(c)(3)(A) of the CZMA, 16 U.S.C. § 1456(c)(3)(A).
21. Norfolk District Corps of Engineers Statement of Findings, January 9, 1984, (1984 ND SOF), Appellants' Initial Brief, App. I at 150-156, AR 7.
22. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 14-16, Supplemental AR 6.
23. North Carolina v. Hudson (Hudson I), 665 F. Supp. 428 (E.D.N.C. 1987); North Carolina v. Hudson (Hudson II), 731 F. Supp. 1261 (E.D.N.C. 1990); and Roanoke River Basin Association v. Hudson, 940 F.2d 58 (4th Cir. 1991) (Hudson III), cert. denied, \_\_\_ U.S. \_\_\_, 112 S. Ct. 1164 (1992) (affirming Hudson II). The State's complaint in the permit suit challenged the adequacy of the Corps' environmental review and permit action on numerous grounds.

In Hudson I, the U.S. District Court for the Eastern District of North Carolina generally upheld the Corps' decision but remanded the case to the Corps for further consideration of the potential adverse effects on striped bass and the extent of the City's water needs. Appellants' Initial Brief at 26-27. On remand and after further study, the Corps issued a final supplemental environmental assessment (EA), a revised finding of no significant impact (FONSI) and a supplemental statement of findings (SSOF) confirming its earlier findings, on December 21, 1988. Id. at 27. The supplemental EA and SSOF were prepared with the technical support of the Wilmington District Corps. Appellants' Initial Brief, App. I, Vol. 1 at 252-256, AR 7. The Wilmington District Corps adopted the Norfolk District's supplemental EA and issued its own FONSI on January 6, 1989. Id.; Appellants' Initial Brief at 28. The State also challenged those supplemental findings. Id. The U.S. District Court subsequently upheld the Corps' supplemental findings on February 2, 1990. Hudson II. The U.S. Court of Appeals for the Fourth Circuit affirmed the lower court's

decision in Hudson II on July 3, 1991. See Hudson III (affirming Hudson II).

24. See Hudson III, supra.
25. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 6-7, Supplemental AR 6; Appellants' Initial Brief at 3-5.
26. Id.
27. Appellants' Initial Brief at 4. Prior to filing an official application to obtain VEPCO's permission, representatives of both Virginia Beach and VEPCO met with FERC representatives and were advised that VEPCO should, indeed, file an application for FERC approval. Id. at 4-5.
28. Appellants' Initial Brief at 5.
29. State's Initial Brief at 3, fn. 3.
30. Appellants' Initial Brief at 6.  

The State requested permission from U.S. Department of Commerce's National Oceanic and Atmospheric Administration (NOAA), which administers the CZMA, to review VEPCO's application for consistency with its coastal management program. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 7, Supplemental AR 6. Over the objection of the City, which argued that the CZMA does not authorize interstate review of activities and that the project does not require a federal license or permit, OCRM notified the State that it could review the application. Id.
31. Appellants' Initial Brief at 6; Letter of Roger N. Schecter, Director, Division Coastal Management, North Carolina Department of Environmental Health and Natural Resources to Arnold H. Quint, Esq., Counsel for VEPCO, September 9, 1991, (State's Objection Letter) at 1, AR 1.
32. State's Objection Letter at 2-3.
33. Id. at 3-6.
34. Id. at 6-9.
35. See section 307(c)(3)(A) of the CZMA and 15 C.F.R. § 930.131.
36. See Notice of Appeal, with accompanying Certificate dated October 3, 1991, AR 3.

37. Letters of Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, January 15, 1992, AR 31.
38. As provided by its regulations, NOAA asked the public to comment on the merits of this appeal. See 57 Fed. Reg. 1456 (January 14, 1992), and notices in the Virginian Pilot-Ledger-Star (January 27-29, 1992), The Richmond Times Dispatch (January 27-29, 1992) and The News and Observer (January 27-29, 1992), AR 25-25c. NOAA also asked for comments at the public hearing on this appeal held on June 13, 1992, in Virginia Beach. See 57 Fed. Reg. 22211 (May 27, 1992), and notices in the Virginian Pilot-Ledger-Star (June 1-3, 1992), The Richmond Times Dispatch (June 1-3, 1992) and The News and Observer (June 1-3, 1992), AR 86-87c. See also 15 C.F.R. §§ 930.113, 930.127 and 930.129.
39. As indicated in this decision, the consistency appeal process is an open one where I receive comments on a proposed activity from any interested party. I then look at the information in the administrative record to determine whether there exists grounds for a Secretarial override of a state's objection to the activity exist.
40. Motion for Expeditious Termination of CZMA Consistency Review Proceedings for Lack of Jurisdiction, July 28, 1992, (Appellants' Termination Brief), AR 140.
41. Id.
42. Letters of Barbara Hackman Franklin, Secretary of Commerce, to Counsel for the City, the State and VEPCO, December 3, 1992, AR 150.
43. Id., enclosing Letter of Timothy E. Flanigan, Assistant Attorney General, Justice, to the Honorable Wendell L. Willkie, II, General Counsel, Department of Commerce, October 1, 1992.
44. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 8, Supplemental AR 6.
45. Letter of Alan S. Hirsch, Special Deputy Attorney General, to the Honorable Ronald H. Brown, Secretary of Commerce, dated February 3, 1993, Reconsideration AR 1.
46. Letter of Ronald H. Brown to Counsel for the City, the State and VEPCO, July 30, 1993, Reconsideration AR 19.
47. North Carolina, et al. v. Ronald H. Brown, et al., No. 93-1839, (D.D.C. filed September 2, 1993).

48. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 4, Supplemental AR 6.
49. Letter of Webster L. Hubbell, Associate Attorney General, Justice, to Carol C. Darr, Acting General Counsel, Department of Commerce, December 14, 1993, Supplemental AR 1.
50. Id.
51. Pursuant to Departmental Organizational Order No. 10-15, the Secretary of Commerce has delegated responsibilities to NOAA for administration of the CZMA. See also NOAA Administrative Order 201-104, 205-11, and Delegation Memorandum from Gray Castle, Deputy Under Secretary for Oceans and Atmosphere, NOAA, and Thomas A. Campbell, General Counsel, NOAA, to Interested Persons, May 29, 1991.
52. See Letter of D. James Baker, Under Secretary for Oceans and Atmosphere and Administrator of NOAA, to Distribution List (Counsel for the City, the State and VEPCO), December 16, 1993, Supplemental AR 2 (notifying the City and the State that NOAA intends to reopen the appeal).
53. See Letter of Margo E. Jackson, Assistant General Counsel for Ocean Services to Counsel for the City, the State and VEPCO, January 7, 1994, Supplemental AR 3.
54. See Decision and Findings in the Consistency Appeal of Roger W. Fuller (Fuller Decision), October 2, 1992, at 5; citing Decision and Findings in the Consistency Appeal of Korea Drilling Company, Ltd. (Korea Drilling Decision), January 19, 1989, at 3-4.
55. The term "appeal" is a misnomer. More precisely, I examine the State's objection for compliance with the CZMA and its regulations in order to determine whether the objection was properly lodged. I then determine whether an appellant has filed a perfected appeal. Then, based on all relevant information in the administrative record, I conduct a de novo inquiry of whether the activity is consistent with the objectives of the CZMA or necessary in the interest of national security. CZMA § 307(c)(3)(A); 15 C.F.R. §§ 930.122. See, e.g., Decision and Findings in the Consistency Appeal of Cruz Colón, (Cruz Colón Decision), September 27, 1993, at 4 (issued after 7/28/92), Decision and Findings in the Consistency Appeal of Jose Perez-Villamil, (Villamil Decision), November 20, 1991, at 3 (issued before 7/28/92).



56. See Decision and Findings in the Consistency Appeal of Claire Pappas, October 26, 1992, at 3; citing Villamil Decision, at 3.
57. Section 307(c)(3)(A) of the CZMA, in pertinent part, states:

[A]ny applicant for a required federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. (Emphasis added.)

58. See CZMA section 307(c)(3)(A).
59. Appellants' Initial Brief at 42.
60. Id.
61. The term "license or permit" is defined by NOAA regulations as:

[A]ny authorization, certification, approval, or other form of permission which any federal agency is empowered to issue to an applicant . . . [it includes] [r]enewals and major amendments of federal license and permit activities not previously reviewed by the State agency . . .

15 C.F.R. § 930.51.

62. Appellants' Initial Brief at 43, 46.
63. See Chevron USA v. NRDC, 467 U.S. 837, 842-44 (1984); See also Aluminum Co. of America v. Central Lincoln People's Util. Dist., 467 U.S. 380, 390 (1984).
64. The conference report for the 1990 amendments to the CZMA states:

The conference report does not alter the statutory requirements as currently enforced under sections 307(c)(3)(A) and (B), and (d) of the CZMA. These requirements are outlined in the NOAA regulations (15 C.F.R. 930.50-930.66) and the conferees endorse this status quo.

H.R. CONF. REP. No. 964, 101st Cong., 2nd Sess. at 972 (1990)

65. See Administrative Procedure Act § 2, 5 U.S.C. § 551(8) (1987).
66. Appellants' Initial Brief at 56-58.
67. State's Initial Brief at 36.
68. See Decision and Findings in the Consistency Appeal of Exxon Company, U.S.A., (Exxon SRU Decision), November 14, 1984, at 8.
69. See Section 304(6a) of the CZMA.

The CZMA provides further that a state may review an activity occurring outside its coastal zone requiring a federal license or permit, such as the proposed pipeline project, for consistency with such policies. See Section 307(c)(3)(A) of the CZMA.

70. Appellants' Initial Brief at 59.

The term "enforceable policy" is defined in the CZMA as:

State policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone.

Section 304(6a) of the CZMA.

71. Appellants' Brief at 59.
72. Id. at 59-60.

AECs are areas located within the coastal zone of North Carolina that contain natural hazards, or environmental, economic or social values that are of concern to the State as a whole. Because of their spatial relationship to coastal waters and characteristic resources, AECs are considered to be critical in protecting the resources and values of North Carolina's coastal zone. That portion of the Roanoke River in North Carolina's coastal zone has been designated by the CRC as either a public trust or estuarine waters AEC. See Appendix B to State of North Carolina Coastal Management Program and Final Environmental Impact Statement published by U.S. Department of Commerce (NCCMP).

73. See North Carolina General Statutes (NCGS) § 113A-108, 111.
74. See NCCMP at 166, 206-209.
75. See NCGS § 113A-108; see also, State Executive Order No. 15.
76. See Findings of Robert W. Knecht, Assistant Administrator for Coastal Zone Management, National Oceanic and Atmospheric Administration - Approval of North Carolina Coastal Management Program, September 1, 1978, at 20.
77. See NCGS § 113A-126.
78. See Section 304(6a) of the CZMA.
79. See Cruz Colón Decision, at 3-4 and cites therein, and Decision and Findings in the Consistency Appeal of Shickrey Anton, (Anton Decision), May 21, 1991, at 3 and cites therein. See also section 307(c)(3)(A) of the CZMA; 15 C.F.R. §§ 930.64.
80. See section 307(c)(3)(A) of the CZMA.
81. Appellants' Initial Brief at 47-52; Appellants' 7/28/92 Brief at 8-24; Appellants' Reply in Support of Motion for Expeditious Termination of CZMA Consistency Review Proceedings for Lack of Jurisdiction (Appellants' Termination Reply Brief) at 3-4, AR 146.
82. Appellants' Initial Brief at 52-56 ; Appellants' 7/28/92 Brief at 26-28.
83. State's Initial Brief at 33; North Carolina's Response to Motion for Expeditious Termination of CZMA Proceedings, at 1-7, AR 14.
84. Letters endorsing the State's view that there is no geographic limitation to consistency review under the CZMA were submitted by members of the U.S. Merchant Marine and Fisheries Committee, including Representatives Walter Jones, Robert Davis, Gerry Studds, Don Young, and Dennis Hertel, as well as by the Natural Resources Defense Council. See Letter from Hon. Walter Jones, Hon. Robert Davis, Hon. Gerry Studds, Hon. Don Young, and Hon. Dennis Hertel, Committee on Merchant Marine and Fisheries to Mary Gray Holt, Attorney-Adviser, NOAA, March 16, 1992, AR 72. See also Letter from Sarah Chasis, Senior Attorney, Natural Resources Defense Council to Mary Gray Holt, Attorney-Adviser, NOAA, February 28, 1992, AR 63.

Comments supporting the City's interpretation that the CZMA does not authorize interstate consistency review were submitted by Virginia Attorney General Mary Sue Terry, the Hampton Roads Chamber of Commerce, Senators John Warner and Charles Robb, and Congressional Representatives Owen Pickett, Norman Sisisky and Herbert Bateman. See Letter from Mary Sue Terry, Attorney General, Commonwealth of Virginia to Hon. William P. Barr, U.S. Attorney General, February 26, 1992, AR 59; Statement of the Hon. Mary Sue Terry, Attorney General, Commonwealth of Virginia before NOAA, June 13, 1992, AR 95. See also Comments by the Hampton Roads Chamber of Commerce, June 13, 1992, AR 113B. See Letter from Senators John Warner and Charles Robb, and Representatives Owen Pickett, Norman Sisisky and Herbert Bateman, to Robert Mosbacher, Secretary, Department of Commerce, October 4, 1991, AR 55; Letter from Representative Owen Pickett to Barbara Franklin, Secretary, Department of Commerce, March 16, 1992, AR 76; Letter from Senator John Warner to Barbara Franklin, Secretary of Commerce, March 20, 1992, AR 78.

The City also included in its submissions statements by the Corps in which the Corps rejects interstate consistency as a matter of policy, asserting that a "state cannot use the CZMA to effectively veto a non-Federal activity located wholly in another state." Memorandum on Inter-State Application of the Coastal Zone Management Act by Lance D. Wood, Assistant Chief Counsel, Environmental Law and Regulatory Programs, U.S. Army Corps of Engineers, March 22, 1991, attaching Memorandum on Legal Guidance Regarding the South Carolina Coastal Council's ["SCCC"] preempted "Veto" under the Coastal Zone Management Act Section 307(c)(3)(A) of the Hooker Corporation's Proposed Project at Hutchinson Island, Georgia, by Lester Edelman, Chief Counsel, U.S. Army Corps of Engineers, May 5, 1989, Comments of City of Virginia Beach, App. at Tab 45, AR 73b; see also Letter from Lester Edelman, Chief Counsel, U.S. Army Corps of Engineers to Mary Gray Holt, Attorney-Adviser, NOAA, February 21, 1992, AR 48.

Part of the City's submissions also included letters of the U.S. Department of Justice reflecting Justice's pre-December 1993 position denying interstate consistency. Memorandum on Inter-State Application of the Coastal Zone Management Act by Lance D. Wood, Assistant Chief Counsel, Environmental Law and Regulatory Programs, U.S. Army Corps of Engineers, March 22, 1991, attaching Letter from Donald Carr, Acting Assistant Attorney General, Land & Natural Resources Division, U.S. Department of Justice to Timothy Keeney, General Counsel, NOAA, April 27, 1989, Comments of City of Virginia Beach, App. at Tab 45, AR 73b; Letter from William

P. Barr, U.S. Attorney General to Senator John Warner, March 8, 1992, Appellants' Motion for Expeditious Termination of CZMA Consistency Review Proceedings for Lack of Jurisdiction (Appellants' Termination Brief), Attachment, AR 140. As noted earlier in the factual background supra, on December 14, 1993, the Department of Justice withdrew its legal opinion (Letter from Barry Hartman, Acting Assistant Attorney General to Thomas Campbell, General Counsel, NOAA, March 12, 1992, attached to Letter from Barbara Franklin, Secretary of Commerce, to Arnold H. Quint, Esq., December 3, 1992, AR 150) that interstate consistency is not authorized by the CZMA. Letter from Webster L. Hubbell, Associate Attorney General, U.S. Department of Justice, to Carol C. Darr, General Counsel, Department of Commerce, December 14, 1993, Supplemental AR 1.

85. Appellants' Initial Brief at 47-48, 52-53.
86. The term "res judicata" is often used to refer to two closely related doctrines: First, res judicata holds that a judgment on the merits of a claim precludes reconsideration, in a later proceeding based on the same cause of action, of any issues that were or could have been litigated with respect to that claim. Second, "collateral estoppel" holds that an issue that has been actually litigated and determined in an earlier action cannot be relitigated in a later proceeding, even if the later proceeding involves a different cause of action. As discussed below, the City's argument is primarily based on the collateral estoppel doctrine, although the City does bring up a res judicata argument as an alternative. In my discussion of this issue, I use the term "res judicata" to refer to both doctrines unless otherwise stated.
87. State's Initial Brief at 34.
88. The State wrote to the Corps on January 4, 1984 to request that the City certify the consistency of its proposed project with North Carolina's coastal zone management program. Letter from James B. Hunt, Governor, State of North Carolina, to Colonel Ronald E. Hudson, U.S. Army Corps of Engineers, January 4, 1984, Appellants' Initial Brief, App. IV at 3121, AR 14. The Corps did not respond directly to the State's request. Five days later, on January 9, 1984, the Corps released its findings on the City's permit application. In its findings, the Corps acknowledged that North Carolina had requested consistency certification, but stated that "based on 33 C.F.R. 325.2(b)(2) and other analyses, certification is not required in this case." The Corps did not elaborate further. Norfolk District Corps of Engineers Statement of Findings, January 9, 1984, (1984 ND SOF), Appellants' Initial Brief, App. I at 150, AR 7.

The cited section of the Corps' regulations provide that if a proposed activity is to be undertaken in a state with an approved coastal zone management program, the district engineer shall, if the application "involves an activity affecting the coastal zone . . . obtain from the applicant a certification that his proposed activity complies with and will be conducted in a manner that is consistent with the approved state CZM Program." 33 C.F.R. § 325.2(b)(2)(ii).

This section certainly does not compel the conclusion that the Corps' decision that certification was not required was based on an interpretation that the CZMA does not authorize interstate consistency review.

89. Letter from Col. Wayne A. Hanson, District Engineer, U.S. Army Corps of Engineers, Wilmington District, to Hon. James B. Hunt, Jr., Governor of North Carolina, January 10, 1984, State's Initial Brief, App. Vol. 9 at Tab 135, AR 29i.
90. Even if it could be said that a decision on the issue of interstate consistency under the CZMA was somehow implied in the Corps' permit findings, which appears to be the City's argument, I would not give that decision preclusive effect because the requirements of res judicata have not been met. The City's primary argument is actually based on the closely related doctrine of collateral estoppel, which holds that an issue actually litigated and determined in a prior action cannot be argued again in a later action. Contrary to the City's claim that the interstate consistency issue was "actually litigated" in the Corps permit proceeding, there is no evidence in the record that the issue of interstate consistency was either actually litigated or determined in that action.

The City's alternative argument, which is a res judicata argument, is that I am precluded from consideration of the interstate consistency issue because that issue could have been litigated in the Corps action. I reject this argument. As noted above, the doctrine of res judicata, as used in this sense, would only apply if there had been a judgment on the merits in a prior suit based on the same cause of action as the present appeal.

The appeal before me, which involves North Carolina's consistency objection to the FERC permit, is not the same cause of action as the permit application before the Corps. As discussed, the Corps permit was a permit granted under the Clean Water Act, 33 U.S.C. § 1344, and the Rivers and Harbors Act, 33 U.S.C. § 403, which

authorized the City to discharge fill material into waters of the United States and to construct river crossings to build the pipeline. The appeal before me involves a consistency objection to an application to FERC seeking authorization of easements and the right to use water.

Finally, even if it could be said that the elements required for res judicata (I use the term now to apply to both doctrines) were present in this case, I am not bound on these facts. Decisions by administrative agencies do not always have to be given preclusive effect, even if they satisfy the technical requirements of res judicata.

In this case, there are compelling reasons against applying res judicata as urged by the City. Congress defines the jurisdiction of administrative agencies by substantive legal provisions. While it is true that in many cases an agency's determination on a certain issue, particularly an issue of fact, will bind other agencies, a determination by an agency that incidentally touches upon substantive legal provisions outside of its jurisdiction cannot bind the agency that has actually been granted that jurisdiction by Congress:

A decision by an agency primarily qualified to determine a question is binding on another agency, but another agency's decision is not binding on an agency primarily qualified to determine a question.

Davis, Administrative Law of the Eighties (1984), Section 21.5.

In this appeal, the City argues that because the Corps promulgated an interpretation of the language of the CZMA, I am bound by that interpretation. I reject that argument. In Lujan v. Defenders of Wildlife, et al., \_\_\_ U.S. \_\_\_, 112 S. Ct. 2130 (1992), the United States Supreme Court dismissed as "facially impracticable" the suggestion that one agency "can acquire the power to direct other agencies by simply claiming that power in its own regulations and in litigation to which the other agencies are not parties." 112 S. Ct. at 2141, footnote 4. Here, as in Lujan, the City's suggestion that the Corps could direct how the Secretary of Commerce is to interpret the language of the CZMA, which Congress has directed the Secretary to administer, is facially impracticable.

92. Appellants' 7/28/92 Brief at 24-26.
93. In the L.J. Hooker consistency appeal, which was ultimately withdrawn, Hooker proposed to dredge marina slips and access channels within 300 feet of the South Carolina border in the Back River, a water body shared by Georgia and South Carolina. The dredging and dredged material disposal would take place entirely within Georgia, but South Carolina asserted that the project may have significant effects on its coastal zone critical areas. See Letter from H. Stephen Snyder, Director of Planning and Certification, South Carolina Coastal Council to Tom Yourk, Project Manager, U.S. Army Corps of Engineers, Savannah District, June 3, 1988; Letter from H. Wayne Beam, Executive Director, South Carolina Coastal Council to Colonel Ralph V. Locurcio, District Engineer, Savannah District, U.S. Army Corps of Engineers, October 18, 1988. OCRM did not consider South Carolina to be the location of the project, because the activity would take place entirely within Georgia. The consistency appeal was allowed because of the effects the project would have in South Carolina. Id. Thus, as contemplated by the CZMA, it was the potential effects that triggered consistency review.

The Town of Seabrook consistency appeal, which was subsequently settled and withdrawn, involved New Hampshire's proposal to pipe discharge from its wastewater treatment facility through the town's heavily developed barrier beach to approximately 2,100 feet offshore in approximately 30 feet of water in the Atlantic Ocean. All construction activities proposed would occur in New Hampshire with the pipe discharging approximately 1,000 feet north of the New Hampshire-Massachusetts border. Prevailing currents flow southeast towards Salisbury, Massachusetts. Under the CZMA's effects test, it was Massachusetts's concerns that the proposed discharge, which required EPA and Corps permits, might reasonably be expected to affect its coastal zone that triggered its review process. See Letter from Richard F. Delaney, Director, Office of Environmental Affairs, The Commonwealth of Massachusetts to Elizabeth A. Thibodeau, Chairperson, Board of Selectmen, Town of Seabrook, January 11, 1989; Letter of Jeffrey R. Benoit, Director, Office of Environmental Affairs, The Commonwealth of Massachusetts to Stephen DiLorenzo, Permits Branch, Regulatory Division, New England Division, U.S. Army Corps of Engineers, June 12, 1990; Letter from Timothy R.E. Keeney, Director, Office of Ocean and Coastal Resource Management, NOAA to Jeffrey H. Taylor, Director, Office of State Planning, State of New Hampshire, February 15, 1991; Letter from Ralph J. Caruso, Chief CT, ME, NH Wastewater Management Section to Steven A. Clark, Administrative Assistant, Town of Seabrook, April 20, 1990.



Similarly, when an activity will actually physically occur in two states, the doctrine of interstate consistency does not come into play, because each state can review the project just as it would any other project occurring within its borders. For example, when the Staten Island Railway Corporation applied to the Interstate Commerce Commission to abandon or discontinue operations on part of its railroad in both New York and New Jersey, interstate consistency was not implicated because the project actually occurred in both states. See Letter from Gail S. Shaffer, Secretary of State, State of New York to Michael F. Armani, Attorney, Staten Island Railway Corporation, August 5, 1992.

94. Letter from Secretary Barbara Franklin to Samuel Brock III, Esq., December 3, 1992, AR 150.
95. Id.
96. See Good Samaritan Hospital v. Shalala, \_\_\_ U.S. \_\_\_, 113 S. Ct. 2351, 2157 (1993) (quoting Chevron U.S.A. Inc. v. Natural Resource Defense Council Inc., 467 U.S. 837, 842 (1984)).
97. CZARA was passed as an amendment to the Omnibus Budget Reconciliation Act of 1990. Coastal Zone Act Reauthorization Amendments of 1990, Pub. L. No. 101-508, 104 Stat. 1388 (1990).
98. Section 307(c)(3)(A) of the CZMA.
99. The City makes an often-heard argument that this view of section 307(c)(3)(A) would lead to Louisiana reviewing for consistency with its coastal management program activities occurring considerably north of Louisiana along the Mississippi-Missouri river system. Appellants' Initial Brief at 50-51. While theoretically possible, this argument is a red herring. There must be a nexus between the activity wherever located and the reviewing state's coastal zone. The activity must cause an effect in the coastal zone of the reviewing state. This limiting factor may be reviewed at two critical junctures in the consistency process. First, OCRM has advised that, if a state has not indicated in its coastal management program the geographic location of activities outside of its coastal zone that it will review for consistency, the preferred method for state review is for a state to request from the Director of OCRM permission to review the activity as an unlisted activity. See Office of Ocean and Coastal Resource Management, Federal Consistency Bulletin, Issue No. 1, January 1993, at 8-9. The standard for allowing such review is that the requesting

state must show that the activity can be "reasonably expected to affect" the land and water uses or natural resources of its coastal zone. 15 C.F.R. § 930.54(c). Clearly, the farther away an activity is from the coastal zone in question, the harder that showing will be. Second, if review is allowed and a state finds the activity inconsistent with its coastal management program, upon appeal, the Secretary will examine the activity within the statutory and regulatory parameters of his review and could find the activity (1) consistent with the objectives of the CZMA or (2) otherwise necessary in the interest of national security.

100. The City cites another portion of the CZMA, section 307(e)(1), as supporting its reading of section 307(c)(3)(A). Appellants' Initial Brief at 51-52. This section reads, in pertinent part:

Nothing in this title shall be construed . . . to diminish either Federal or state jurisdiction, responsibility, or rights in the field of planning, development, or control of water resources . . . .

101. Appellants' Initial Brief at 51-52.
102. The sovereign rights of the non-objecting state are not impinged by a neighboring state's objection. In fact, instead of restricting state authority, the CZMA actually expands it by granting to all coastal states with a federally approved program, the right to influence or prevent the issuance of federal permits and licenses which could lead to coastal degradation. See California Coastal Commission v. Granite Rock Co., 480 U.S. 572, 592.
103. Motion for Expeditious Termination of CZMA Consistency Review Proceedings for Lack of Jurisdiction, July 28, 1992, AR 140 (Appellants' Termination Brief), at 3-4.

In the 1990 CZARA amendments, Congress added not only the term "enforceable policies," but also definition of that term. The definition included in the amendments describes enforceable policies as "State policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone." See Section 304(6a) of the CZMA.

Prior to the inclusion of the definition of enforceable policies in the CZMA, NOAA's regulations required a

state's management program to include enforceable policies. A state management program had to:

[i]dentify relevant constitutional provisions, statutes, regulations case law and such other legal instruments (including executive order and interagency agreements) that will be used to carry out the State's management program.

15 C.F.R. § 923.41(b)(1). See also 923.41(b)(2)(i)-(iii), 15 C.F.R. § 923.71(c)(4)(iv).

104. Further, as noted above, NOAA already required states, in preparing and implementing their coastal programs, to demonstrate enforceability of their laws and policies incorporated into those programs. In 1977, NOAA revised its regulations to place increased emphasis on enforceable policies in management programs. See Coastal Zone Management Program Approval Regulations, Proposed Rule, 42 Fed. Reg. 43552 (Aug. 29, 1977). In the Decision and Findings in the Consistency Appeal of Amoco Production Company, (Amoco Decision), July 20, 1990, at 4-12, the Secretary reiterated to the states the prerequisite of having a consistency objection based on enforceable policies that had been incorporated into their coastal management programs. NOAA at the same time interpreted section 307 to allow interstate consistency review. See Keeney Memorandum at Attachment. Therefore, a reasonable explanation for Congress's inclusion of the term "enforceable policies" in section 307 is to codify NOAA's existing regulatory practice.
105. Secretary of the Interior v. California, 464 U.S. 312 (1984).
106. See H.R. Conf. Rep. No. 964 at 972; H.R. No. 8073, 101st Cong., 2nd Sess. (1990)
107. The legislative history indicates that the definition of enforceable policies was "intended to endorse existing NOAA and state practice." The existing NOAA practice and interpretation was that the CZMA authorized interstate consistency. Id. at 969.
108. The City, in making this argument, relies heavily on the views of other agencies. Appellants' 7/28/92 Brief at 16-18.
109. Id. at 17-18.

110. (See, e.g., 42 U.S.C. 7410(2)(E); 33 U.S.C. 1341(a)(1); 33 U.S.C. 1342.)
111. Section 307(c)(3)(A) of the CZMA.
112. The CAA and CWA require notice to neighboring states of the contents of a state's plans to implement those Acts. See, e.g., 42 U.S.C. 7426, 33 U.S.C. 1341(a)(2). The CZMA does not require notices to neighboring states, but a state's initial program and any changes thereto have to be noticed to the public with the opportunity for input from the public, including other states. See CZMA section 306(d)(1); 15 C.F.R. § 923.81(b). Further, if the Secretary considers, pursuant to the statutory grounds, an override of a state's objection to an activity, an opportunity is provided for comments from the public, including states, and from federal agencies. See 15 C.F.R. §§ 930.126, 930.127.
113. Section 302 of the CZMA.
114. Those policies included:
- to encourage the participation and cooperation of the public, state and local governments, and interstate and other regional agencies, as well as of the Federal agencies having programs affecting the coastal zone, in carrying out the purposes of this title.
- Section 303(4) of the CZMA.
115. Section 303(2) of the CZMA.
116. See Davis v. Michigan Department of Treasury, 489 U.S. 803,809 (1989).
117. See section 307(c)(3)(A) of the CZMA. See also 15 C.F.R. § 930.130(a).
118. See 15 C.F.R. § 930.121(a).
119. See 15 C.F.R. § 930.121(b).
120. See 15 C.F.R. § 930.121(c).
121. See 15 C.F.R. § 930.121(d).
122. See 15 C.F.R. § 930.121.
123. See 15 C.F.R. § 930.122.
124. See sections 302 and 303 of the CZMA. See also 15 C.F.R. § 930.121(a).

125. See sections 302 and 303 of the CZMA.
126. Previous consistency appeal decisions have found that activities satisfying Element 1 include oil and gas exploration, development and production; the siting of railway transportation facilities; and the construction of a commercial marina, as well as the construction of a food market.
127. The sections of the CZMA primarily identified by the City are: the national interest in the effective management, beneficial use, and development of the coastal zone; the national interest in states exercising their full authority to develop water use programs for the coastal zone through cooperative efforts with federal and local governments; the national policy for developing coastal zone resources; and the national objective for state coastal management programs to provide priority consideration for coastal-dependent uses. Appellants' Initial Brief at 66-67, 69-70; citing sections 302(a), 302(i), 303(1) and 303(2)(D) of the CZMA.
128. The City argues that the project will develop a coastal zone resource to its most beneficial use: water for human consumption, and that this project will provide a desperately needed, essential public service to southeastern Virginia. See Appellants' Initial Brief at 67-69. The City argues that Virginia state law and U.S. Supreme Court decisions recognize the importance of maintaining safe and adequate water supplies. Id. at 68. The U.S. Supreme Court has recognized that "[d]rinking and other domestic purposes are the highest uses of water." Id., citing Connecticut v. Massachusetts, 282 U.S. 660 (1931).
129. The City maintains that its project will promote further development of the coastal zone, including numerous vital or beneficial coastal-dependent uses in the southeastern Virginia coastal zone, such as recreation, ports and transportation, and national defense. Appellants' Initial Brief at 67; Appellants' 7/28/92 Brief at 35.
130. See State's Initial Brief at 39. The State asserts that there is no support in the CZMA, the regulations or prior decisions for the City's argument that a beneficial use of a resource is development of the resource. Id. at 39-40.
131. Id. at 40; State's 7/28/92 Brief at 27, citing Decision and Findings in the Consistency Appeal of John K. DeLyser, (DeLyser Decision), February 26, 1988, and Decision and Findings in the Consistency Appeal of the Asociación de Proprietarios de Los Indios, (Los Indios Decision), February 19, 1992.

132. See, e.g., Statement of the Hon. Meyera E. Oberndorf, Mayor, City of Virginia Beach, June 13, 1992, AR 98.
133. See, e.g., Letter of Ronald J. Wilson, Of Counsel, Sierra Club Legal Defense Fund, Inc., to Ms. Mary Gray Holt, Attorney-Advisor, NOAA, March 20, 1992, AR 75.
134. See Los Indios and DeLyser Decisions.
135. Id.
136. See sections 302(a) and 303(1) of the CZMA. See also Decision and Findings in the Consistency Appeal of Davis Heniford (Heniford Decision), May 21, 1992, at 6-7.
137. See Decision and Findings in the Consistency Appeal of Chevron U.S.A., Inc., (Chevron Destin Dome Decision), January 8, 1993, at 7.
138. See 15 C.F.R. § 930.121(b).
139. See Decision and Findings in the Consistency Appeal of Texaco, Inc., (Texaco Decision), May 19, 1989, at 6.
140. The record of this appeal indicates that several state and federal resource agencies have characterized the Corps' NEPA analysis as inadequate and outdated, and FERC's NEPA analysis as inadequate. This is discussed further below.
141. 15 C.F.R. § 930.121(b). See Decision and Findings in the Consistency Appeal of Chevron U.S.A., Inc., (Chevron Destin Dome Decision), January 8, 1993, at 8.
142. For the purposes of my CZMA analysis, there is adequate information in the record of this appeal to assess the effects of the project on coastal resources and uses. The record of this appeal contains significant new information which has been developed or become available since the Corps completed its environmental analysis of the project. In May 1992, the North Carolina Striped Bass Study Management Board released its report on striped bass and discussed low flows, striped bass needs and water quality. The Roanoke River Water Flow Committee released four reports on river flows and their effects on resources. North Carolina, and the U.S. Geological Survey (USGS), in concert with the Albemarle-Pamlico Estuary Study (APES), have produced new information on Roanoke River water quality. The record of this appeal also contains new information on coastal uses which may be affected by the City's project. The City made available additional information relevant to the individual and cumulative impacts of a 60 mgd withdrawal on water flows and coastal resources and uses. The sufficiency of

information for my CZMA analysis does not mean, however, that this information would be sufficient for other purposes.

143. The Roanoke River Water Flow Committee (Flow Committee), which consists of representatives of state and federal agencies and university scientists, described the river as the largest intact, and least disturbed, bottomland forest ecosystem remaining in the Mid-Atlantic Region. Roanoke River Water Flow Committee Report for 1991-1993, November 1993 (1993 Flow Committee Report), at 3, State's 2/15/94 Brief, App. Vol. 1994-4, Supplemental AR 15.
144. The Corps states that these three dams are operated primarily for peak power production. Norfolk District Corps of Engineers Final Supplement EA, December 21, 1988, (1988 ND SEA), at 2, Appellants' Initial Brief, App. I at 204, AR 7. In its comments on the Corps 1988 ND SEA, the North Carolina Wildlife Resources Commission (NCWRC) states that Kerr Reservoir is operated primarily for flood control as well as hydropower operation. Letter from Richard B. Hamilton, Assistant Director, NCWRC, to Col. Joseph J. Thomas, ND Corps, August 3, 1988, at 2, State's Initial Brief, App. IV, Tab 60, AR 29d.
145. The Corps releases water from Kerr Reservoir following the Kerr Reservoir guide or rule curve, which is tied to water elevations. Most releases except those to meet contractual obligations for the sale of energy are made so that certain flows will be achieved at Roanoke Rapids Dam.
146. Memorandum of Understanding for Reregulation of Augmentation Flows for Fish from John H. Kerr Reservoir. Appellants' Initial Brief, App. I at 825, AR 8. The 1971 MOU avoided the paperwork needed to establish annual agreements for augmentation releases. Under the 51-day flow augmentation regime, the Corps and VEPCO supplemented the 2,000 cfs basic minimum release with water from Kerr Reservoir sufficient to maintain a minimum stage of 13 feet (about 6,000 cfs) at Weldon. The augmentation period generally was from April 26 through June 15, provided storage for augmentation flows was available in Kerr Reservoir.
147. In 1988, the Flow Committee was formed to investigate flows below Roanoke Rapids Dam and to suggest improvements for striped bass and other downstream resources. In August 1988, after negotiating with the Corps and VEPCO, the Flow Committee recommended a new flow regime, which the Corps and VEPCO voluntarily implemented on a trial basis. Instead of 51 days of augmented releases, the Committee proposed a 76-day augmentation period, from April 1 to June 15. Instead of the steady minimum river stage of 13 feet, the

Flow Committee proposed minimum, maximum and target flows. The Flow Committee recommended a minimum flow in early April of 6,600 cfs, with a target flow of 8,500 cfs. The minimum augmented flow would then be reduced to 4,000 cfs by early to mid-June, with a target flow of 5,300 cfs. This regime is referred to as the 76-day flow regime. The Corps (on February 25, 1994) and VEPCO (on February 2, 1994) agreed to implement the 76-day flow regime through the year 2000. The Corps states that, as has been the case since 1971, the regime cannot be met under certain conditions.

148. Table 1 summarizes the Roanoke River and striped bass water flow regimes (flow measurements have an accuracy of five percent):

Table 1

Roanoke River/Striped Bass Water Flow Regimes

Striped Bass Flows

	FERC <u>Minimum</u>	1971 MOU <u>51-day</u>	Flow Committee <u>76-day*</u>
January	1,000 cfs		
February	1,000		
March	1,000		
April 1-15	1,500	2,000 cfs	8,500 cfs
April 16-30	1,500	5,700	7,800
May 1-15	2,000	5,700	6,500
May 16-31	2,000	5,700	5,900
June 1-15	2,000	5,700	5,300
June 16-30	2,000		(5,300)**
July	2,000		
August	2,000		
September	2,000		
October	1,500		
November	1,000		
December	1,000		

\* Flow Committee 76-day (addition for 90-day) experimental flow regime, including upper and lower limits:

	<u>Lower Limit</u>	<u>Target Release</u>	<u>Upper Limit</u>
April 1-15	6,600 cfs	8,500 cfs	13,700 cfs
April 16-30	5,800	7,800	11,000
May 1-15	4,700	6,500	9,500
May 16-31	4,400	5,900	9,500
June 1-15	4,000	5,300	9,500
(June 16-30)	(4,000)	(5,300)	(9,500)**



\*\* (Proposed extension to create a 90-day flow regime.)

149. The Corps stated:

We do not propose to include the period of June 16-30 in the new flow regime, per se; however, Virginia Power Company has verbally agreed, as a good faith partner, to operate its Roanoke Rapids Hydro Plant during that period to provide the above flows when possible. During that time of year, there is no storage to guarantee that these flows can be met. However, there is a good chance that these recommended flows can be maintained from minimum discharges from hydro-electric power commitments at John. H. Kerr Dam.

See Letter from William R. Dawson, P.E., Chief, Engineering Division, WD Corps, to Fred A. Harris, Chief, Division of Boating/Island Fisheries, NCWRC, January 3, 1994, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 23, Supplemental AR 12.

VEPCO agreed to continue its part in implementing the 76-day flow regime and offered qualified support for the proposed June 16-30 extension of the flow augmentation regime. Letter from W.R. Cartwright, Vice President, Fossil and Hydro, Virginia Power, to Col. George L. Cajigal, WD Corps, February 2, 1994, State's 3/10/94 Brief, Vol. 1994-5, App. Tab 64, Supplemental AR 23.

150. The North Carolina Division of Marine Fisheries (NCDMF) recommended that the flow models used by the Corps and the City be recalculated to evaluate the impact of the project on the 76-day flow regime. Letter from William T. Hogarth, Director, NCDMF, to Col. J.J. Thomas, ND Corps, August 1, 1988, at 4, Appellants' Initial Brief, App. I at 755, AR 8. The National Marine Fisheries Service (NMFS) has repeatedly stated that the City's project should be evaluated against the 76-day flow regime, and not the 51-day regime which NMFS considered inadequate. See, e.g., Letter from Andreas Mager, Jr., Acting Assistant Regional Director, Habitat Conservation Division, NMFS, to Col. Joseph Thomas, ND Corps, August 2, 1988, (1988 NMFS Letter), State's Initial Brief, App. Vol. IV, Tab 59, AR 29d. Furthermore, NMFS stated to the Corps:

This apparent change in position should not be interpreted as a recommendation of denial. Our only reason for requesting the model reevaluation of the City's withdrawal against the revised flow regime is to ensure that the striped bass stocks are not impacted in some unexpected manner.

Letter from Robert L. Lippson, Assistant Regional Director, NMFS, to Col. Joseph J. Thomas, ND Corps, March 15, 1988, Appellants' Initial Brief, App. I at 734-735, AR 8.

In 1993, NOAA (of which NMFS is a part), in its comments on the FERC environmental assessment (EA), characterized the Corps' 1983 and 1988 environmental analyses, upon which FERC relied, as "out-dated NEPA documents." See Letter from David Cottingham, Director, Ecology and Conservation Office, NOAA, to Lois Cashell, Secretary, FERC, September 17, 1993, (NOAA Comments on FERC draft EA), State's 2/15/94 Brief, App. Vol. 1994-1, Tab 3, at 4, Supplemental AR 12. NOAA pointed out that FERC's draft environmental analysis (EA) failed to address the findings and recommendations of the North Carolina Striped Bass Study Management Board. Id. NOAA stated that the findings and recommendations of the Board, in contrast, are based on current literature. Id.

NOAA also stated that FERC did not adequately address the cumulative effects of the project. NOAA repeated its earlier concern that the Corps' analysis of the project's individual and cumulative impacts on fishery resources is inadequate. NOAA Comments on FERC draft EA at 11. NOAA also criticized the FERC draft EA as inadequate in not considering water flow effects on striped bass throughout the year. Id. at 13-14. Finally, NOAA suggested changes in the flow augmentation regimes, including a possible "annual" flow regime as discussed below. See NOAA Comments on FERC draft EA at 12-14. NOAA also suggested that the Corps' control of water flow under the Kerr Reservoir Rule and FERC's control of water flow through its license to VEPCO should also be examined. NOAA Comments on FERC draft EA at 12.

The North Carolina Wildlife Resources Commission (NCWRC) has suggested to the Corps that a 365-day, or annual, flow regime be developed. The Corps stated that intricate studies would be required to develop this regime and that the Corps would assist the NCWRC in developing these studies. Letter from William R. Dawson, P.E., Chief, Engineering Division, WD Corps, to Fred A. Harris, Chief, Division of Boating/Island fisheries, NCWRC, January 3, 1994, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 23, Supplemental AR 12. For future years (beyond 1994), VEPCO proposes an examination of alternate flow management strategies, such as one based on water temperatures. Letter from W.R. Cartwright, Vice President, Fossil and Hydro, Virginia Power, to Col. George L. Cajigal, WD Corps, February 2, 1994, State's 3/10/94 Brief, App. Vol. 1994-5, Tab 64, Supplemental AR 23.

The record shows that adoption of an annual flow regime would require substantial modification of VEPCO's FERC license and changes in the Corps' operation of Kerr Reservoir. VEPCO's FERC relicensing is a reasonably foreseeable activity. Based upon the record of this appeal, however, I am persuaded that the nature of the coastal impacts of VEPCO's relicensing under FERC are not reasonably foreseeable and I decline to speculate as to the terms of VEPCO's hydropower operations after the year 2001. I am also persuaded that changes in the Corps' operation of Kerr Reservoir necessary to implement an annual flow regime are not reasonably foreseeable at this time. I am therefore unable to assess the impacts of the City's withdrawal against the Corps' and VEPCO's implementation of an annual flow regime.

151. In 1976, 1977 and 1981, the Corps was unable to store enough water to release a minimum of 6,000 cfs when needed during the striped bass spawning periods. See Final Coordination Act Report for Hampton Roads Areas Water Supply Study, FWS, August 1984, at 8, Appellants' Initial Brief, App. I at 710, AR 8. The NCWRC commented to FERC, stating:

Inadequate storage in Kerr Reservoir has resulted in discharges less than the targeted rate for portions of the spawning season. Storage reallocation in Kerr Reservoir by Virginia Beach will certainly not assure that flows into the river will be met, especially during critical periods when inflow into Kerr Reservoir may be abnormally low.

Memorandum from Richard B. Hamilton, Assistant Director, NCWRC, to Lois Cashell, Secretary, FERC, October 20, 1993, at 3, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 16, Supplemental AR 12.

152. See Roanoke River Water Flow Committee Report, February 1989, (1989 Flow Committee Report), at 125, State's Initial Brief, App. Vol. IV, Tab 57, AR 29d.
153. Wilmington District Corps of Engineers Final FONSI, January 13, 1984, (1984 WD FONSI), at 1, Appellants' Initial Brief, App. I at 157, AR 7.
154. Bales, J., Strickland, A., and Garrett, R., "An Interim Report on Flows in the Lower Roanoke River, and Water Quality and Hydrodynamics of Albemarle Sound, North Carolina, October 1989-April 1991," USGS and APES, 1993, (Bales Report), State's 3/10/94 Brief, App. Vol. 1994-5, Tab 66 at 1, Supplemental AR 23. The Bales Report was

prepared in cooperation with the North Carolina Division of Water Resources (NCDWR) and the Corps.

155. See 1984 WD FONSI at 1.
156. State's Objection Letter at 3.
157. Memorandum from John Morris, Director, Office of Water Resources, NCDNRCD, to Virginia Members of North Carolina-Virginia Water Supply Technical Liaison Committee, March 3, 1983 (Excerpts); Appellants' Initial Brief, App. I at 1578, AR 9. The North Carolina Division of Natural Resources and Community Development (NCDNRCD) found that such withdrawals would have no impact on the lowest one-day average flow (or reservoir release) that is expected to occur in any ten years (the 1Q10), or the lowest seven-day average flow (or release) expected to occur in ten years (the 7Q10).
158. See Memorandum from John Morris, Director, Office of Water Resources, NCDNRCD, to Jay Langfelder, Assistant Secretary, NCDNRCD, March 15, 1983, Appellants' Initial Brief, App. IV at 3368, AR 14.
159. Under the agreed upon 76-day flow regime, or the proposed 90-day flow regime, the smallest acceptable range of flows (May 1-15) is between 4,700 cfs and 9,500 cfs, a range of 4,800 cfs. The allowable rate of fluctuation within this range is 1,500 cfs per hour, more than 15 times the amount of the City's proposed maximum withdrawal.
160. See "Analysis of Combined Effects of Virginia Beach Withdrawal and Other Future Consumptive Uses," Virginia Beach Department of Public Utilities, January 1991, Appellants' Initial Brief, App. at 1025-1078, AR 8. The City modeled its project in combination with other future uses, as recommended by federal and state resource agencies. Id. at 1028. The City's modeling found that 5,700 acre-feet of the City's storage in Kerr Reservoir (56 percent of its 10,200 acre-feet) would replace all lost days of augmented flows in all but two years, when either 7,660 acre-feet or 7,180 acre-feet was needed. Id. at 1036-1039. The City states that the need for 7,660 or 7,180 acre-feet is probably an overstatement, however. See Appellants' Initial Brief, footnote 62, at 101-102.

The Corps, USGS, and the National Weather Service (NWS) reviewed the City's model and commented favorably. See Norfolk District Corps of Engineers Supplemental Statement of Findings, December 21, 1988, (1988 ND SSOF), at 8, Appellants' Initial Brief, App. I at 231, AR 7; Id., at 210, 239 (Corps); Review Comments on Virginia Beach Hydrologic Model prepared by USGS, June 1, 1988, Id., App.

IV at 3179, AR 14; March 22, 1988 Memorandum from Thomas Leahy, Virginia Beach Department of Public Utilities, to File regarding NWS confirmation of Virginia Beach Hydrologic Model, Id. at 3182-3183A.

161. The City's project will also minimally reduce the number of high flow days.
162. Letter from Samuel M. Brock III, to Lois D. Cashell, Secretary, FERC, October 20, 1993, (City's Reply Comments on FERC draft EA), at 12, Appellants' 2/15/94 Brief, App. Vol. 1, Tab 10, Supplemental AR 6.
163. Water Storage Contract, Appellants' Initial Brief, App. IV at 4073, AR 15.
164. See "Analysis of Combined Effects of Virginia Beach Withdrawal and other Future Consumptive Uses," Virginia Beach Department of Public Utilities, January 1991, Appellants' Initial Brief, App. I at 1025-1078, AR 8; Appellants' Initial Brief at 77-82.
165. See, e.g., Appellants' Initial Brief at 79-80, Appellants' 7/28/92 Brief at 117-121, Appellants' 2/15/94 Brief at 7-8.
166. The North Carolina Striped Bass Study was undertaken pursuant to Section 5 of the Atlantic Striped Bass Conservation Act (ASBCA), P.L. 100-589. Section 5 of the ASBCA mandated that the FWS, in consultation with NOAA/NMFS, conduct a study of factors affecting the decline of striped bass in the Albemarle Sound and Roanoke River Basin. The North Carolina Striped Bass Study Management Board was established to assist the FWS and NOAA in conducting the Study. Section 5(a)(5) of the ASBCA specified that the Study should

... obtain additional biological information to understand the significance of fishing, water flows, and other factors in the decline of the striped bass populations in the Albemarle Sound-Roanoke River Basin and, if feasible, develop an effective course of action for restoring these important stocks of striped bass.

The Board included representatives from FWS, NMFS, NCDMF, NCWRC, Virginia Department of Natural Resources, and the Corps Wilmington District. The Board was guided in its deliberations by a Scientific Advisory Committee. The Report to Congress consists of three parts: the Report of the Director of the FWS (Director's Report), the concurrence of the NMFS, and the Report of the North Carolina Striped Bass Study Management Board (Board Report). See AR 120.

167. Report of the North Carolina Striped Bass Study Management Board (Board Report) at 14, (one of three sections in the Report to Congress). In its public hearing comments on this appeal, the NCDWR states that by the year 2010, North Carolina projects that consumptive water use in the Roanoke River Basin will increase by 90.2 mgd without this project. Comments of the NCDWR, AR 105. The City takes issue with other projections of future consumptive water use. See Appellants' 7/28/92 Brief at 117-121, City's Reply Comments on FERC draft EA at 47-51; Appellants' 3/10/94 Brief at 1-3.
168. See Board Report at 34. The City argues that the Corps' prediction includes some data on total water use in addition to net or consumptive water use, and is therefore too high. See Appellants' 7/28/92 Brief at 117-121. The Corps' prediction does not include increased net water consumption below Kerr Reservoir. However, in a draft report prepared by the North Carolina Division of Water Resources (NCDWR) for the North Carolina Striped Bass Study Management Board, the NCDWR projected a 124 mgd increase in consumptive water use in the entire Roanoke River basin by the year 2010. See Appellants' 3/10/94 Brief at 2, Appellants' 2/15/94 Brief, App. Vol. 1, Tab. 12, Supplemental AR 6; "Roanoke River Basin Water Use Investigation," NCDWR, June 1991, State's Initial Brief, App. Vol. V, Tab 92, AR 29e. This estimate of future consumptive use in the entire Roanoke River basin is less than the Corps' prediction. Without explanation, the State says that the data contained in the 1991 NCDWR draft report is both incorrect and long superseded, and urges adoption of the Corps' prediction (also made in 1991) as a consumptive use figure. State's 3/10/94 Brief at 3. Furthermore, the record indicates that the State may limit future withdrawals from the Roanoke River depending on the river's capacity to assimilate wastes.
169. VEPCO is required to maintain minimum flows, and the Corps and VEPCO implement flow augmentation regimes (subject to limitations).
170. The Corps stated that the Flow Committee's 76-day regime would be somewhat easier to meet than the 51-day regime, because lowering the minimum flow during the latter part of the augmented flow period more than compensates for raising the minimum flow in April. See 1988 ND SSOF at 9.
171. See Bales Report at 13-17, 59.
172. See State's Initial Brief at 57; Memorandum from Richard B. Hamilton, Assistant Director, NCWRC, to Kenneth E. Baker, Fossil & Hydro Support, Virginia Power, September 10, 1990, at 2, State's Initial Brief, App. Vol. IV, Tab 71, AR 29d; 1991 Flow Committee Report at 75. The NCWRC stated:

The anadromous fishes of the Roanoke River include the alewife, the American shad, the white perch, and the striped bass. Of these, the striped bass is, by far the most important [economically] as well as the most glamorous -- although these facts should in no way detract from the equal need for protection of the other species.

"The Minimum River Discharges Recommended for the Protection of the Roanoke River Anadromous Fishes," NCWRC, 1960, at 1, Appellants' 7/28/92 Brief, App. Vol. 2, Tab 15, AR 138c.

173. See State's Initial Brief at 5, 56-58. Different State agencies have commented on the project. In 1988, the NCWRC concluded that removal of 60 mgd is likely to cause severe damage to striped bass in the Roanoke River. See Letter from Richard B. Hamilton, Assistant Director, NCWRC, to Col. Joseph J. Thomas, ND Corps, August 3, 1988, State's Initial Brief, App. Vol. IV, Tab 60, at 4, AR 29d.

The North Carolina Department of Environment, Health and Natural Resources (NCDEHNR), and its predecessor, the North Carolina Department of Natural Resources and Community Development (NCDNRCD) have also commented on the project. In 1983, the NCDNRCD modeled expected low flows of a 60 mgd withdrawal and found that the effects of a 60 mgd withdrawal are fairly minor on both lake levels and stream flow. More recently, however, the NCDEHNR stated that the City's planned withdrawal of up to 60 mgd will have significant adverse impacts on Roanoke River striped bass.

Divisions of the NCDEHNR have commented on the project. The NCDEHNR includes the Division of Marine Fisheries (NCDMF), the Division of Water Resources (NCDWR), the Division of Environmental Management (NCDEM) and the Division of Coastal Management (NCDCM). The NCDMF stated that the planned withdrawal of 60 mgd will have a significant long-term negative impact on striped bass in the Roanoke River and Albemarle Sound. Letter from William T. Hogarth, Director, NCDMF, to Col. J.J. Thomas, ND Corps, August 1, 1988, at 3, Appellants' Initial Brief, App. I at 755, AR 8. A 1978 study of the North Carolina Division of Environmental Management (NCDEM) reported that "the potential for overall development, fishery maintenance, and water quality conditions on the lower Roanoke River are directly related to the minimum flow requirements." "Second Stage Preliminary Analysis of Withdrawals from the Roanoke River and the Chowan River for Water Supply in the Hampton Roads Area," NCDEM, August 1978, at v, Appellants' Initial Brief, App. IV at 3365, AR 14. More recently, the NCDEM expressed opposition to the City's project.

174. See State's Initial Brief at 49.
175. Annual striped bass landings decreased from about 15-20 million pounds during the mid-1960s and early 1970s to less than 300,000 pounds during the late 1980s, a decline of more than 80 percent in 20 years. Bales Report at 4, citing Manooch and Rulifson, 1989.
176. In 1988 the NCWRC stated that fishing pressure on this striped bass fishery may be inordinately high, and that "[r]ecreational fishermen feel as though they are being treated unfairly by being limited to three fish per day while commercial fishermen may take unlimited numbers during the commercial season." Letter from Charles R. Fullwood, Executive Director, NCWRC, to Hon. Walter B. Jones, Chairman, House Committee on Merchant Marine and Fisheries, March 17, 1988, Appellants' 7/28/92 Brief, App. Vol. 2, Tab 30, AR 138c. The NCWRC stated further: "The Division of Marine Fisheries has not heeded our requests during recent years to implement meaningful conservation regulations and continues to allow what we believe to be an unacceptable level of commercial striped bass harvest." Id.
177. See Report of the Director of the FWS (Director's Report) at 3-4 (one of three parts contained in the Report to Congress); Bales Report at 4-5; Emergency Striped Bass Research Study Report for 1990, FWS and NMFS, April 1992 (ESBS 1990), Appellants' 7/28/92 Brief, App. Vol. 1, Tab 7, at 1, AR 138b.
178. The record of this appeal indicates the following details of the striped bass life cycle occurring within the Roanoke River and Albemarle Sound. See also Roanoke River Water Flow Committee Report, February 1989, (1989 Flow Committee Report), at 51, State's Initial Brief, App. Vol. IV, Tab 57, AR 29d. Striped bass inhabit Albemarle Sound for much of their life histories, migrating up the Roanoke River during the annual spring spawning season (mid-April through mid-June). Board Report at 16. The striped bass spawn between River Mile (RM) 78 and RM 137, with spawning centered at Weldon (RM 130) just downstream from the Roanoke Rapids Dam. "Albemarle-Pamlico Estuarine System, Analysis of the Status and Trends," (April 1991), NMFS Comments, Attachment, AR 52g.

Large water flows attract striped bass upstream to spawn. The first of the adult striped bass begin ascending the river in late March. Most of the spawning stock ascends the river between mid-April and mid- to late May. Spawning occurs in water temperatures ranging from 13°C to 21.7°C, with a peak spawning temperature at 16.7°C. Ninety percent of spawning occurs between 15.4°C and 20.3°C. Id. Thus,



spawning activity is greatly influenced by water temperature. The spawning habitat is the main open water area of the river up to the Roanoke Rapids Dam in wet years, with water highly sedimented and turbulent. Id.

Striped bass eggs are released in open waters of rivers where they are fertilized. Water hardening of the eggs occurs in a few hours. The eggs require adequate current for suspension in the water column. The fertilized eggs are transported downstream and the incubation period ranges from 29 hours at 23.9°C to 80 hours at 12.2°C. Id. Newly hatched larvae are totally dependent upon water flow for transport and timing of arrival to the brackish water nursery grounds where feeding is initiated. The nursery area includes the Roanoke delta around the Cashie River, and the western Albemarle Sound. While larval development is dependant upon water temperature, active feeding begins about 10 days after hatching. Prey for striped bass larvae include small zooplankton crustaceans, primarily copepodid copepods and Bosmina. The zooplankton food source is also dependent on water flow for transport and timing of arrival to the nursery area. Id.

179. The water flow needs of striped bass in the Roanoke River have been studied beginning with the planning of Kerr Reservoir in the late 1940s. See, e.g., "The River Discharges Required for Effective Spawning by Striped Bass in the Rapids of the Roanoke River of North Carolina," NCWRC, December 1, 1959, Appellants' 7/28/92 Brief, App. Vol. 1, Tab 14, AR 138b. The NCWRC articulated the importance of Roanoke River water flow on the striped bass life cycle, in particular, on post-spawning events such as downstream egg transport, larval transport, and food supply transport. The following NCWRC comments to the Corps in 1988 detail the importance of water flow on striped bass:

Prior to actual spawning season, high flow rates in the Roanoke River in March and early April serve as an attractant for mature striped bass. High discharges enable spawning age fish to easily locate the mouth of the river and spawning areas. High flow rates probably also influence spawning fish to ascend the river more quickly by helping fish orient to the proper direction to move as they swim against the current. Thus concentrations for fish in the lower end of the river system and western Albemarle Sound are reduced, thereby reducing their vulnerability to commercial fishing pressure. Recently analyzed data also indicate that high flows in early spring and late winter were related to the formation of strong striped bass year classes and successful reproduction in these years prior to 1976 before the population decline. It is suspected

that these early overbank flows (greater than 10,000 cfs) washed nutrients from the watershed and adjacent bottomlands into the river. These nutrients then stimulated high populations of phytoplankton in the delta and nursery area which in turn stimulated the production of zooplankton upon which juvenile striped bass depend for forage.

Suitable river flows are as critical for downstream transport of striped bass eggs and larvae as they are for successful spawning. While striped bass eggs are near neutral in buoyancy when hardened, they are still more dense than water, especially as they near hatching. Sufficient flows must be maintained to suspend the developing eggs and larvae as they are transported downstream to the nursery area until the larvae are able to maintain their position in the water column. If the relatively high flows are not maintained, both eggs and larvae will drop out of suspension to suffocate in the bottom silt.

Suitable flows are also important in determining zooplankton prey abundance for larvae in the nursery area. When the larval yolk sac is depleted the young fish must have food available or starve. Flows are critical in controlling the timing at which these larvae arrive at any area that contains dense zooplankton populations so they can initiate feeding.

Letter from Richard B. Hamilton, Assistant Director, NCWRC, to Col. Joseph J. Thomas, ND Corps, August 3, 1988, State's Initial Brief, App. Vol. IV, Tab 60, at 2-3, AR 29d.

180. The Flow Committee stated to the Corps in 1988 the importance of river flow to the striped bass fishery: "The Committee concludes that the quantity of water passing through the Roanoke River system between March and June of each year has a significant effect on striped bass and other natural resources downstream." Letter from Recommendation Subcommittee, Roanoke River Water Flow Committee, to Col. Joseph J. Thomas, ND Corps, August 4, 1988, State's Initial Brief, App. Vol. IV, Tab 61, at 4, AR 29d. The Flow Committee made several statements as to the effects of low flows on striped bass. The Flow Committee stated in its first report:

The occurrences of extreme high or low flows also make it difficult to determine a flow level or range of flows that are acceptable to spawning fish. To try and isolate a range of flows thought to be acceptable, it was decided that this range should occur for 50% of the time and be centered

around the median flow; that is, within the 25 and 75 percentile of flows. In other words, the bottom 25 percent (low flows) and the top 25 percent (high flows) were not considered to be representative of the best flow conditions of spawning or subsequent life stages. Obviously, this selection of the quartiles was arbitrary and it is possible that a broader or narrower range would provide a more optimal flow regime.

1989 Flow Committee Report at 66. The Flow Committee made the following statements in the Executive Summary of its 1989 Report:

Extremely low water releases have negatively impacted the survival of young striped bass and perhaps other anadromous species, created unsuitable nesting and brooding habitat for waterfowl [and] compounded effluent problems for industries and municipalities.

A combination of factors including flow regulation on the lower Roanoke River, deteriorating water quality, and heavy fishing pressure on immature fish has taken its toll on the [striped bass] population as evidenced by extremely poor juvenile production.

[I]t is clear that one of the major forces influencing the aquatic environment and, therefore, striped bass stocks is water flow. Water flow affects striped bass in all facts of its complex life history.

1989 Flow Committee Report, Executive Summary.

The Flow Committee recommended that the existing 51-day flow regime be replaced by an experimental 76-day flow regime in order to further assess the relationship between the release of impounded water and striped bass recruitment. After the implementation of the 76-day experimental flow regime, the Flow Committee continued to investigate the improvement of flows below Roanoke Rapids Dam for striped bass and other downstream resources. A second report of the Flow Committee, which examined data from springs of 1988 and 1989, was issued in April 1990. Roanoke River Water Flow Committee Report for 1988 and 1989, April 1990 (1990 Flow Committee Report); State's Initial Brief, App. Vol. VI, AR 29f. A third report, which examined 1990 data, was issued in August 1991. Roanoke River Water Flow Committee Report

for 1990, August 1991 (1991 Flow Committee Report); State's Initial Brief, App. Vol. VII, AR 29g. A fourth report, the most recent report of the Flow Committee to date, examined data from 1991-1993 and was issued in 1993. In that 1993 report the Flow Committee concluded that the 76-day flow regime, in concert with other management actions, benefitted striped bass recruitment. 1993 Flow Committee Report at 83.

In October 1993, the Flow Committee recommended a 90-day flow regime. 1993 Flow Committee Report at 83; letter from J. Merrill Lynch, Chairman, Flow Committee, to Charles Fullwood, Executive Director, NCWRC, October 1, 1993, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 21, Supplemental AR 12. The Flow committee used the otolith aging technique (counting rings on the earbone of larval striped bass) in concluding that the 1990, 1991 and 1992 year classes of striped bass had spawning windows of 91 days, 80 days and 99 days, respectively. 1993 Flow Committee Report at 232-234. The Flow Committee also recommended the adoption of an annual flow regime. Id. at 84. The Flow Committee stated:

[N]atural resources of the lower Roanoke River Basin and Albemarle Sound (which receives much of its freshwater inflow from the Roanoke) are best managed within the context of a flow regime that approximates as closely as possible a preimpoundment hydrography. No rigorous scientific analysis is required to support or document this ecologically defensible position.

Id. at 83.

The significance of low flows on the striped bass fishery is further substantiated by the work of the North Carolina Striped Bass Study. The Study was not designed to address site-specific case-by-case project development impacts such as the City's project. See Letter from James W. Pulliam, Jr., Regional Director, FWS, to Kenneth E. Baker, Fossil and Hydro Support, VEPCO, November 26, 1990, Appellants' Initial Brief, App. I at 922-924, AR 8. However, many of the findings of the Study are relevant to this appeal. The North Carolina Striped Bass Study was designed, in general, to assess the depleted condition of the Roanoke River striped bass fishery, and develop recommendations to enhance this resource. The North Carolina Striped Bass Study Management Board's work was released in May 1992 while the work of the Flow Committee was ongoing. Specifically, the North Carolina Striped Bass Study Management Board (Board) indicated that there were several reasons for the decline in the striped bass fishery, including reduced water flow. See

Board Report at 33-37; State's Initial Brief at 49. The Board stated:

Analysis of existing data document a relationship between high (>10,000 cubic feet per second-cfs) and low (<5,000 cfs) flows and larval distribution, feeding and the subsequent juvenile abundance index (JAI). Extremes of flow can result in improper timing of larval arrival to suitable nursery areas, with resultant increased mortality and observed low JAI.

Board Report at iii; see also Board Report at 38, 39, 41.

The Board recommended that in order to enhance the striped bass resource "[a] moratorium on additional wastewater discharges and consumptive water withdrawals should be implemented in the Albemarle/Roanoke system until a comprehensive basinwide water study is completed for the system." Board Report at 41. As previously stated, however, the Flow Committee's subsequent 1993 report concludes that no rigorous scientific analysis is required to support or document the position that Roanoke River resources are best managed within the context of a flow regime that approximates as closely as possible a preimpoundment hydrography. While this study may be necessary for the more general purpose of enhancing the striped bass fishery, as I stated above, the record of this appeal contains sufficient information for me to evaluate the individual and cumulative impacts of this project for CZMA requirements.

Both NMFS and FWS have expressed support for the substantive findings and conclusions of the Flow Committee and the North Carolina Striped Bass Study Management Board. See NOAA Comments on FERC draft EA; FWS Comments on FERC draft EA. In commenting on the Corps 1983 EA and FONSI for the project, NMFS stated: "The National Marine Fisheries Service (NMFS) has reviewed the subject document and concurs with your Finding of No Significant Impact." Letter from Ruth Rehfus, Branch Chief, NMFS, to Col. Ronald Hudson, ND Corps, December 22, 1983, Appellants' Initial Brief, App. I at 690, AR 8. However, NMFS stated to the Corps:

While we realize that the analysis presented in the assessment indicates that the project will have minimal impacts to spawning striped bass, we are of the opinion that even this small loss could be eliminated. Perhaps it would even be possible to enhance the releases for this species. Therefore, we reiterate our earlier request that a group of state and federal resources agencies,

including the North Carolina Division of Marine Resources, be formed to review this situation and recommend an appropriate release schedule to protect, and perhaps enhance, this resource.

Id. NMFS focused on eliminating the small impacts of the project on striped bass. These comments foreshadow the Flow Committee's formation. Both NMFS and FWS have emphasized the importance of low flows on striped bass.

181. See 1988 ND SSOF at 3-7; 1988 ND SEA at 3-5, 7-10.

182. The City states:

Analyses performed by the City and by its fisheries consultant indicate that the [Flow] Committee's conclusions are not reflected in historical data for the stock, and that the analyses presented by the Committee as a basis for those conclusions are seriously flawed. Moreover, there is no scientific basis for the flow regime recommended by the Flow Committee in August 1988.

Leahy, T, "Potential Causes for the Decline of the Roanoke River Striped Bass Stock," Virginia Beach Department of Public Utilities, April 1991, Appellants' Initial Brief, App. III at 2813, AR 13. See also Leahy, T, "Review of 'Roanoke River Water Flow Committee Report for 1991-93'," Virginia Beach Department of Public Utilities, March 1994, Appellants' 3/10/94 Brief, App. Vol. 1, Tab 1, Supplemental AR 19.

The City argues that the Flow Committee has made "significant and blatant errors in fact, methodology, and scientific process." "Potential Causes for the Decline of the Roanoke River Striped Bass Stock," Virginia Beach Department of Public Utilities, April 1991, Appellants' Initial Brief, App. III at 2890, AR 13. The City's environmental consultant reviewed the Flow Committee's work and provided many critical comments. See "Review of the 1989 and 1990 Roanoke River Water Flow Committee Reports," Versar, Inc., April 1991, Appellants' Initial Brief, App. III at 2924, AR 13.

The City takes issue with the validity of the North Carolina Striped Bass Study's findings, conclusions and recommendations. See Leahy, T., "A Technical Review of the North Carolina Striped Bass Study," Virginia Beach Department of Public Utilities, October 21, 1993, Appellants' 2/15/94 Brief, App. Vol. 4, Supplemental AR 9. See also Appellants' Initial Brief at 100; City's Reply Comments on FERC draft EA at 11-13. The City states that in

a review of striped bass juvenile abundance indexes with respect to a proposed June 16-30 flow regime, there is no correlation between flows meeting the recommended limits and striped bass juvenile abundance. See City's Reply Comments on the FERC EA at 11; Leahy, T., "Review of the Roanoke River Striped Bass Juvenile Abundance Index Performance with Respect to the Proposed June 16-30 Flow Regime," Virginia Beach Department of Public Utilities, October 21, 1993, Appellants' 2/15/94 Brief, App. Vol. 3 at Tab 30, Supplemental AR 8; Leahy, T., "Review of 'Roanoke River water Flow Committee Report for 1991-93'," Virginia Beach Department of Public Utilities, March 1994, Appellants' 3/10/94 Brief, App. Vol. 1, Tab 1 at 21-23, Supplemental AR 19.

Furthermore, the City states that the otolith aging technique (counting rings on the earbone of larval striped bass), used to argue that the spawning season is longer than field data indicates, is "very unreliable and probably overstates the length of the spawning season." *Id.* at 30; Leahy, T., "Review of 'Striped Bass Egg Abundance and Viability in the Roanoke River, North Carolina and Young of Year Survivorship, for 1992'," Virginia Beach Department of Public Utilities, March 1994, Appellants' 3/10/94 Brief, App. Vol. 1, Tab 7, Supplemental AR 19. The City responds to the possibility of an annual flow regime by stating that the court in Hudson I resolved this issue (in its discussion of water quality). See *Id.* at 13; *c.f.* Hudson I, 665 F. Supp. 428, 439.

183. See Norfolk District Corps of Engineers Final EA, December 7, 1983, (1983 ND EA), at 6-7, Appellants' Initial Brief, App. at 128, AR 7; 1988 ND SEA at 2-10; 1988 ND SSOF at 10. The Corps has a long history of involvement in Roanoke River water flows, as well as a long history of involvement in this project. The Corps' involvement in this project stems back to its nine-year study of water supply needs of the Hampton Roads Area in which the Corps recommended tapping Lake Gaston after considering numerous alternatives. See Norfolk District Corps of Engineers Water Supply Study, Hampton Roads, Virginia Feasibility Report, and Final Environmental Impact Statement (December 1984) (1984 Water Supply Study), Appellants' Initial Brief, App. I at 265, AR 7. After considering several alternatives in its 1984 Water Supply Study, the Corps recommended building a pipeline to Lake Gaston and tapping this water source. The recommended plan contained in the study is very similar to the City's project.

The Corps completed its analysis of the project's impacts in 1988, months before the Flow Committee issued its first report on the effects of river flow on striped bass

recruitment. Relying principally on its modeling of the project's effects on water flows and on the City's proposed mitigation, the Corps declined to prepare an environmental impact statement for the City's project and declined to delay its analysis of the project's impacts pending the results of the Flow Committee's work. See Norfolk District Corps of Engineers Revised FONSI, December 21, 1988, (1988 ND FONSI), at 1-2, Appellants' Initial Brief, App. at 228, AR 7. Over a protracted period, the Corps defended its conclusions that the City's project would have no significant impacts. See also 1988 ND SEA at 6; 1988 ND SSOFF at 7-10. FERC relied on conclusions and findings of the Corps made in 1988 and earlier, when it, too, concluded in a draft environmental analysis (EA), that the project will have no significant impacts. FERC concludes that "[l]oss of striped bass spawning within the Roanoke River system would be minimal and insignificant." FERC draft EA at 39. FERC relies on Corps findings of predicted insignificant impacts in worst-case instances with maximum future withdrawals. FERC draft EA at 25. NMFS, FWS and the Environmental Protection Agency (EPA) criticize FERC, however, for not addressing recent efforts of resource agencies to enhance striped bass recruitment through changes in how impounded water is released.

184. See Memorandum from John Boreman, U. Mass./NOAA CMER Program, Univ. of Mass., C. Phillip Goodyear, Southeast Fisheries Center, NMFS, Edward Houde, Chesapeake Biological Laboratory, Univ. of Maryland, to Andrew J. Kemmerer, Director, Southeast Region, NMFS, October 22, 1990, State's Initial Brief, App. Vol. V, Tab 91, AR 29e. NMFS' Southeast Regional Director stated to the NOAA Assistant Administrator for Fisheries: "We believe that the team did an excellent job in assimilating the large quantity of information on the issue and fully concur with the team's conclusions." Memorandum from Andrew J. Kemmerer, F/SER, to William W. Fox, Jr., F, October 25, 1990, State's Initial Brief, App. Vol. V, Tab 91, AR 29e.
185. See "Lake Gaston Project Hydrological Model with Flow Committee Regime," Virginia Beach Department of Public Utilities, June 1990, Appellants' Initial Brief, App. I at 517-568, AR 8.
186. City's Reply Comments on FERC EA at 12.
187. See Appellants' 7/28/92 Brief, footnote 55 at 98; Board Report at 16-17; 1993 Flow Committee Report at 237 (information on basis for 90-day flow regime); "Larval Striped Bass and the Food Chain: Cause for Concern?," Rulifson, Cooper and Stanley, 1988, State's Initial Brief, App. Vol. V, Tab 98, AR 29e.



188. See Bales Report at 13-17, 59.
189. NOAA raises the issue of possible impacts of the project on the endangered shortnose sturgeon, Acipenser brevirostrum, which NOAA states may occur in the Roanoke River watershed:

It is the NMFS's view that, unless documented otherwise, it should be presumed that shortnose sturgeon occur in North Carolina watersheds such as the [Roanoke River watershed] where they were historically found.

NOAA Comments on FERC draft EA at 10. However, FWS stated: "[T]here are no federally listed or proposed endangered or threatened plant or animal species in the impact area of the proposed pipeline project." Letter from James W. Pulliam, Jr., Regional Director, FWS, to Lois D. Cashell, Secretary, FERC, September 22, 1993, (FWS Comments on FERC draft EA), at 4, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 8, Supplemental AR 12. Moreover, the City submitted into the record of this appeal uncontradicted information indicating that only one shortnose sturgeon is known to have been taken in the Albemarle Sound drainage area, from the lower Chowan River in 1881.

190. See "Total and catch-effort by species from Hassler Stations by year, 1982-1990," State's 7/28/92 Brief, App. Vol. 9, Tab 134, AR 29i; Board Report at 22.
191. See 1993 Flow Committee Report at 253. Dr. Roger Rulifson stated that the Roanoke River striped bass population is unique because it travels a great distance upstream to spawn. Comments of Dr. Roger Rulifson, East Carolina University, AR 121A.
192. See State's 7/28/92 Brief at 16. Among other things, the State alleges that the water reduction from the project will exacerbate dioxin pollution and encourage saltwater intrusion. The State asserts that the river is currently at (or exceeds) its capacity to assimilate certain pollutants during minimum flow periods, and that this project would reduce the river's assimilative capacity.
193. See State's 7/28/92 Brief at 47.
194. See "Water Quality as a Function of Discharges from the Roanoke Rapids Reservoir During Hydropower Generation," APES, October 1990, at 8, NMFS Comments, Attachment, AR 52f. Aside from low dissolved oxygen concentrations at certain times of the year, the river suffers from other water quality problems. USGS stated that low freshwater inflows into Albemarle Sound during the summer and fall allow

saltwater to advance landward. See "Hydrology of Major Estuaries and Sound of North Carolina," USGS, (1985) (excerpts), at 85, Appellants' 7/28/92 Brief, App. Vol. 1, Tab 4, AR 138b. As I will discuss further in the section on industrial uses, the record of this appeal indicates that certain coastal industries have difficulty meeting effluent pollution control standards. Finally, in 1988, the NCDEM found that the lower river fails to comply with established water quality criteria for selenium, arsenic, phenols, mercury and lead. "Comprehensive List of Impaired Waters (1988)," NCDEM, Preliminary Mini List [307(a) toxicants/numerical standards only/all sources] (1988), Exhibit 4, AR 68a.

195. The Flow Committee cited to the work of the NCDEM on Roanoke River water quality. The NCDEM performed mathematical modeling to evaluate the impact of discharges on the assimilative capacity of the river. The model has consistently predicted that the carbon biological demand capacity of the lower watershed is exhausted. See 1991 Flow Committee Report at 38; 1993 Flow Committee Report at 44. The Flow Committee further reported that water quality is generally good with the exception of dissolved oxygen levels. The Flow Committee stated:

The analysis of the most recent data finds consistently good water quality with the noteworthy exception of dissolved oxygen. In the late spring, summer, and early fall the dissolved oxygen level drops below the swamp water standard of 4 mg/L for significant periods of time in the lower River. While some of these events do occur during low flow periods, the problem is not just flow related. In fact, these low levels are predicted by the 1990 assimilative capacity modeling calculations under a number of flow scenarios.

1993 Flow Committee Report at 44, 49.

The Flow Committee suggested that Roanoke River water temperature and other physical parameters such as dissolved oxygen depend in part on releases from Roanoke Rapids Dam. See 1993 Flow Committee Report at 161-175. Dr. Roger Rulifson, a member of the Flow Committee, concluded that reduced river flows affect water quality. See Comments of Dr. Roger Rulifson, East Carolina University, AR 121A.

The NCDEM has found dissolved oxygen standard violations in the lower Roanoke River and stated that the lower Roanoke River is at its assimilative capacity during minimum flow periods. See Letter from George Everett, Director, NCDEM,

to Kenneth E. Baker, Fossil and Hydro Support, Virginia Power, September 24, 1990, Appellants' Initial Brief, App. I at 968, AR 8. The North Carolina Striped Bass Study Management Board also discussed Roanoke River water quality. See Board Report at 24-28. The Board reported that the assimilative capacity of the lower Roanoke River for oxygen is exceeded at certain times of the year. See Board Report at 15, 38. NOAA (of which NMFS is a part) also stated that water quality is generally good with the exception of dissolved oxygen levels at the river's mouth at certain times of the year. NOAA stated:

Increased use of the Roanoke River for wastewater discharge has altered fisheries habitat since the early 1950s. Briggs (1991), based on modelling results, predicted a minimum dissolved oxygen concentration of 4.47 mg/L below Perdue Farms outfall. The Roanoke River model has consistently predicted that the chemical biological oxygen demand capacity of the system is exhausted. This most recent Roanoke River data shows consistently good water quality with the noteworthy exception of dissolved oxygen. In the late spring, summer, and early fall, the dissolved oxygen level drops below the swamp water standard of 4 mg/L for significant periods of time in the lower River (Mulligan 1991).

NOAA Comments on FERC draft EA at 17.

196. See, e.g., "Water Quality as a Function of Discharges from the Roanoke Rapids Reservoir During Hydropower Generation," APES, October 1990, NMFS Comments, Attachment, AR 52f.
197. The City claims:

Page 43 of the 1993 Flow Committee Report includes a reprint of a discussion in the 1991 Flow Committee Report attempting to argue that an uncalibrated (and unsubstantiated) Streeter-Phelps model by North Carolina personnel indicates that the main stem of the lower Roanoke River has exhausted its assimilative capacity. This allegation has become popular among many of the Flow Committee members and they cite it frequently in numerous documents. However, regardless of the number of times that Flow Committee members have reprinted this allegation, they all trace back to the undocumented and unsubstantiated statement in the 1991 Flow Committee Report.

Leahy, Thomas M., "Review of 'Roanoke River Water Flow Committee Report for 1991-93'," Virginia Beach Department of Public Utilities, March 1994, Appellants' 3/10/94 Brief, App. Vol. 1, Tab 1 at 5, Supplemental AR 19. See also Leahy, T., "A Technical Review of the North Carolina Striped Bass Study," Virginia Beach Department of Public Utilities, Virginia, October 21, 1993, Appellants' 2/15/94 Brief, App. Vol. 4, Supplemental AR 9.

198. See, e.g., Leahy, T., "Comments on 'Instream Flow and Striped Bass Recruitment in the Lower Roanoke River, North Carolina'," Rivers, Vol. 3, No. 2, Appellants' 2/15/94 Brief, App. Vol. 3, Tab 34, Supplemental AR 8. Different dissolved oxygen models that have been used by the State and the City to predict water quality have produced different results. See Letter from Millard P. Robinson, Jr., Vice President, Malcolm Pirnie, to Thomas M. Leahy, III, Virginia Beach Department of Public Utilities, October 19, 1993, Appellants' 2/15/94 Brief, App. I, Tab 39, Supplemental AR 8.
199. The North Carolina Striped Bass Study Management Board reports that the Roanoke River striped bass stock is presently contaminated by dioxin, and that a health advisory has been issued which advises against consumption of fish from Welch Creek and some areas of the lower Roanoke River. Board Report at 21. See also the section on Other Resources and Uses.
200. Dr. Rulifson, a striped bass researcher and a member of the Flow Committee, stated that poor water quality, specifically low oxygen levels and high temperature levels, limits the available striped bass habitat, a phenomenon known as "habitat squeeze." In 1990, NMFS stated that during the summer striped bass at the river's mouth and in Albemarle Sound can be adversely affected by high temperatures and low concentrations of dissolved oxygen. NOAA stated:

River water discharges during the summer can be very low. During periods when the western Albemarle Sound is receiving very little inflow, high water temperatures and low levels of dissolved oxygen may restrict the habitat of adult striped bass.

Letter from Andreas Mager, Jr. Assistant Regional Director, Habitat Conservation Division, NMFS, to Kenneth E. Baker, Fossil and Hydro Support, Virginia Power, August 30, 1990, at 2, Tab 70, AR 29d. In commenting on the FERC draft EA, NOAA stated:

The months June through September...are important to young-of-year striped bass habitat in Albemarle Sound. Extremely low flows may contribute to habitat degradation by limiting areas of minimal dissolved oxygen and water temperature, respectively (Coutant and Benson 1990, Coutant pers. comm.).

NOAA Comments on FERC draft EA at 8. The North Carolina Striped Bass Study Management Board concluded that the striped bass fishery is suffering from low water quality, particularly with respect to low oxygen levels and the seasonal lack of appropriate temperature refugia at certain times of the year in the lower river and in parts of Albemarle Sound. See Board Report at 13-15. In particular, the Board found:

Water quality, as indicated by studies of assimilative capacity and observed dissolved oxygen concentrations, may be a limiting factor for the AR stock during certain seasons in the lower Roanoke River and some parts of Albemarle Sound.... Use of those portions of the habitat where oxygen levels are less than 4 mg/l is precluded for juvenile and adult fish during such periods, and use of areas with less than 5 mg/l is marginal.

Board Report at 34.

201. See Letter from Lester Edelman, Chief Counsel, Corps, to Mary Gray Holt, NOAA, February 21, 1992, App. 2, Final Environmental Assessment of a Permit Application for Construction of a Water Supply Pipeline and Appurtenant Structures in Lake Gaston and Crossing Several Rivers, at 5, AR 48.
202. EPA administers the provisions of the Clean Water Act. In 1984, EPA agreed with the Corps recommendation of the Lake Gaston project in the 1984 Water Supply Study. See Letter from John R. Pomponio, Chief, Environmental Impact and Marine Policy Branch, EPA, to Col. Claude D. Boyd, ND Corps, July 16, 1984, Appellants' Initial Brief, App. IV at 3643, AR 15. In reviewing the Corps draft SEA in 1988, the EPA agreed with the finding of no significant impact. Letter from Heinz J. Mueller, Acting Chief, NEPA Review Staff, Environmental Assessment Branch, EPA, to Bob Hume, District Engineer, ND Corps, August 2, 1988, Appellants' Initial Brief, App. at 3672, AR 15. In its comments on this appeal, EPA expressed no opinion as to the second element of Ground I. See letter from Richard E. Sanderson, Director, Office of Federal Activities, EPA, to Ray Kammer, Deputy Under

Secretary for Oceans and Atmosphere, DOC, March 11, 1992, AR 53. In its comments on the FERC draft EA, EPA expressed no specific coastal water quality concerns. See Letter from Patrick M. Tobin, Acting Regional Administrator, EPA, and Stanley L. Laskowski, Acting Regional Administrator, EPA, to FERC Office of Hydropower Licensing, (EPA Comments on FERC draft EA), State's 2/15/94 Brief, App. Vol. 1994-1, Tab 5, Supplemental AR 12.

203. The water quality problems appear to be worst in the summer months when the flow is likely to be minimal, and the City's withdrawal proportionately more significant. However, the principal water quality problem is low dissolved oxygen concentrations. VEPCO's FERC license contains summertime dissolved oxygen requirements which will not be violated as a result of the water withdrawal. Federal Power Commission, Findings and Order, 23 F.P.C. 537, March 25, 1960, Appellants' Initial Brief, App. IV at 4204, AR 16. Even in the months of May through October, when higher water temperatures result in lower concentrations of dissolved oxygen in the water, VEPCO must provide dissolved oxygen at a rate of 78,000 pounds per day.

Furthermore, pollution discharge permits are keyed to minimum flows, and VEPCO's minimum flows will not be affected by the City's project. See State's 7/28/92 Brief at 60; Appellants' Initial Brief at 87-94, 110; Appellants' 7/28/92 Brief at 63-65; City's Reply Comments on the FERC EA at 37-40; Appellants' 3/10/94 Brief, App. Vol. 1, Tab 1 at 4-14, Supplemental AR 19. See also 1983 ND EA at 5; Hudson I at 438-440; Hudson III at 64-65; Review Report on Roanoke River, Virginia and North Carolina at and below John H. Kerr Dam and Reservoir, WD Corps, 1968, at 25, Appellants' Initial Brief, App. IV at 3845, AR 15. A 1978 NCDEM study reported that "the potential for overall development, fishery maintenance, and water quality conditions on the lower Roanoke River are directly related to the minimum flow requirements." "Second Stage Preliminary Analysis of Withdrawals from the Roanoke River and the Chowan River for Water Supply in the Hampton Roads Area," NCDEM, August 1978 (excerpts), Appellants' Initial Brief, App. IV at 3363, 3365, AR 14.

In addition, the river's water quality problems appear to be worst near the river's mouth, and the City's withdrawal is proportionately less significant as the distance downstream increases. The project will have little effect on water levels of the river at its mouth as those levels are greatly influenced by water levels in Albemarle Sound. The Bales Report of USGS and the Albemarle-Pamlico Estuary Study states that water levels in the lower 20 miles of the Roanoke River fluctuate in response to water levels in

Albemarle Sound even during periods of high river inflow. See Bales Report at 59. The USGS also reported that winds and tides are the most important short-term factors influencing water levels in Albemarle Sound. "Hydrology of Major Estuaries and Sounds of North Carolina," USGS, 1985, (excerpts), at 80, Appellants' 7/28/92 Brief, App. Vol. 1, Tab 4, AR 138b. The Corps stated: "Water quality in Albemarle Sound should not be significantly affected, as the City's proposed withdrawal represents only approximately 0.5% of the average freshwater inflow into the Sound." 1983 ND EA at 5.

In 1983, NCDEM indicated that a 200 cfs change in flow during low flow periods would have an extremely small effect on water quality. NCDEM considered the effects of increasing river flow by 200 cfs and stated:

[T]he 200 cfs increase in flow would have only an extremely small impact on the river's water quality during the low flow design conditions used for wasteload allocations. In approximately the upper half of the part of the river modeled, the dissolved oxygen is increased by 0.1 mg/l at the maximum. In the lower half of the model, the maximum increase in [dissolved oxygen] would be 0.2 mg/l. Since Weyerhaeuser's discharge is currently water-quality limited, the increase in [dissolved oxygen] would merely provide additional assimilative capacity for their waste; the next time the Weyerhaeuser permit would be renewed, their permit limits may be increased to take advantage of this extra assimilative capacity. Thus, the predicted increase in dissolved oxygen in this area of the river might only be temporary.

Memorandum from Jennifer Buzun, Water Quality Monitoring Group, NCDEM, to Forrest Westall, Head, Operations Branch, NCDEM, February 18, 1983, Appellants' Initial Brief, App. II at 1586, AR 10. NCDEM also stated:

It should be noted that an increase in [dissolved oxygen] of 0.1 mg/l is very small, and considering the margin of error involved in water quality models which attempt to simulate the environment, it could be meaningless in that context.

Id.

In forwarding this memorandum to the chief of the Water Quality Section of NCDEM, Forrest Westall stated that the increased effect on dissolved oxygen from a proposed increased flow of 200 cfs would be virtually insignificant.

Memorandum from Forrest R. Westall, Head, Operations Branch, NCDEM, to W. Lee Flemming, Jr., Chief, Water Quality Section, NCDEM, February 22, 1983, Appellants' Initial Brief, App. II at 1587, AR 10. NCDEM also stated: "Since this system is affected by tidal influence in the lower Roanoke, this is consistent with our physical knowledge of the system." Id. It follows that a 93 cfs change would have an even smaller effect. In short, dissolved oxygen concentrations and the river's assimilative capacity are largely influenced by factors not affected by the City's withdrawal. See Appellants' 7/28/92 Brief at 65-70.

204. There is no indication in the record that the project would affect the dioxin pollution problem except to remove water that would otherwise be available to reduce dioxin concentrations. In particular, there is no information in the record that the project would alter the distribution of dioxin.
205. A USGS report states: "[I]t is not likely that any significant saltwater encroachment will occur in the future in the Roanoke River estuary, even under extreme drought conditions, as long as the current flow regulation patterns are maintained." 1982 ND EA at 5, citing "Hydrology of Major Estuaries and Sounds of North Carolina," USGS/WRI-79-46, 1979. The Corps concluded that any effects on saltwater intrusion caused by the project would likely be insignificant. See 1983 ND EA at 5; 1988 ND SSOF at 16.
206. There is no evidence in the record that the City's project will affect factors governing water temperature in Albemarle Sound, such as solar and atmospheric radiation, evaporation and air conduction.
207. State's 7/28/92 Brief at 34, 36-38. In assessing the consistency of the project with the State's coastal management program, the State need not be concerned with coastal zone impacts occurring in Virginia. These comments are relevant, however, to my independent assessment of coastal zone impacts.
208. See State's 7/28/92 Brief at 36-38.
209. Id. at 37-38.
210. Id. at 38.
211. EPA commented to FERC that adverse impacts to downstream wetlands during low flow events should be considered. Letter from Patrick M. Tobin, Acting Regional Administrator, EPA, and Stanley L. Laskowski, Acting Regional Administrator, EPA, to FERC Office of Hydropower Licensing,



(EPA Comments on FERC draft EA), at 3, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 5, Supplemental AR 12. In EPA's comments on the Lake Gaston project as described in the Corps 1984 Water Supply Study, EPA stated that the Corps' Lake Gaston project would involve only the minimal loss of, or impacts to, wetlands. Letter from John R. Pomponio, Chief, Environmental Impact and Marine Policy Branch, EPA, to Col. Claude D. Boyd, ND Corps, July 16, 1984, Appellants' Initial Brief, App. III at 3643, 3644, AR 15. EPA agreed with the Corps recommendation on the Lake Gaston project in the 1984 Water Supply Study. *Id.* In reviewing the Corps draft SEA in 1988, EPA agreed with the finding of no significant impact. Letter from Heinz J. Mueller, Acting Chief, NEPA Review Staff, Environmental Assessment Branch, EPA, to Bob Hume, District Engineer, ND Corps, August 2, 1988, Appellants' Initial Brief, App. III at 3672, AR 15.

212. The project's impacts on river flow decrease as the distance from Roanoke Rapids Dam increases. The findings of the Bales Report of USGS and the Albemarle-Pamlico Estuary Study persuade me that water levels in coastal wetlands in the lower Roanoke River will not be appreciably changed by the proposed withdrawal. Downstream water levels are influenced by contributions from the watershed and from Albemarle Sound.
213. The record shows that wetlands at the Blackwater River will be disturbed. The project will disturb additional wetlands near the pipeline terminus at the Ennis Pond Channel tributary of Lake Prince. The proposed project will result in the disturbance of forested wetlands in areas where the pipeline rights of way cross wetlands and streams. In its Corps permit application, the City states that a maximum of 23 acres of wetlands will be temporarily disturbed during the pipeline construction. The City subsequently proposed to move the pipeline terminus to the Ennis Pond Channel tributary of Lake Prince, resulting in additional wetland disturbance of about 11 acres. The City claims that there will be no permanent loss of wetlands.
214. Mitigation measures proposed by FWS for the Lake Gaston project as considered by the Corps in its 1984 Water Supply Study were adopted by the City in its proposed project. The project as proposed by the City would follow a route that would impact fewer wetlands (than the Lake Gaston proposal of the 1984 Water Supply Study) by taking advantage of existing rights of way. FWS asserted that the project as first considered by the Corps in its 1984 Water Supply Study would impact about 126 acres of wetlands, principally as the project would cross the Meherrin, Nottoway and Blackwater Rivers. See Final Coordination Act Report for Hampton Roads

Areas Water Supply Study, FWS, August 1984, at 10, Appellants' Initial Brief, App. I at 712, AR 8. In 1983, the Corps concluded that any wetlands impacts of the City's project would be insignificant. See 1983 ND EA at 6.

A NMFS review team stated: "NMFS initially focussed comments on potential impacts caused by construction of the water pipeline between Lake Gaston and Virginia Beach, and essentially agreed with the Corps of Engineer's finding of no significant impact." Memorandum from John Boreman, U. Mass./NOAA CMER Program, Univ. of Mass., C. Phillip Goodyear, Southeast Fisheries Center, NMFS, Edward Houde, Chesapeake Biological Laboratory, Univ. of Maryland, to Andrew J. Kemmerer, Director, Southeast Region, NMFS, October 22, 1990, State's Initial Brief, App. Vol. V, Tab 91, AR 29e. NMFS Northeast Region stated that it had no objection to the project's impacts on the resources of its concern, i.e., resources in Virginia. See Letter from Timothy E. Goodger, Assistant Branch Chief, NMFS, to Kenneth Baker, Fossil and Hydro Support, VEPCO, August 6, 1990, Appellants' Initial Brief, App. I at 925, AR 8; Letter from Richard B. Roe, Regional Director, NMFS, to Kenneth Baker, Fossil and Hydro Support, VEPCO, October 30, 1990, Id. at 931. In 1992, NMFS expressed no specific comments on this appeal about potential wetlands impacts.

In EPA's comments on the Lake Gaston project as described in the 1984 Water Supply Study, EPA stated that the Corps' Lake Gaston project would involve only the minimal loss of, or impacts to, wetlands. Letter from John R. Pomponio, Chief, Environmental Impact and Marine Policy Branch, EPA, to Col. Claude D. Boyd, ND Corps, July 16, 1984, Appellants' Initial Brief, App. IV at 3643, 3644, AR 15. EPA agreed with the Corps' recommendation on the Lake Gaston project in the 1984 Water Supply Study. Id. In this appeal, EPA offered no opinion as to Element 2.

FWS recommended, as compensation for impacts to wetlands, that the lost wetlands be recreated in areas with currently low habitat value, such as prior converted cropland. DOI Comments, Letter from Karen L. Mayne, FWS, to Col. Richard Johns, ND Corps, February 13, 1992, AR 54. FWS pointed out to the Corps that the change in the discharge terminus of the pipeline to Ennis Pond would result in increased flooding of either 11.4 or 12.8 acres of palustrine forested wetlands and the destruction of 2500 square feet of unspecified wetlands. See February 13, 1992 letter from Karen L. Mayne, FWS, to Col. Richard C. Johns, ND Corps, enclosed with the FWS Comments on FERC draft EA.

The Corps required 11.67 acres of wetland compensation, at a 1:1 ratio, for the potential loss or degradation of these

wetlands. In addition, the City will take actions during pipeline construction to preserve wetland values. After construction at pipeline river crossings the areas would be regraded to their preexisting wetland elevations.

FERC's draft EA concludes that the project will have no significant wetlands impacts. See FERC draft EA at 25, 31, 40. FERC staff recommends, however, that VEPCO work with the City and the City of Norfolk to develop a management plan for Lake Prince, and that this management plan should include a wetland monitoring and management plan for Ennis Pond Channel. FERC draft EA at 40. VEPCO and the City of Virginia Beach take issue with this recommendation. See Letter from W.R. Cartwright, Vice President, Fossil and Hydro, VEPCO, to Lois D. Cashell, Secretary, FERC, September 15, 1993, Appellants' 2/15/94 Brief, App. Vol. 1, Tab 8, Supplemental AR 6; Letter from Samuel M. Brock III, to Lois D. Cashell, Secretary, FERC, September 20, 1993, (City Comments on FERC draft EA), at 13, Appellants' 2/15/94 Brief, App. Vol. 1, Tab 9, Supplemental AR 6.

FWS agreed with the recommendation contained in the FERC draft EA for a management plan for Lake Prince, and that the management plan should contain provisions for monitoring hydrilla. FWS Comments on FERC draft EA at 10.

215. The Commonwealth of Virginia did not object to the project's effects on its coastal zone. The record indicates that several of the Commonwealth's resource agencies reviewed this project and provided comments related to wetlands and other coastal resources. The Virginia State Water Control Board (VSWCB) expressed few wetlands concerns when commenting on the project or in issuing its water quality certification for the project. See Appellants' Initial Brief, App. I at 73-78, 941-942, AR 7, 8. The Virginia Marine Resources Commission reviewed the project and issued a permit to the City to encroach in, on or over state owned subaqueous bottoms. See Appellants' Initial Brief, App. I at 79-82, AR 7. The Virginia Department of Conservation and Recreation, Division of Planning and Recreation Resources, indicated to the City that its concerns related to the construction permit have been addressed. Memorandum from John R. Davy, Jr., to Rita G. Sweet, October 29, 1990, Appellants' Initial Brief, App. I at 947-948, AR 8. The Virginia Department of Game and Inland Fisheries indicated that its concerns about the project have been addressed. See Appellants' Initial Brief, App. I at 949-961, AR 8. Moreover, record indicates that the City satisfactorily responded to those comments.

216. The Corps, and FERC in its draft EA, concluded that the project will have no significant environmental impacts. In commenting on the Corps' 1983 EA on the project, NMFS agreed with the Corps' finding of no significant impacts. NMFS Northeast Region later stated that it had no objection to the project's impacts on the resources of its concern, i.e., resources in Virginia. NOAA commented to FERC that the project would have positive and negative impacts on the human environment in and around the City of Virginia Beach, although NOAA made no specific statement as to wetlands impacts near the City. NOAA Comments on FERC draft EA at 2. In its Coordination Act report, FWS offered no comments on any indirect wetlands impacts of the project resulting from the City's development. In its comments on this appeal, FWS did not raise any concerns about any indirect wetlands impacts that would result near the City. However, DOI stated to FERC that changes in the City's zoning policies could fuel population growth. EPA raised no specific concerns to the Corps or FERC about indirect impacts near the City, and offered no opinion on Element 2 in this appeal. As stated above, the record indicates that several of the Commonwealth of Virginia's resource agencies reviewed this project and provided comments, principally related to wetlands impacts. Moreover, the record indicates that the City satisfactorily responded to those comments.
217. I am unable to determine the population growth that would result from this project. As I will discuss further in the following section on contribution to the national interest, water supply planners consider several factors in projecting future needs, including population growth. Conversely, population growth is in turn influenced by many factors, including the amount of available water. In discussing the project's contribution to the national interest, I will discuss the accuracy of the population projections associated with the projected deficit of 60 mgd by the year 2030.

In addition, the record of this appeal suggests that the nature of development which would result from this project is unclear. There is a paucity of information in the record on this point, and other factors contribute to the City's development. Furthermore, development may affect resources and uses in different ways; the effects of the population growth and development on coastal resources and uses near Virginia Beach may be influenced by several variables.

The information in the record indicates that the City may develop policies that can have a direct influence on the nature of coastal impacts of population growth and development. For instance, the City's Comprehensive Land Use Plan (CLUP) recognizes the need for wise stewardship and

resource conservation while encouraging appropriate growth and development; the CLUP limits development in some areas and encourages development in others. The City's "Green Line" preserves undeveloped land south of the City. See CLUP (excerpts), State's 7/28/92 Brief, App. Vol. 9, Tab 140 at II-A-16, AR 29i.

The CLUP established two transition areas south of the Green Line. Transition Area I has been established to provide opportunities to enhance the economic development potential of Virginia Beach. CLUP at I-10. Transition Area II has been established to provide opportunities for residential development that are compatible in part with the surrounding environmentally sensitive land. CLUP at I-11. The DOI states that growth in the Transition Areas south of the Green Line was not considered in formulating water demand projections. Letter from Jonathan P. Deason, Director, Office of Environmental Affairs, DOI, to Lois D. Cashell, Secretary, FERC, August 21, 1991, State's Initial Brief, App. Vol. V, Tab 90, at 6, AR 29e. How this land use plan is implemented will determine in part how development will affect resources and uses near Virginia Beach.

218. See 1991 Flow Committee Report at 49-65 and 71-74 for a description of ecological, forest and wildlife resources in the Roanoke River basin.
219. The Roanoke River basin is a source of irrigation water for agricultural uses. The agricultural industry is competing with the City and other users for the same water resource in the Roanoke River basin. The North Carolina Farm Bureau Federation (Federation) and the North Carolina Department of Agriculture indicated that farmers in North Carolina are currently irrigating crops such as corn, peanuts, soybeans, tobacco, and cotton with water from the Roanoke Basin. Comments of Anne Coan, Natural Resources Division Director for the North Carolina Farm Bureau Federation, AR 121J; Letter from James A. Graham, Commissioner, North Carolina Department of Agriculture, to Barbara Franklin, Secretary, Department of Commerce, June 12, 1993, AR 106A.
220. Coastal industry uses Roanoke River water. The record indicates that the principal location of the coastal industry using this water is near Plymouth, North Carolina. The Flow Committee reported:

One of the largest wood products facilities in the world is located on the banks of Welch Creek and the lower Roanoke River west of Plymouth. This industrial site has been operating since 1938 and today consists of 1200 acres, which includes 750 acres of industrial waste water treatment ponds.

1993 Flow Committee Report at 98. Industrial products include textiles and wood products. In particular, Weyerhaeuser operates a paper and pulp mill on Welch Creek, near Plymouth, North Carolina, and depends on the flow of the Roanoke River.

The State commented that industrial use makes up the largest portion of water withdrawal in the North Carolina coastal zone, although current consumptive uses by self-supplied industrial users is low. State's 7/28/92 Brief at 57-58. In other words, much of the water used by industries is returned to the Roanoke River.

221. The State asserts that the proposed project will have "impacts to wildlife, impacts to high value bottomland hardwood habitats, and impacts on riverine/estuarine ecology as well." State's Objection Letter at 4. In its comments on the FERC draft EA, the NCWRC stated that the EA was inadequate in failing to consider impacts to other wildlife in addition to fishery resources. See Memorandum from Richard B. Hamilton, Assistant Director, NCWRC, to Lois Cashell, Secretary, FERC, October 20, 1993, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 16 at 3-5, Supplemental AR 12. The NCWRC cites as areas of concern: conservation lands, hardwood ecosystems, plant community succession, waterfowl and other wildlife, wild turkeys, and endangered species. Id. The State argues that the project will affect the Roanoke River National Wildlife Refuge. See State's Objection Letter at 6. The State asserts that lost hydropower generating capacity caused by withdrawals from Lake Gaston will have to be replaced by other sources that ultimately will result in, among other things, increased air pollution in the North Carolina coastal zone. See State's 7/28/92 Brief at 35-36.
222. The State argues that the proposed project will significantly limit the future ability of North Carolina farmers to irrigate and process their crops. See State's 7/28/92 Brief at 55-57. The State argues that agricultural uses of Roanoke River water are increasing. State's 7/28/92 Brief at 55. The NCDWR states that the major projected increases in water use from 1984 to 2010 will be crop irrigation, thermal electric power production, and other self-supplied industrial demands. Comments of NCDWR, AR 105. The North Carolina Department of Economic and Community Development (NCDECD) states that in periods of low flow, farmers may have difficulty irrigating their land. Comments of Estell C. Lee, Secretary, NCDECD, AR 106B.

223. The State and other interested parties have commented that the project will adversely affect present and future industrial uses of Roanoke River water. The State asserts that major industrial users of water may be forced to shut down during low flow conditions because of inadequate water. See State's 7/28/92 Brief at 6-11, 60. The Roanoke Valley Chamber of Commerce states that the project will limit opportunities for economic growth along the river. Comments of Brenda M. Blackburn, Executive Vice President, Roanoke Valley Chamber of Commerce, AR 108. Weyerhaeuser, one of the Roanoke River water users, asserts that the proposed project is a threat to existing jobs. See Comments of Weyerhaeuser Company, AR 122ddd.
224. See State's 7/28/92 Brief at 38.
225. See State's 7/28/92 Brief at 6-11.
226. See State's 7/28/92 Brief at 62. The State cites air quality problems associated with increased automobile use, and the production of increased solid waste. See State's 7/28/92 Brief at 65-66.
227. In commenting on the Corps 1988 SEA, NMFS focused its concerns on Roanoke River fisheries, and expressed few concerns with the project's impacts on other coastal resources and uses. Memorandum from John Boreman, U. Mass./NOAA CMER Program, Univ. of Mass., C. Phillip Goodyear, Southeast Fisheries Center, NMFS, Edward Houde, Chesapeake Biological Laboratory, Univ. of Maryland, to Andrew J. Kemmerer, Director, Southeast Region, NMFS, October 22, 1990, State's Initial Brief, App. Tab 91, AR 29e. In commenting on this appeal in 1992, NMFS again focused on fishery related concerns. As stated above, EPA agreed with the Corps recommendation on the Lake Gaston project in the 1984 Water Supply Study. In EPA's comments on the Corps' SEA, EPA agreed with the Corps' finding of no significant impact, and in its comments on this appeal, EPA expressed no opinion as to the second element of Ground I. In its comments on the FERC draft EA, EPA stated that FERC should more fully address the project's cumulative impacts, and use information made available since the Corps' environmental analysis. See EPA Comments on FERC draft EA at 2.
228. DOI commented that FWS is concerned about potential impacts of the project on the ability of the refuge to protect and manage its wetland communities. Letter from Assistant Secretary for Fish and Wildlife and Parks, DOI, to Mary Gray Holt, Attorney-Adviser, NOAA, March 19, 1992, (DOI Comments), at 1, AR 54. The record indicates that the effects of a 60 mgd withdrawal on the Roanoke River National

Wildlife Refuge will be minimal, principally due to the small size of the water withdrawal in relation to river flows and the natural variation of river flows. The Roanoke River National Wildlife Refuge depends on water from the Roanoke River. The FWS environmental assessment (EA) for the refuge notes several hydrological characteristics considered optimal for fish and waterfowl. See FWS, Final EA, Roanoke River National Wildlife Refuge, May 1988, Appellants' Initial Brief, App. at 1539, AR 10. The EA for the refuge states that water is the driving force of bottomland hardwood communities such as those within the refuge area. Id. at 1542. The EA also notes that the river flow is regulated to a great extent by the Kerr-Lake Gaston-Roanoke Rapids impoundments. The EA for the refuge states:

The net effect of the cumulative operation of these reservoirs is to reduce the peak, but extend the duration, of flooding in the lower basin and to cause rapid fluctuations in both discharge and temperature immediately below Roanoke Rapids Reservoir Lake. The result is that areas which once were flooded rarely flood, and those which do flood do so for a longer time period.

Id. at 1543.

229. FWS Comments on FERC draft EA at 4.
230. FERC states that the project would slightly reduce the energy output of the Lake Gaston and Roanoke Rapids projects. Specifically, FERC states that the full 60 mgd withdrawal rate would result in a daily energy loss of 21.7 megawatt-hours and an annual loss of 7,930 megawatt-hours. FERC draft EA at 23. FERC states that this represents 0.18 percent of the total generation from the Kerr-Lake Gaston-Roanoke Rapids hydropower complex, or about 0.014 percent of VEPCO's projected system generation supplies in 1995. Id. FERC concludes that these losses are insignificant from both a capacity and an energy standpoint. Id.
231. The City argues that the project will have no detectable effects on agricultural uses, and takes issue with the State's information on the use of Roanoke River water for agricultural use. The City states that there is no valid argument to support any growth projections for tobacco, and that tobacco accounts for 90 percent of the withdrawals taken directly from stream flow. The City argues:

[W]hile 72 percent of North Carolina's alleged irrigation withdrawals came from surface water sources, only 16 percent were taken directly from stream flow. Most of the water withdrawn from



surface sources originated from impoundment ponds or farm ponds which represented offstream withdrawals. Only 10 percent of the alleged irrigation water withdrawals were taken directly from stream flow for non-tobacco crops.

"Potential Causes for the Decline of the Roanoke River Striped Bass Stock," Virginia Beach Department of Public Utilities, April 1991, Appellants' Initial Brief, App. at 2848, AR 13 (emphasis in original). Nevertheless, I am persuaded by the comments of the State that coastal agricultural uses are increasing. See, e.g., Comments of NCDWR, AR 105; State's 7/28/92 Brief at 55.

232. The public hearing on this appeal includes the comments of farmers and farming interests expressing concern over the availability of water for their needs. See, e.g., Public Hearing Transcript at 110-11, AR 142b. The North Carolina Farm Bureau Federation (Federation) opposes the project as adversely affecting the area's farming interests. The Federation stated to FERC that the project would impact the ability of farmers to irrigate their farmland, particularly during dry periods. Letter from Fred Alphin, Associate General Counsel, North Carolina Farm Bureau Federation, to Lois D. Cashell, Secretary, FERC, October 19, 1993, State's 2/15/94 Brief, App. Tab 9, Supplemental AR 12.
233. In 1990 the NCDEM stated to VEPCO that Roanoke River water quality, (and dissolved oxygen in particular), is at minimum permissible levels at certain times, and that industrial uses are adversely affected. The NCDEM stated:

At present, water quality in the Roanoke is at times at absolute minimum permissible levels. As a result, effluent discharges at Weyerhaeuser's Plymouth facility must be curtailed when dissolved oxygen (DO) concentrations reach critical levels. Any flow reduction will cause the river's assimilative capacity to be further diminished. This may result in additional interruptions of otherwise permitted discharges, and could restrict future economic growth by limiting discharges from new industries or future expansions of existing facilities.

Letter from George Everett, Director, NCDEM, to Kenneth E. Baker, Fossil and Hydro Support, Virginia Power, September 24, 1990, Appellants' Initial Brief, App. I at 968, AR 8. Weyerhaeuser states that any substantial reduction in flow of the Roanoke River could result in a reduction or shutdown of mill operations. Weyerhaeuser's outfall is in a tidal area where its pollutants tend to linger rather than disperse. See State's Initial Brief at 6; "A Dissolved

Oxygen Model for the Lower Roanoke River, NC," Research Triangle Institute, 1986, at 4-20, 4-21, Appellants' Initial Brief, App. at 3734-35, AR 15.

234. In commenting on the Corps' 1983 EA of the project, NMFS agreed with the Corps' finding of no significant impacts. NMFS Northeast Region later stated that it had no objection to the project's impacts on the resources of its concern, i.e., resources in Virginia. In its comments on the FERC EA, NOAA commented that the project would have positive and negative impacts on the human environment in and around the City, but NOAA did not discuss this point in further detail. NOAA Comments on FERC draft EA at 2. Again, as stated above, the City appears to have satisfactorily responded to comments expressed by the Commonwealth of Virginia's resource agencies.
235. James C. Berry testified at the June 13, 1992 public hearing on the indirect impacts of the water withdrawal on Virginia's coastal zone. Mr. Berry stated that the withdrawal will fuel the City's growth, and that:

Greater growth wi[ll] trigger a host of secondary environmental problems. It is the impact of these problems on the people of this city to with an environmental impact statement should have been directed. Growth will create a need for more solid waste dumps, greater sewage treatment, more waste and hazard[ous] waste incineration.

Public Hearing Transcript at 271, AR 142b. The public hearing transcript indicates that Mr. Berry stated that he represented the Lake Gaston Association and spoke for the Roanoke River Basin Association. Public Hearing Transcript at 270, 273, AR 142b. Mr. Berry's written comments indicate that he represented the Lake Gaston Association. Comments of James C. Berry, AR 12211. The record lacks additional information as to the nature of indirect impacts near Virginia Beach resulting from the City's project.

236. The Deputy Under Secretary for Oceans and Atmosphere solicited the views of various federal agencies concerning the project's contribution to the national interest. The Corps was the only agency that responded directly to the issue of contribution to the national interest. The Chief Counsel of the Corps stated:

As to the substantive issues of this particular appeal, I have the following comments. First, you sought comments concerning whether the project's contributions to the national interest outweigh the adverse effects of the project. In its public interest review of the

project, the Corps Norfolk District answered this question affirmatively. After completing an exhaustive review of the project and after considering the concerns presented by North Carolina and other interested groups, the Norfolk District Engineer found on January 9, 1984, that the [sic] "the issuance of this permit is in the public interest." Appendix 2, pg. 6. The Norfolk District Engineer reaffirmed this position on December 21, 1988, in the Supplemental Statement of Findings. Appendix 3.

Letter from Lester Edelman, Chief Counsel, Office of the Chief of Engineers, Department of the Army, to Mary Gray Holt, Attorney-Adviser, February 21, 1992, at 5, AR 48.

237. Decision and Findings in the Consistency Appeal of Korea Drilling Company, Ltd., (Korea Drilling Decision), January 19, 1989, at 16.
238. See sections 302 and 303 of the CZMA.
239. See section 302(a) of the CZMA. While Lake Gaston is not located in the coastal zone, the water the City plans to withdraw would otherwise flow into North Carolina's coastal zone and support various coastal resources and uses.
240. Federal law and Supreme Court decisions recognize the importance of maintaining safe and adequate public water supplies. See, for example, 42 U.S.C. § 1962d-4, in which Congress recognizes that assuring adequate water supply to the northeastern United States has become such a problem that the Corps is authorized to help cooperate with other federal, state and local agencies to develop plans to meet long-range water needs, including plans for conveyance facilities to exchange water between river basins. See also Connecticut v. Massachusetts, 282 U.S. 660, 673 (1931), in which the court stated: "Drinking and other domestic purposes are the highest uses of water. An ample supply of wholesome water is essential." These examples make clear that there is a national interest in providing water to the communities of the country, notwithstanding the public comments that the project only contributes to the City's or local interests because it is an attempt to provide the City with a particular source of water in lieu of many other available sources. See e.g., Comments of Roanoke River Basin Association and Town of Weldon at 3, AR 68.
241. See sections 302(a); 303(1); 303(2)(D) of the CZMA.
242. Adequate water supply is but one of numerous factors influencing population growth and economic development. Conversely, water supply planning involves consideration of

numerous factors, including population, water uses, degree of hardship, sources of water, and policies influencing development conditions (such as zoning policies). The National Wildlife Federation states:

The usual determinants of water demand are: population; prices of water and sewage; plumbing code specifications; income; rainfall; household size; yard size; and specific industrial uses. These significant factors are, in turn, a function of other factors.

Letter from David C. Campbell, Resources Economist, Water Resources Program, National Wildlife Federation, to Mary Gray Holt, Attorney-Adviser, NOAA, March 20, 1992, at 2, AR 74.

243. The Corps, in its Statement of Findings for the City's permit application to construct the pipeline, found a net deficit of 60 mgd in the year 2030 to be reasonable. Norfolk District Corps of Engineers Statement of Findings, January 9, 1984, (1984 ND SOF) Appellants' Initial Brief, App. I at 150, AR 7. In response to the Court's order in Hudson II, supra, the Corps issued a Supplemental Statement of Findings, specifically addressing, as a part of its public interest review, the extent of Virginia Beach's water needs. The Corps considered its own 1984 Water Supply Study, Hampton Roads, which found a regional deficit of 55 mgd (excluding Suffolk). See Appellants' Initial Brief, App. III at 1865, AR 11. The Corps also considered the Virginia State Water Control Board's 1988 James Water Supply Plan, which found a range for a regional deficit (with conservation) of 49 mgd (to avoid storage depletion) to 81 mgd (to avoid mandatory use restrictions). See Appellants' Initial Brief, App. III at 2387, AR 12. The Corps concluded, after considering comments from interested parties, that it would not be reasonable to limit the City's withdrawal to anything less than the 60 mgd for which it applied. In short, the Corps found that "Virginia Beach needs this 60 mgd project". Norfolk District Corps of Engineers Supplemental Statement of Findings, December 21, 1988, (1988 ND SSOF), at 14, Appellants' Initial Brief, App. I at 231, AR 7.
244. In Hudson II the court stated:

This court's 1987 Opinion upheld as reasonable the Corps' determination that Virginia Beach had a need for water and remanded only for a determination of the extent of that need. Upon remand the Corps sought input from all interested parties and all available sources. Its analysis of the projections of the amount of water Virginia Beach will need in 2030 and the

amount which will be available may be flawed in some respects but is not arbitrary or capricious. Indeed, this court is convinced that 60 mgd in 2030 may be insufficient to meet the city's need after considering all other reasonably foreseeable sources of water.

\* \* \* \* \*

Colonel Thomas then very carefully analyzed the available information and contentions and concluded that "Virginia Beach needs this 60 mgd project." He reached this conclusion only after a searching analysis which complies with the requirements of an assessment of the public need for the project.

Hudson II, 731 F. Supp. at 1272 (emphasis in original).

In Hudson III, supra the court noted:

The public interest analysis conducted by the Corps examined estimates of the population growth for Virginia Beach over the next 40 years, and concluded that the pipeline water will be necessary to meet the needs of Virginia Beach's fast-growing population. The district court examined the same data and concluded that even with the pipeline, Virginia Beach may soon find itself with an inadequate water supply.

Hudson III, 940 F.2d at 65.

The Court also stated:

[T]here is no longer any controversy concerning either the environmental effects on the Roanoke River or the need for a new supply of water in Virginia Beach, in both absolute terms and relative to the needs of northeastern North Carolina.

Hudson III, 940 F.2d at 66.

245. Indeed, as the court noted and other studies have shown, 60 mgd may be insufficient to meet regional demands by the year 2030. In addition to the Corps' Water Supply Study, Hampton Roads and the VSWCB's James Water Supply Plan, the record contains other studies indicating that the regional deficit is 60 mgd or more. For example, the 1982 NC-VA Tidewater Area Study, which was prepared by the VSWCB and North Carolina Department of Natural Resources and Community Development, concluded that the regional deficit for the year 2030 would be 60.5 mgd. Appellants' Initial Brief, App. III at 2667, AR 12. In July of 1993, in its Hampton Roads Water Supply Update, the Virginia Department of

Environmental Quality projected a year 2030 deficit of 68.5 mgd, which includes the Isle of Wight County. Appellants' 2/15/94 Brief, App. Vol 2, Tab 3, at 11-13, Supplemental AR 7.

Moreover, the latest population projections (December 1993) for the Hampton Roads area released by the Virginia Employment Commission (VEC) indicated that population projections used in the prior studies are lower than those based on actual 1990 census data, confirming that the 60 mgd figure may be an understatement. Appellants' 2/15/94 Brief, App. Vol. 1, Tab 5, Supplemental AR 6. Compare the VEC's 2010 projection for the five-City Hampton Roads area at 1,210,957 with the NC-VA Tidewater Area Study of 1,070,000; the Corps' Water Supply Study of 1,088,050; and the VSWCB's James Water Supply Plan of 1,134,150. In addition, a change in the City's land use plan (March 1991) will permit growth in an area south of the "Green Line," which up to that time preserved underdeveloped land south of the City. This change was apparently not considered in formulating water demand projections prior to March 1991 and may result in increased population and even greater need for water. See discussion of changes in City's Comprehensive Land Use Plan (CLUP), supra. Since the Corps was aware of a range of differing projections for the water deficit when it concluded that a 60 mgd deficit was reasonable, and the City's permit application to FERC seeks to withdraw only up to 60 mgd, it is appropriate to adopt this figure for purposes of this appeal.

246. To support its contentions, the State cites to Department of Defense documents showing a reduction in the number of ships to be maintained by the Navy. See State's Initial Brief, App. Tab 107, AR 29h, at 75-76 and State's 2/15/94 Brief App. Vol. 1994-3, Tab 51, Supplemental AR 14. The State also cites "Plan 2007," which was put together by business and local leaders in the Hampton Roads area to develop a comprehensive plan for "restructuring the regional economy." State's 2/15/94 Brief, App. Vol. 1994-3, Tab 50, Supplemental AR 14. This plan projects a range from an annual loss of 3,000 jobs to an annual gain of 7,000 jobs, with a "midpoint scenario" of 500 jobs lost over a five-year period. The plan concludes that "it appears entirely likely that the next five years will represent slow to flat to negative job growth." Id. at 15. In addition, the State cites numerous newspaper articles detailing layoffs and loss of contracts at Norfolk ship yards, slippage in the local economy in the fall of 1993, bankruptcies, and possible closures of military installations. State's 2/15/94 Brief, App. Vol. 1994-3, Tabs 52-62, Supplemental AR 14.

247. In particular, the State alleges that Chesapeake installed a three mgd water banking system and added a 10 mgd system to desalt brackish surface and groundwater. The State also alleges that Portsmouth has increased its supply by two mgd by relocating a water intake, and that Suffolk has added a 3.75 mgd electro dialysis reversal (EDR) system and applied for an additional two mgd in groundwater withdrawals. State's 3/10/94 Brief at 7.
248. For example, the City cites recommendations of the Base Closure and Realignment Commission which it asserts will result in a net gain of approximately 2,170 to 4,700 jobs in southeastern Virginia. See, Appellants' 2/15/94 Brief, App. Vol. 3, Tab 50, Supplemental AR 8; and Appellants' 3/10/94 Brief, App. Vol. 1, Tab 15 at 9, Supplemental AR 19. The City also states that, historically, base closings have led to long-term employment gains. Appellants' 3/10/94 Brief at 9. Moreover, the City points out that "Plan 2007" projects that job growth may range from a loss of 3,000 to a gain of 7,000 jobs over a five year period and points out that area employment increased by 1.2% in 1993. See Appellants' 3/10/94 Brief, App. Vol. 1, Tab 14, Supplemental AR 19.
249. The evidence in the record persuades me that Chesapeake's potential three mgd water banking system and Suffolk's 3.75 EDR system do not add to the available supply of water. See Letter from James W. Rein, City Manager, City of Chesapeake to Mary Gray Holt, Attorney-Adviser, February 28, 1992, at 2, AR 62, and Letter from William E. Harrell, Director of Public Utilities, City of Suffolk, to Mary Gray Holt, Attorney-Adviser, February 28, 1992 at 1, AR 119. Further, the evidence cited to support the claim for Portsmouth is inconclusive because it does not indicate that the water intake relocation has been completed. State's 3/10/94 Brief, App. Vol. 1994-5, Tab 78 at 3, Supplemental AR 23. Finally, the claims of additional amounts of groundwater for Chesapeake and Suffolk is premature as those cities only have applications pending for the withdrawals. At most, the record discloses that Chesapeake is pursuing an alternative (brackish water desalting at the Northwest River Water Treatment Plant) which may allow the City to recover a yield of seven mgd from the Northwest River Project. See State's 3/10/94 Brief, App. Vol. 1994-5, Tab 79, Supplemental AR 23, and Appellants' 3/10/94 Brief App. Vol. 1, Tab 20 at 3, Supplemental AR 19. Even if this alternative is implemented, however, it would do little to alleviate the projected 60 mgd regional deficit. In sum, I conclude that the City's need for water has not been diminished by other communities adding to the water supply.

250. This evidence consists of anecdotal statements made by residents and local officials, which are not sufficient to establish economic harm. See State's 7/28/92 Brief, at 38-40. Another argument raised by the State is that the project might permit the City to grow beyond the capacity of the area's natural resources and lead to unmitigated growth in Virginia Beach. This argument is frequently made in the case of interbasin transfers of water. On a philosophical basis this argument may have validity, and the CZMA provides that economic development must be compatible with the protection of natural resources. See sections 302 and 303 of the CZMA.

Although growth in the Virginia Beach area is certainly expected, whether such growth will be beyond the capacity of the area's natural resources is too speculative to determine for purposes of this appeal. In addition, it is difficult to determine at what point growth and development become excessive and begin to be detrimental to an area. Indeed, it is the Commonwealth of Virginia's responsibility to effectively manage its coastal zone, pursuant to its coastal program. Any growth or development in the Virginia Beach area affecting the natural resources of the coastal zone, involving an activity that requires a federal license or permit, would be subject to review by Virginia. Moreover, other interbasin transfers already exist. See, e.g., Appellant's 7/28/92 Brief, App. Vol. 3, Tab 39, AR 138d, which lists examples of interbasin transfers statewide in Virginia. In fact, the Supreme Court has recognized that interbasin transfers are often necessary. New Jersey v. New York, 203 U.S. 336, 343 (1931).

Finally, I agree with the court in Hudson II when it concluded that "whether to permit interbasin transfer of water is essentially a political decision." Hudson II, 731 F. Supp. at 1273. Therefore, I conclude that the national interest arguments and public comments arguing against the interbasin transfer of water in general raise questions outside the scope of my inquiry.

251. In fact, the State asserts that more than half of the water the City is seeking is designed to allow the City to avoid mandatory water use restrictions during drought. It should be noted, however, that the Corps, in its Supplemental Statement of Findings, found that mandatory use restrictions and rationing would, occasionally, still be needed by the City even with the project. 1988 ND SSOF at 14.
252. See sections 302(a) and 303(1) of the CZMA.



253. Specifically, mandatory water use restrictions and a moratorium on extensions of the City's water distribution system have been in effect since February 1992. Appellants' 3/19/92 Submittal, App. Vol. 1, Tab 3, AR 73a. Since the late 1970s, the City's building code has mandated use of water-saving plumbing devices in all new and renovated plumbing. Appellants' 3/10/94 Brief, App. Vol. 1, Tab 9 at 1, Supplemental AR 19. Since July 1993, the City has required ultra-low-flush plumbing devices in all new and renovated plumbing. *Id.* at 7. The City also provides rebates for conversion of old plumbing. *Id.* Conservation efforts by the City have resulted in lower gallons per capita per day (gpcd) usage of water by Virginia Beach residents (71 gpcd) compared to the level of usage (80 gpcd) prior to the implementation of conservation measures. Appellants' Initial Brief, App. I at 1303-5, AR 9.
254. See 15 C.F.R. § 930.121(c). See also the Federal Water Pollution Control Act, as amended (Clean Water Act or CWA), 32 U.S.C. §§ 1341 & 1344 and the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq.
255. See section 307(f) of the CZMA.
256. As discussed previously, on January 9, 1984, the U.S. Army Corps of Engineers (Corps) issued a permit authorizing the City to discharge dredged or fill material into navigable waters pursuant to section 404 of the Clean Water Act and to construct river crossings pursuant to section 10 of the Rivers and Harbors Act. See Department of the Army Permit issued by the Norfolk District Corps pursuant to section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act, January 9, 1984, (CWA § 404 Permit), Appellant's Initial Brief, App. I at 64, AR 7.

On or about March 1990, pursuant to 33 C.F.R. § 325.6, the Corps granted an extension of time for the CWA § 404 Permit, which had the effect of reinstating the original ten-year construction period through the year 2000. See Letter of Colonel J.J. Thomas, District Engineer, ND Corps, to Mr. Aubrey Watts, Jr., City Manager, Virginia Beach, March 1990, Appellants' Initial Brief, App. I at 72, AR 7 (modification for special condition and grant of time extension for the 1984 CWA § 404 Permit). An additional modification was granted in 1992. See Letter of Colonel Andrew Perkins, Jr., District Engineer, ND Corps, to James Spore, City Manager, Virginia Beach, December 17, 1992, enclosing permit modifications, Appellants' 2/15/94 Brief, App. at Vol. 1, Tab 17, Supplemental AR 6 (for alteration of pipeline terminus and other conditions for the 1984 CWA § 404 Permit).

In addition, the Virginia State Water Control Board (VSWCB) issued a section 401 certification in September, 1983, which certified that the proposal to construct a water supply intake and transmission system will comply with Virginia water quality standards. See Section 401 CWA Certification issued by the VSWCB, September 15, 1983, (CWA § 401 Certification), Appellants' Initial Brief, App. I at 569-571, AR 8.

257. The City argues that the proposed project has been approved by the Corps and the VSWCB and is subject to the continuing jurisdiction of those agencies. Appellants' Initial Brief at 118.

The State, on the other hand, argues that the permits issued under the Clean Water Act were issued a decade ago and "[s]ince that time, critical changes in the river system have occurred." State's 7/28/92 Brief at 68. The State also claims "there is substantial reason to conclude that water quality permits could not be granted today." Id.

258. See Decision and Findings in the Consistency Appeal of Union Exploration Partners, Ltd, (Unocal Pulley Ridge Decision) January 7, 1993, at 31-33, citing Decision and Findings in the Consistency Appeal of Chevron U.S.A., Inc., (Chevron Decision), October 29, 1990, at 57.
259. Appellants' Initial Brief at 118. The City claims it intends to operate the back-up diesel generator for testing and in the event of a power outage. Id. In order to construct the back-up diesel generator at the pumping station, the City is required to apply for and obtain the necessary permit(s) pursuant to the Clean Air Act. See 42 U.S.C. §§ 7401 et seq.

The State does not argue or present any evidence that the proposed project will violate the Clean Air Act. Instead, the State argues that the project will remove water before it can pass through the two generators located at Gaston Dam and Roanoke Rapids Dam, thereby decreasing hydropower generation and requiring it to be replaced by less-environmentally clean methods. State's Initial Brief at 66. The State argues the loss of clean hydropower should be considered with respect to the Clean Air Act. Id.

260. Letter of Richard E. Sanderson, Director, Office of Federal Activities, EPA, to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, U.S. Department of Commerce, dated March 11, 1992 (EPA March, 1992 Letter), AR 53.
261. State's Initial Brief at 66, State's 7/28/92 Brief at 68.

262. See Chevron Decision at 57. The Chevron Decision also held that the consistency appeals process is an inappropriate forum to examine decisions by federal agencies to issue permits within their purview. Id. This determination was recently upheld in the Unocal Pulley Ridge Decision at 32-33.
263. Specifically, I must determine that "[t]here is no reasonable alternative available (e.g., location design, etc.) which would permit the activity to be conducted in a manner consistent with the management program." 15 C.F.R. § 930.121(d).
264. See, e.g., Decision and Findings in the Consistency Appeal of Carlos A. Cruz Colón, (Cruz Colón Decision), September 27, 1993, at 6.
265. See, generally, e.g., Decision and Findings in the Consistency Appeal of Yeaman's Hall Club, (Yeaman's Hall Decision), August 1, 1992; Cruz Colón Decision.
266. See, e.g., Yeaman's Hall Decision at 6.
267. 15 C.F.R. § 930.121(d).
268. As was stated in the Korea Drilling Decision at 23:  
The regulation [15 C.F.R. § 930.64(b)] serves two purposes. First, it gives the applicant a choice: adopt the alternative (or if more than one is identified, adopt one of the alternatives) or, if the applicant believes all alternatives not to be reasonable or available, either abandon the proposed activity or appeal to the Secretary and demonstrate the unreasonableness or unavailability of the alternatives. Second, it establishes that an alternative is consistent with a State's program because the State body charged by the Act with determining consistency makes the identification of the alternative.
269. This requirement applies to state objections made pursuant to 15 C.F.R. § 930.64(b).
270. See, e.g., Decision and Findings in the Consistency Appeal of Texaco, Inc. (Texaco Decision), May 19, 1989, at 36.
271. If the objecting state does not provide enough detail as to how the proposed alternative can be implemented consistently with its coastal management program, the project's proponent and the Secretary are not able to evaluate the alternative to determine whether it is reasonable or available, because the project's proponent and the Secretary cannot be sure what the objecting state is proposing.

272. Korea Drilling Decision at 23.
273. Appellants' Initial Brief at 153-154, Appellants' 7/28/92 Brief at 129-130.
274. Appellants' 7/28/92 Brief at 132-134.
275. Id. at 130.
276. 15 C.F.R. § 930.121(d), Appellants' 7/28/92 Brief at 130.
277. The issue of when an objecting state must propose alternatives was most recently addressed in the Chevron Destin Dome Decision. In that decision, the Secretary found that a state must describe alternatives in its Objection Letter, unless the state demonstrates "good cause" for not describing an alternative at the time of its Objection Letter (e.g., changes in technology). Chevron Destin Dome Decision at 26-27. Prior to Chevron Destin Dome, however, the Secretary recognized an additional exception to the general rule that a state must describe consistent alternatives in its Objection Letter. See, Korea Drilling Decision at 24, Unocal Pulley Ridge Decision at 34. This second exception applied where the record disclosed an alternative that might be consistent with the state's coastal management program and appeared reasonable and available. Because at the time the State filed its Objection Letter the Secretary allowed alternatives to be raised for the first time during an appeal, in order not to prejudice the interests of the State, I will examine the record to determine whether the State describes any consistent, reasonable, available alternatives.
278. State's 7/28/92 Brief at 79.
279. See Chevron Decision at 66 ("While the alternative stated in the [Objection Letter] was not specific enough, that defect was cured during the course of this appeal.").
280. See State's Objection Letter at 6-9, State's 2/15/94 Brief at 15-6.
281. The State also advocates a "building blocks" approach. Under the "building blocks" approach, water supply is added in increments as it is needed. The State argues that it is less expensive to build components of water supply projects as they are needed, rather than incur huge capital costs decades in advance. In addition, the State argues, water supply technology is rapidly improving. By adding water incrementally, the City can make use of the latest technology, and in the process reduce costs. State's 7/28/92 Brief at 77-78. The building blocks method is

especially critical for southeastern Virginia, the State argues:

Because there is so much dispute about how much water will actually be needed during the next century, building a water supply in increments will allow the system to be sized to meet actual needs, without unnecessarily depleting resources critically needed by others.

State's 8/31/92 Brief at 4.

In addition, the State asserts that the City's need should be divided into two components: 1) base supply to serve the City's future growth, and 2) emergency supply to offset reductions in its current supplies which may occur during drought conditions. State's Initial Brief at 71-73.

In suggesting these alternative methods, the State is questioning the need for at least 60 mgd in additional water supplies that the proposed project would provide, and that I found to be necessary to alleviate southeastern Virginia's year 2030 water deficit in Element 2. Furthermore, neither of these methods guarantees that southeastern Virginia will have the water it needs to alleviate its year 2030 water deficit.

The base/emergency distinction rests on the assumption that part of the City's year 2030 need can be fulfilled by current sources, primarily Norfolk, which the State argues can continue to provide water to the City. *Id.* at 71-72. This assumption fails to consider that the 60 mgd deficit in the year 2030, which the proposed project is designed to alleviate, is a regional deficit. The amount of water that Norfolk continues to make available to the City would result in that water being unavailable to other municipalities. Thus, the base/emergency supply distinction proposed by the State is irrelevant because, regardless of the amount of water that Norfolk continues to supply to the City, the regional need remains.

Under the building blocks approach, water supplies are added as they are needed through the year 2030. The purpose of the Lake Gaston project is to secure a water supply to alleviate the year 2030 deficit. The building blocks approach would result in an uncertain water supply for the year 2030, which is what the City is attempting to avoid with the proposed project. For these reasons and the reasons stated in Element 2, I reject the State's emergency/base distinction and building blocks approach.

282. State's Objection Letter at 8-9.

283. Id. at 9.

284. State's 2/15/94 Brief at 24.

285. In addition, if these are two separate alternatives, the State failed to meet its burden of stating that the "balancing program" described in the State's Objection Letter is consistent with its coastal management program. As was stated in the Korea Drilling Decision at 23:

The Act and its implementing regulations charge the State with interpreting its own management program and applying it to a proposed activity to determine its consistency. Since determining consistency is the State's responsibility, and since that determination is within the State's control, the State should be and is allocated the burden of describing consistent alternatives.

286. State's Objection Letter at 8, State's 8/31/92 Brief at 24.

The State indicates that this alternative is consistent with its coastal management program. State's 8/31/92 Brief at 24.

287. State's 7/28/92 Brief at 91.

288. Id.

289. State's Initial Brief at 11. This alternative, the State asserts, is consistent with its coastal management program. Id.

290. See Factual Background; Appellants' Initial Brief at 14; Appellants' 2/15/94 Brief, App. Vol. 1, Tab 32 at 13-14, Supplemental AR 6.

291. State's Objection Letter at 6-7. The State asserted therein that the alternative is consistent with its coastal management program. Id. at 6.

292. State's Initial Brief at 84.

293. I believe it is beneficial, however, to assess the general availability of groundwater in southeastern Virginia.

The City argues that while groundwater withdrawals may be technically feasible, neither fresh nor brackish groundwater is practically available now or in the future as a source of additional water supply, because of the groundwater level declines already experienced in southeastern Virginia and northeastern North Carolina as a result of overuse, and

because of the significant adverse impacts that would result from pumping additional groundwater. City's Initial Brief at 126. In support of its position, the City presents the conclusions of studies dating back to 1975 that demonstrate the groundwater situation in southeastern Virginia. City's Initial Brief at 127, App. III at 2539-41.

The State presents studies by various consultants that show that additional groundwater withdrawals are possible in southeastern Virginia. The State's Boyle Report, however, stated that several independent investigations have concluded that the present rates of withdrawal are approximately equal to the rate of natural recharge to the systems. Therefore, the Boyle Report concluded:

substantial increases in the amount of water withdrawn by wells will likely be offset by a combination of additional declines in water levels (potentially including local dewatering of the aquifer), reductions in the natural discharge of groundwater to streams, and the landward movement of the fresh/saltwater interface.

Boyle Report at 17.

In 1973, southeastern Virginia was designated a "groundwater management area" under the Virginia Groundwater Act of 1973. Appellant's Initial Brief at 127-8. Groundwater withdrawals could not be made within groundwater management areas without a permit issued by the VSWCB. Appellant's Initial Brief at 128. A 1991 VSWCB memorandum stated that "it is doubtful that the aquifer system within the Eastern Virginia Groundwater Management Area can support the level of groundwater rights that have been established by implementing the Ground Water Act of 1973." App. III at 2746, City's Initial Brief at 129. Furthermore, the VSWCB stated, in a 1988 memorandum to the Corps that:

North Carolina's latest contention that increased pumpage of groundwater...could meet the needs of southeastern Virginia is not consistent with past North Carolina statements and would violate Virginia's current plans and policies for water development for southeastern Virginia. Increasing groundwater withdrawal from southeastern Virginia is not a viable alternative, and Virginia has a consistent policy dating from 1973 in limiting the amount of groundwater pumpage.

App. III at 2586.

The State also provides evidence that in December 1991, the VSWCB granted the City an initial test permit to take

approximately two mgd from two wells for the purpose of investigating the feasibility of placing a deep well. If the testing had been successful, the City hoped to develop a 7.5 mgd supply. The City could not, however, develop the 7.5 mgd supply unless it obtained a permit. Boyle Engineering Corporation Letter (7/92), NC App. Vol. 9, Tab 138. The City claims that it was forced to abandon the test well project by excessive costs and numerous legal and regulatory constraints. The permit expired at the end of 1993. Letter from Thomas Leahy III to Terry Wagner, Groundwater Program, VDEQ (4/93); City's 2/15/94 Submittal, Vol. 1, Tab 25.

The Groundwater Act of 1973 was repealed in 1992 and replaced by the Groundwater Management Act of 1992 (1992 Act). Va Code Ann § 62.1-254 et seq. Under the 1992 Act, the City would be required to obtain a permit before it could withdraw groundwater. Va Code Ann. § 62.1-258. Pursuant to the 1992 Act, VDEQ (formerly VSWCB) may, in its discretion, "issue a permit [to an applicant for a groundwater withdrawal permit] for a greater amount than that which is based on historic usage and water conservation... ." Va Code Ann. § 62.1-260. The 1992 Act also provides that "...when available supplies of groundwater are insufficient for all who desire them, preference shall be given to uses for human consumption, over all others." Va Code Ann. § 62.1-263. The Virginia State Department of Health (VDOH) noted:

[t]he General Assembly and Department of Environmental Quality changed the regulations governing groundwater management and the permitting procedures for obtaining groundwater. A by-product of these changes made it apparent that groundwater was now available in Southeast Virginia, as all of the previously permitted and grandfathered water rights were done away with.

VDOH Interoffice Correspondence (10/93), NC App. 1994-5, Tab 80 at 3. In September 1993, Chesapeake and Suffolk applied for permits to withdraw groundwater (five and six mgd, respectively). NC App. 1994-5, Tab 74.

The VSWCB, commenting on the Boyle Report, states:

[t]he report itself discounts the prospect of increased ground water development. The [V]SWCB points out that the strengthened Ground Water Act of 1992 was enacted precisely because this resource is in danger of over use.

VSWCB comments on the Boyle Report (7/92), City's 7/28/92 submission, Tab 40M at 4.



The record is persuasive that prior to 1992, additional groundwater withdrawals were unavailable to the City. With the abolishment of previously permitted and grandfathered water rights, however, the record indicates that the VDEQ may grant permits to allow groundwater withdrawal for municipal use. Chesapeake and Suffolk have already applied for these permits. The record, however, does not indicate that these permits have been issued. Therefore, it is not certain that VDEQ will issue the permits at all. Nor does the record indicate the amount of water that VDEQ would permit to be withdrawn if it does issue permits. For these reasons, I find that, even if the State were not to condition withdrawal of groundwater on the City's implementation of "a well-designed groundwater system," this alternative would be speculative, and thus unavailable.

294. These sources are not mentioned elsewhere in the State's briefs or in the Objection Letter.

Although the State does not specifically indicate that these alternatives are consistent with its coastal management program, it states in its 2/15/94 Brief, at 15, that:

In our earlier briefs, we describe many reasonable and economic alternatives, totalling well over twice Virginia Beach's claimed needs, which are readily available in the local Southeastern Virginia area. All would be consistent with the NCCMP.

Since both of these sources are located in southeastern Virginia, they will be assumed to be consistent with North Carolina's coastal management program.

295. Boyle Report at 19.
296. The Boyle Report states that this alternative would require "[d]etailed technical and environmental feasibility investigations ... before implementation." *Id.* The necessity of such detailed technical and environmental feasibility studies also would render this alternative unavailable.
297. State's Objection Letter at 7-8. The State asserts that such techniques are consistent with its coastal management program. *Id.* at 6.
298. *Id.* at 7-8.

EDR is currently being used by Suffolk to desalinate its existing water supply from the Blackwater River. See discussion of project's contribution to the national

interest under Element 2. The evidence in the record does not indicate that EDR technology causes adverse environmental effects, or that this proposed alternative is more costly than the proposed pipeline project. There is also no dispute that EDR technology exists.

299. Boyle Report at 14.

Back Bay may be considered a local source of surface water. In its Objection Letter, the State identifies local sources as consistent with its coastal management program. State's Objection Letter at 6,8. Furthermore, the State indicates that the "many reasonable and economic alternatives" it described in its earlier briefs in the local southeastern Virginia area would all be consistent with its coastal management program. State's 2/15/94 Brief at 15. Therefore, I will assume that this alternative is consistent with the State's coastal management program.

300. Management Plan for Back Bay, Appellants' Initial Brief, App. IV at 4167, AR 15.

301. Id. at 4095, AR 15.

302. Boyle Report at 14.

303. Boyle Report at 14. Both the City and the Boyle Report state that desalinating water from Back Bay is technically feasible. The City states, however, that desalination of Back Bay has never been considered realistic because of the serious environmental impacts it would entail. Appellants' Initial Brief at 136.

304. Boyle Report at 14.

305. With respect to dredging, the Boyle Report states that while dredging of existing reservoirs will produce a small increase in yield due to increases in storage, "[e]nvironmental impacts associated with dredging and sediment disposal can be adverse." Boyle Report at 19. Therefore, because this alternative does not have environmental advantages over the Lake Gaston project, this alternative is also not reasonable.

306. State's Initial Brief at 83. These proposed modifications of the Norfolk system presumably would be considered specific examples of local sources, which were found consistent with the State's coastal management program in its Objection Letter. State's Objection Letter at 6, 8.

307. See Cruz Colón Decision at 6, footnote 20.

308. The analysis could be different if there were an established process by which the City could obtain a permit to undertake the actions proposed by the State. Through the permitting process, the City would have the opportunity to obtain the legal authority to implement the alternatives. It could also be different if there were evidence that Norfolk had offered the City the opportunity to undertake these actions. If this were the case, the City would have the authority to implement these alternatives by exercising its legal authority to enter into a binding contract.

309. Appellants' Initial Brief at 85-6.

310. Boyle Report at 11.

311. Boyle Report at 11.

The State proposes obtaining water from Portsmouth as an alternative to the proposed project in its Objection Letter and stated therein that this alternative is consistent with its coastal management program. State's Objection Letter at 6, 8. I find that this alternative was stated with sufficient specificity.

312. "Portsmouth denies strings on water deal," Virginian-Pilot, February 26, 1992, State's 7/28/92 Brief, App. Vol. 9, Tab 131, AR 29i. See also, "Beach rejects Portsmouth's water offer," Virginian-Pilot, February 22, 1992, Id. at Tab 130, AR 29i.

313. Boyle Report at 11. While the State asserts that Portsmouth's system has now increased its water supply by two mgd by relocating this intake structure, I found in Element 2 that the state has not provided evidence to support this claim.

314. Boyle Report at 15. The State indicates that water exchange is consistent with its coastal management program. State's 7/28/92 Brief at 80-81. I find that this alternative was described with sufficient specificity for me to determine that it is unavailable.

315. Boyle Report at 39.

Union Camp extracts between 35 and 46 mgd of groundwater. During high flow months, surplus surface water supplies would be treated and delivered to Union Camp, thereby minimizing groundwater pumping during a large portion of the year. This groundwater would then be used during low flow months by the municipalities and Union Camp. Boyle Report at 39.

The supply of surface water would be from Norfolk's reservoir spills, supplemented by the Blackwater and Nottoway Rivers or Lake Chesdin. Boyle Report at 39. A 30 mgd treatment plant to provide finished water to Union Camp and a 50 mgd wellfield to supply the Norfolk reservoirs during low flow months would need to be built. Id. at 41.

316. The Boyle Report states that paper mills have successfully utilized treated wastewater in California and South Africa. Boyle Report at 15. The facilities required for this project include a seven mgd wastewater treatment plant for flows from Suffolk and Franklin, a seven mgd pump station at a Suffolk wastewater treatment plant and a booster station midway between Suffolk and Franklin, a force main from Suffolk to the Union Camp paper mill near Franklin, a water reclamation plant with a capacity of seven mgd, a blending reservoir with two million gallon capacity, and a seven mgd wellfield supplying the Virginia Beach Area. Id. at 16.

The State indicates that water reuse is consistent with its coastal management program. State's 7/28/92 Brief at 80-81. I find that this alternative is sufficiently specific for me to determine that it is unavailable.

317. State's 7/28/92 Brief at 76.

The State quotes the Roanoke River Basin Association comment:

[I]nterconnection and coordinated management of the various systems could result in yields for the regional system that would exceed the arithmetic sum of current yield estimates. L. Shabman & W.E. Cox, "Costs of Water Management Institutions: The Case of Southeastern Virginia" in K.D. Frederick (ed.) Scarce Water and Institutional Change (1987).

State's 7/28/92 Brief at 76, AR 68, 68a, Exhibit 14. The State also cites the National Wildlife Federation's comments, which state that interconnection and coordinated management doubled the available supplies to the local Washington area without adding additional water supplies. State's 7/28/92 Brief at 76-7. Letter of David Campbell, National Wildlife Federation to Mary Gray Holt, Attorney-Adviser, March 20, 1992, at 4, AR 74.

In its 2/15/94 Brief at 15, the State asserts:

In our earlier briefs, we describe many reasonable and economic alternatives, totalling well over twice Virginia Beach's claimed needs, which are readily

available in the local Southeastern Virginia area. All would be consistent with the NCCMP.

Since the interconnection of the five cities of the Hampton Roads area are within the local Southeastern Virginia area, I will assume that the State considers this alternative to be consistent with its coastal management program. I also find this alternative to be stated with sufficient specificity for me to determine that it is unavailable.

318. Comments of VDOH, AR 104.

319. In its Objection Letter, the State proposed aquifer storage and recovery (ASR) as an alternative consistent with its coastal management program. State's Objection Letter at 6-8. I find that this alternative is stated with sufficient specificity for me to determine that it is unavailable.

The proposed alternatives which utilize ASR are: (1) withdrawal of water from Lake Gaston during high flows and storage in the aquifer for later use, (2) withdrawal of water from Lake Chesdin, the Blackwater River, or the Nottoway River, and storage in the aquifer, and (3) storage of surplus water from the Portsmouth and Norfolk reservoirs in the aquifer. Boyle Report at 12-14, 25, State's Initial Brief at 74-77, 90. State's 7/28/92 Brief at 80.

320. See Boyle Report at 12, City's Initial Brief at 142. The State proposes two different-sized ASR projects. In its Initial Brief, the State proposes that the City build two ASR systems of eight mgd each. State's Initial Brief at 76. The Boyle Report proposed that, during higher flow months, surplus surface water be pumped a short distance to a treatment plant and treated to safe drinking water standards. The well field capacity required would be 30 mgd during injection, and 50 mgd during recovery. Boyle Report at 25.

321. State's Initial Brief at 75-76; State's 8/31/92 Brief at 14; State's 7/28/92 Brief at 80, Boyle Report at 29.

322. Appellants' Initial Brief at 142, Appellants' 7/28/92 Brief at 166. The City acknowledges that ASR has been used successfully in other parts of the country. Appellants' 7/28/92 Brief at 166.

323. See, VSWCB memorandum, Tidewater Regional Office, from Robert Jackson, Jr., to Martin Ferguson, Jr., June 18, 1992, Appellants' 3/10/94 Brief, App. Vol. 1, Tab 20, Supplemental AR 19.

324. The Boyle Report and Malcolm Pirnie, Inc., the City's consultant, disagree as to whether southeastern Virginia is a suitable site for an ASR system. Boyle Report at 12-13, 25-35; Appellants' Initial Brief, App. IV at 4223-4235, AR 16. Neither, however, conducted experiments in southeastern Virginia to determine the feasibility of ASR.
325. The USGS summarized the two studies which surveyed the feasibility of ASR in southeastern Virginia as follows:

The objective of both studies was to displace saline groundwater with surplus freshwater for subsequent withdrawal during drier seasons. The conclusions for both studies was [sic] that artificial recharge might be feasible when (1) the aquifer material is suitable for a highly developed well, and (2) the recharge water is properly treated to minimize physical and chemical clogging of the well screen and aquifer matrix. Both USGS tests were of relatively short duration and research in nature.

Letter from Gary S. Anderson, District Chief of the USGS, to Thomas Leahy, III, P.E. dated June 26, 1992, Appellants' 7/28/92 Brief, App. Vol. 4, Tab 40W, AR 138e.

326. Appellants' 7/28/92 Brief at 167-168, Boyle Report at 11.
327. Appellants' 2/15/94 Brief at 19, State's 3/10/94 Brief at 12.

CH2M Hill wrote, in a letter to VSWCB, that the high cost was mainly due to the "high organic and color content of the water in the Dismal Swamp Canal, which would require extensive chemical treatment and would generate large quantities of sludge." Letter of John Glass, Geohydrologist, CH2M Hill, to Virginia Newton, VDEQ, State's 3/10/94 Brief, App. Vol. 1994-5, Tab 76 at 2, Supplemental AR 23, State's 3/10/94 Brief at 12.

328. Appellants' 2/15/94 Brief at 19-20, Appellants' 2/15/94 Brief, App. Vol. 1, Tab 24, Supplemental AR 6.
329. The Virginia Department of Health (VDOH) noted that pilot testing and some full scale testing showed that the ASR portion of the project would work. State's 3/10/94 Brief, App. Vol. 1994-5, Tab 80, Supplemental AR 23; State's 3/10/94 Brief at 12. A memorandum from the builder of the Chesapeake system regarding the performance of injection and recovery cycles during the operation of the ASR well, however, shows that Chesapeake's ASR system is not yet fully operational. This memorandum concerns water quality and water capacity problems related to Chesapeake's ASR well.

Memo from Meg Ibison and Doug Dronfield, CH2M Hill to Frank Sanders, City of Chesapeake, November 29, 1993, Appellants' 3/10/94 Brief, App. Vol. 1, Tab 20, Attachment 1, Supplemental AR 19. Prior to Chesapeake's abandoning the project, the VDOH wrote in a letter to Leahy in response to the Boyle Report, that Chesapeake's experience up to that point:

has demonstrated the delicate unpredictability of ASR in a relatively small scale application. The problems grow exponentially when the aquifer(s) used are expanded and various qualities of injection water are applied.

Letter from Eric Bartsch, VDOH, to Thomas Leahy III, VSWCB, June 26, 1992, Appellants' 7/28/92 Brief, App. Vol. 4, Tab 40N, AR 138e; Appellants' 7/28/92 Brief at 168.

330. Chesapeake's Public Utilities Director reported that the injected water:

could be stored below ground without mixing with native water and be recovered for later use. We have not yet determined the maximum available storage in the ASR, but we have stored almost 354.0 million gallons of water before withdrawal commenced.

State's 3/10/94 Brief, App. Vol. 1994-5, Tab 78 at 2, Supplemental AR 23; State's 3/10/94 Brief at 11-12.

331. See Chevron Decision at 67 (the Secretary determined that a proposed alternative was unavailable based partly on the lack of verification of effectiveness of the alternative and the additional studies that would be required).
332. The Boyle Report states that the City has five emergency wells which have a total maximum capacity of 20 mgd. These wells are located in neighboring communities, and the City would need to renew existing contracts with these communities to maintain the wells for emergency situations. Boyle states that the use of these wells during extreme drought conditions will effectively lower the demand deficit of 60 mgd as defined by the Corps. Furthermore, Boyle states,

The existing permits allow for the City to make application for permitted withdrawals when no shortage exists. If this is done, these wells could be utilized for delivering groundwater which has been "freed up" by reduced pumping from industrial users such as Union Camp.

Boyle Report at 15.

The emergency wells can be considered local sources, which the State found to be consistent in its Objection Letter. State's Objection Letter at 6,8. I also find this alternative to be stated with sufficient specificity for me to determine it is unavailable.

333. VSWCB Staff Comments on Boyle Report, Appellants' 7/28/92 Brief, App., Tab 40M at 4, AR 138e.
334. James Water Supply Plan, March 1988, VSWCB, Appellants' Initial Brief, App. III at 2386, AR 13. The State acknowledges that, under VSWCB regulations, emergency wells may only be used when mandatory water conservation is imposed. State's 7/28/92 Brief at 74.
335. State's 8/31/92 Brief at 16-17, State's 3/10/94 Brief at 14.

It is questionable whether this proposed alternative is truly an alternative. In suggesting drought restrictions as an alternative, the State can be viewed as arguing the legitimacy of the need for at least an additional 60 mgd of water, which I have determined to be appropriate. See Element 2.

Although the State does not specifically state that this alternative is consistent with its coastal management program, it stated in its 2/15/94 Brief at 15 that:

[i]n our earlier briefs, we describe many reasonable and economic alternatives, totalling well over twice Virginia Beach's claimed needs, which are readily available in the local Southeastern Virginia area. All would be consistent with the NCCMP.

Since the drought restrictions described by the State would take place within Virginia Beach, which is within the southeastern Virginia area, I will assume that the State considers this alternative to be consistent with its coastal management program. I also find that this alternative is specific enough for me to consider whether it is reasonable and available.

336. State's 8/31/92 Brief at 17.

The State argues that the City's citizens have been under mandatory restrictions for well over two years; if the City officials are willing to require mandatory restrictions rather than adopt alternatives to Lake Gaston, they should be willing to reduce their water use during extreme drought once every 10-15 years. State's 2/15/94 Brief at 21.



337. State's 7/28/92 Brief at 76, State's 2/15/94 Brief at 19-20. The State cites five recent studies which show that communities can expect to reduce their overall water consumption by installing ultra-low-flush toilets and other water-saving devices. State's 2/15/94 Brief at 20.

The State indicates that this alternative is consistent with its coastal management program. State's 7/28/92 Brief at 80-81. The State also described this alternative specifically enough for me to evaluate whether it is reasonable and available.

Since the record does not disclose that implementation of this proposed alternative would result in adverse environmental effects, I find that this alternative has environmental advantages over the Lake Gaston project. The record also does not disclose evidence that the increase in cost of this proposed alternative, if any, outweighs the environmental advantages of this alternative. Therefore, I find that this proposed alternative is reasonable.

338. State's 2/15/94 Brief at 15, 19, 20; State's 7/28/92 Brief at 76; Boyle Report at 18.

The State argues that these studies indicate that a complete retrofit program in the City should reduce water consumption by six to nine mgd. State's 2/15/94 Brief at 15, 19, 20. The Boyle Report suggests that the City could enhance its water supply by such measures as: (1) plumbing code changes which mandate ultra-low-flow toilets in new construction; (2) retrofitting plumbing in existing homes and buildings with water saving devices; and (3) retrofitting hotels, offices and restaurants with water saving devices. Boyle Report at 17-18.

339. See Element 2, Contribution to the National Interest.

340. The State indicates that wastewater reuse is consistent with its coastal management program. State's 7/28/92 Brief at 80. I find that this alternative was described with enough specificity for me to evaluate whether it is reasonable and available.

The record does not show that implementation of this proposed alternative would result in adverse environmental impacts. Therefore, I find that this alternative has environmental advantages over the Lake Gaston project. I am not persuaded by the evidence in the record that this alternative is more costly than the proposed project. Therefore, I find this proposed alternative to be reasonable.

In its list of potential sources of water, the Boyle Report also mentions water reuse by groundwater recharge, but concludes that this is not a feasible alternative, in part because natural recharge areas are too distant from reclaimed water sources and from locations where extractions will occur, and because it is unlikely that high volume surface recharge could be accomplished in the outcrop area. Boyle Report at 18-19.

341. State's 2/15/94 Brief at 18-19.

342. State's 2/15/94 Brief at 19.

343. State's 2/15/94 Brief at 19.

344. Boyle Report at 18.

345. Boyle Report at 18.

346. Appellants' 7/28/92 Brief at 180.

347. Appellants' 3/10/94 Brief at 13-14. Therefore, the City claims, "[i]t would be wildly expensive and inefficient to build pipelines to and from these golf courses to convey treated wastewater and groundwater back and forth." Appellants' 3/10/94 Brief at 14.

348. The Boyle Report states that:

Water reuse for non-potable purposes such as landscape irrigation for existing golf courses, parks, and other large turf areas, and dual systems for separate reclaimed water irrigation of greenbelts, common areas and lawns, is technically viable and widely practiced in water-short areas of the United States, particularly California and Florida.

Boyle Report at 18.

Further, the State quotes "Wastewater Reuse Criteria and Practice in the U.S.," Camp Dresser and McKee:

Water reuse is well-established in the U.S. While many of the early projects were implemented as a least-cost means of wastewater disposal, water reuse is now recognized as an important integral component of water resource management in many parts of the country. As droughts and population increases continue to stress the availability of fresh water supplies, water reuse of municipal wastewater will play an ever-increasing role in helping to meet our water demands. Reclaimed water is used for many nonpotable purposes, ranging

from pasture irrigation to urban applications such as residential lawn irrigation, toilet flushing, and vehicle washing.

State's 2/15/94 Brief, App. Vol. 1994-2, Tab 45, p. 2, Supplemental AR 13; State's 2/15/94 Brief at 18.

In addition, EPA, in its Guidelines for Reuse, states that non-potable reuse only requires conventional wastewater treatment technology that is widely and readily available in countries throughout the world, and, because properly implemented non-potable reuse does not entail significant health risks, it has generally been accepted and endorsed by the public in the urban and agricultural areas where it has been introduced. State's 2/15/94 Brief, App. Vol. 1994-2, Tab 34, Supplemental AR 13, State's 2/15/94 Brief at 19.

349. It is too speculative for me to attempt to consider the amount of water that could be added by wastewater reuse "[o]ver time, and following an extensive public program." Boyle Report at 18.
350. This alternative was proposed in the State's objection, and was stated therein to be consistent with the State's coastal management program. State's Objection Letter at 6,8. I find that this alternative is specific enough for me to consider whether it is reasonable and available.
351. The Boyle Report states that a 1971 report prepared for Norfolk indicated that this was a viable alternative for future water supply for Norfolk's system. Boyle Report at 19. The State does not specifically indicate that constructing this proposed reservoir would be consistent with its coastal management program. However, as stated earlier, the State asserts in its 2/15/94 Brief that the "reasonable and economic alternatives" it described in its earlier briefs would all be consistent with its coastal management program. State's 2/15/94 Brief at 15. Since a new reservoir on the Blackwater River could be considered a source for the local southeastern Virginia area, I will assume that the State considers this alternative to be consistent with its coastal management program.

The State does not elaborate on the location of such a reservoir, or provide detail as to the size of the reservoir. I find, however, that this proposed alternative is specific enough for me to determine that it is unreasonable.

352. Lake Genito would require the flooding of 10,500 acres, including the flooding of 4,250 acres of non-tidal wetlands, and the alteration of flow regimes. Appellants' Initial

Brief, App. I at 1357-1362, AR 9. The Boyle Report acknowledges that "[c]onstruction of new reservoirs such as the proposed Lake Genito would impact large areas of wetlands and permitting for new reservoirs could prove difficult." Boyle Report at 19.

353. It is also questionable whether the Lake Genito alternative is available. The evidence in the record suggests that this proposed alternative would require further environmental analyses and the issuance of multiple permits. According to the Corps, building Lake Genito would require the construction of a new dam, the alteration of flow regimes, and the significant flooding of wetlands. Appellants' Initial Brief, App. I at 141, AR 7. This would probably require, in addition to permits from multiple agencies, additional studies on the environmental impact of the altered flow regimes and the impacted wetlands, particularly since there is a national policy against the loss of wetlands. See Executive Order 11990 (May 24, 1977). The Boyle Report acknowledges that: "[c]onstruction of new reservoirs such as the proposed Lake Genito would impact large areas of wetlands and permitting for new reservoirs could prove difficult." Boyle Report at 19. The Secretary has previously rejected a proposed alternative as being unavailable based partly upon the additional time required for studies and to seek multi-agency approval. See Chevron Decision at 67. This reasoning applies in a case such as this, where large areas of wetlands are impacted, flow regimes are altered, and a new dam must be constructed.

354. Boyle Report at 13-14.

The State does not indicate specifically that this alternative is consistent with its coastal management program. However, as stated earlier, the State asserts in its 2/15/94 Brief, at 15, that the "reasonable and economic alternatives" it described in its earlier briefs, which are "readily available in the local Southeastern Virginia area" would all be consistent with its coastal management program.

Since Lake Chesdin could be considered a source for the local southeastern Virginia area, I will assume that the State considers this alternative to be consistent with its coastal management program. I also find that this alternative is stated with sufficient specificity for me to evaluate whether it is reasonable and available.

355. Boyle Report at 13-14.

356. Boyle Report at 14.

The VDOH and the VSWCB also note the adverse environmental effects associated with this alternative. The VDOH points out that the pipeline portion of this proposed alternative would run across several wetlands. Appellants' 7/28/92 Brief, App. Vol. 4, Tab 40M at 2, AR 138e. The VSWCB states that "[e]nvironmentally [the Lake Chesdin proposal] is much less attractive than the Lake Gaston solution." Id. at Tab 40M, Attachment at 2, AR 138e.

357. The Boyle Report acknowledges that this proposed alternative would require the City to enter into negotiations with the Appomattox River Water Authority for the raw water from Lake Chesdin. Boyle Report at 14. The Appomattox River Water Authority (ARWA), which owns and operates Lake Chesdin, stated:

The [Boyle Report] gives the impression that water from Lake Chesdin is available to Virginia Beach for the taking. This is simply not so. I have indicated to Boyle that the Authority would discuss the possibility with Va. Beach, but the ultimate decision would be up to the Authority's Board of Directors. We had talked to Va. Beach in the early 1980s and recently to Newport News about excess water. In both cases no agreement could be reached. The reason Va. Beach went with the Gaston alternative was partially our inability to reach an agreement.

Letter of Richard Hartman, Appomattox River Water Authority to Thomas Leahy, III, Appellants' 7/28/92 Brief, App. Vol. 3, Tab 38, 138d.

The City could again attempt to negotiate with the ARWA, but the previous difficulties in reaching an agreement with the ARWA underscore that it is speculative at best as to whether a future agreement could be reached. Therefore, I also find that this alternative is unavailable.

358. The State asserts that this proposed alternative is consistent with its coastal management program. State's Objection Letter at 6-8; Boyle Report at 14.
359. State's Initial Brief at 79.
360. Appellants' 7/28/92 Brief at 154.
361. Appellants' 7/28/92 Brief at 154, Appellants' Initial Brief at 139-40.
362. State's Initial Brief, App. Vol. 1, Tab 1, AR 29a; State's Initial Brief at 80-82.

363. Both parties agree that seawater desalination by reverse osmosis is available, and I am persuaded that it is available.
364. The City argues that seawater desalting is very energy intensive, and a desalting plant would have the environmental impacts associated with generation of the electricity required to operate it. Furthermore, the City argues, there are adverse environmental consequences associated with the discharge of concentrated brine into the ocean. Appellants' Initial Brief at 139-140. This position is supported by the Corps, which stated in its 1984 Water Supply Study that pumping brine several miles offshore into the ocean appeared questionable from an environmental standpoint, and that an environmentally suitable disposal method appeared doubtful at that time. Appellants' Initial Brief, App. III at 1940-1941, AR 11. In addition, the VSWCB, in its 1988 James Water Supply Plan, rejected seawater desalination partly based on the environmental impacts. Appellants' Initial Brief, App. III at 2406, AR 12.

The State argues that the City has provided no evidence that there are adverse environmental effects from seawater desalination. State's Initial Brief at 79, note 31. The State also points out that NMFS has endorsed seawater desalination for the Hampton Roads area. In 1978, NMFS stated that it believed that "desalination should be the primary source of water for the Hampton Roads as it is truly the only real long-range source capable of meeting the needs of the growing Tidewater community." *Id.*, Appellants' Initial Brief, App. IV at 3357, AR 14.

365. Boyle Report at 15.
366. Both the State and the City provided evidence regarding the cost of seawater desalination and the cost of the Lake Gaston project, including studies which compare the cost of the Lake Gaston project to the cost of seawater desalination by reverse osmosis. The cost of seawater desalination projected by these studies ranges from \$2.56 to \$5.50 per 1,000 gallons of water. The cost of the Lake Gaston project ranges from \$.84 to \$4.81 per 1,000 gallons of water.

Much of the disagreement between these studies stems from different assumptions, including different assumptions regarding desalination plant capacities, water treatment costs, and the cost of the pipeline. In addition, some studies calculated costs in present value and others did not.

The studies provided by the City and its consultant, Malcolm Pirnie, Inc., found that desalination is more costly than the Lake Gaston project. Appellants' Initial Brief, App. I at 1344-1349, AR 9; Appellants' 7/28/92 Brief, App. Tab 32 at 15, AR 138d. A study provided by Du Pont Company, which builds reverse osmosis plants and was trying to solicit business from the City, found that desalination would be more costly than the Lake Gaston project. State's Initial Brief, App. Vol. 2, Tab 33, AR 29b. One of the studies provided by the State, the Boyle Report, found that "[b]ecause of improving technology, seawater desalination would most economically be implemented toward the latter part of the planning period at which time relative costs may have decreased." Boyle Report at 14.

The other study provided by the State found that under certain conditions the Lake Gaston project was less expensive, and that under other conditions, desalination was less expensive. This report, entitled "A Preliminary Analysis of the Total Cost for a City of Virginia Beach Blended Water Supply when Supplementary Water is Provided by: A Pipeline from Lake Gaston vs. A Seawater Desalination Plant," (the Leitner Report) was prepared for the State by the consulting firm of Leitner & Associates. State's Initial Brief, App. Vol. 1, Tab 1, AR 29a. The Leitner Report "is preliminary...and is not intended to support any final determinations." Id.

The Leitner Report based its study on the premise that 32 mgd would continue to be available to the City from Norfolk and that 11 mgd would be available from local wells during droughts. The study presented the results of two scenarios. The first scenario assumed that Norfolk would not provide the City with water during a drought. The second scenario assumed that Norfolk would supply the City with 15 mgd during droughts. Under the first scenario, the Lake Gaston project was less expensive. Under the second scenario, desalination was less expensive. State's Initial Brief, App. Vol. 1, Tab 1 at 2, AR 29a. It is interesting that even in this study, under the scenario in which Norfolk does not provide water to the City during a drought, and thus desalination or Lake Gaston water is more heavily relied upon, desalination is more expensive.

367. A cogeneration plant produces electric power by a gas turbine electric generator and utilizes the exhaust heat from the gas turbine. Some of the electric power generated would be used to operate a seawater reverse osmosis unit and the rest would be sold to the local electric power company. State's Initial Brief, App. Vol. 1, Tab 1 at 6, AR 29a. In addition to the Leitner Report, the State also submitted articles which discuss cogeneration technology. The two

articles, one by Fluor Daniel, Inc. and the other by General Atomics and Florida Power and Light, project that substantial cost savings can be gained by locating reverse osmosis seawater desalination plants at power plants. State's 2/15/94 Brief at 17.

368. Appellants' 3/10/94 Brief at 13.
369. One of these advances involves a "freely running turbine driven centrifugal pump used to recover the brine stream hydraulic energy in reverse osmosis systems and to transfer that energy in the form of a pressure boost to the feed stream." State's 2/15/94 Brief at 17, citing State's 2/15/94 Brief, App. Vol. 1994-2, Tab 42 at 311, Supplemental AR 13. The other is advanced hydrostatic transmission technology. State's 2/15/94 Brief at 18. I find that the State describes these technologies with sufficient specificity for me to evaluate whether they are reasonable and available.
370. There is no information as to whether the use of these technologies would result in any less adverse environmental effects than reverse osmosis plants without this technology. Therefore, I am also persuaded that reverse osmosis plants which use these technologies would not have environmental advantages over the proposed project. Therefore, I also do not find this alternative to be reasonable.
371. See Section 307(c)(3)(A); see also 15 C.F.R. § 930.130(c).
372. 15 C.F.R. § 930.122 (emphasis added).
373. Id.
374. Decision and Findings in the Consistency Appeal of Amoco Production Company, (Amoco Decision), July 20, 1990, at 58.
375. See Letter from B. E. Tobin, Rear Admiral, U.S. Navy, to Lois D. Cashell, Secretary, Federal Energy Regulatory Commission, April 25, 1991, Appellants' Initial Brief, App. at 3231, AR 14; Letter from Jacqueline Schafer, Assistant Secretary of the Navy (Installations and Environment) to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, Department of Commerce, March 6, 1992, AR 51; and Comments of Byron E. Tobin, Commander, Norfolk Naval Base, AR 101.

Moreover, since the Department of Defense was consulted on the previous nine consistency appeals involving Ground II, there should have been no question about the legal standard. See Findings and Decision in the Matter of the Appeal by Exxon Company, U.S.A., (Exxon SYU Decision), February 18, 1984; Decision and Findings in the Consistency Appeal of



Union Oil Company of California, (Union Oil Decision), November 9, 1984; Decision and Findings in the Consistency Appeal of Exxon Company, U.S.A., (Exxon SRU Decision), November 14, 1984; Decision and Findings in the Consistency Appeal of Gulf Oil Corporation, (Gulf Oil Decision), December 23, 1985; Amoco Decision; Chevron Decision; Decision and Findings in the Consistency Appeal of Mobil Exploration and Producing U.S. Inc., (Mobil Pulley Ridge Decision), January 7, 1993; Unocal Pulley Ridge Decision; and Chevron Destin Dome Decision.

376. Amoco Decision at 58.

**APPENDIX A**

**GLOSSARY OF ADMINISTRATIVE RECORD CITES  
FOR DOCUMENTS RECURRENTLY CITED**

**NOAA/NMFS Materials:**

1988 NMFS Letter      Letter from Andreas Mager, Jr., Acting Assistant Regional Director, Habitat Conservation Division, NMFS, to Col. Joseph Thomas, ND Corps, August 2, 1988, State's Initial Brief, App. Vol. IV, Tab 59, AR 29d

NOAA Comments on FERC EA      Letter from David Cottingham, Director, Ecology & Conservation Office, to the Hon. Lois Cashell, FERC, September 17, 1993, enclosing National Marine Fisheries Service and Office of Ocean and Coastal Resource Management Comments, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 3, Supplemental AR 12

**DOI/FWS Materials:**

FWS Comments on FERC EA      Letter from James Pulliam, Jr., Regional Director, FWS, to Lois Cashell, FERC, September 22, 1993, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 8, Supplemental AR 12

**Corps Materials:**

1983 ND EA and FONSI      Norfolk District Corps of Engineers Final EA and FONSI, December 7, 1983, Appellants' Initial Brief, App. I at 128, AR 7

1984 ND SOF      Norfolk District Corps of Engineers Statement of Findings, January 9, 1984, Appellants' Initial Brief, App. I at 150, AR 7

1984 WD FONSI      Wilmington District Corps of Engineers Final FONSI, January 13, 1984, Appellants' Initial Brief, App. I at 157, AR 7

CWA § 404 Permit      Department of the Army Permit issued by the Norfolk District pursuant to CWA § 404, January 9, 1984, Appellants' Initial Brief, App. I at 64, AR 7

1984 Water Supply Study      Norfolk District Corps of Engineers Water Supply Study, Hampton Roads, Virginia Feasibility Report, and Final Environmental Impact Statement, December 1984, Appellants' Initial Brief, App. I at 265, AR 7

1988 ND SEA Norfolk District Corps of Engineers Final Supplement EA, December 21, 1988, Appellants' Initial Brief, App. I at 204, AR 7

1988 ND FONSI Norfolk District Corps of Engineers Revised FONSI, December 21, 1988, Appellants' Initial Brief, App. I at 228, AR 7

1988 ND SSOF Norfolk District Corps of Engineers Supplemental Statement of Findings, December 21, 1988, Appellants' Initial Brief, App. I at 231, AR 7

1988 WD SFONSI Wilmington District Corps of Engineers Final Supplemental FONSI, December 23, 1988, Appellants' Initial Brief, App. I at 254, AR 7

1989 WD FONSI Wilmington District Corps of Engineers Final FONSI, January 6, 1989, Appellants' Initial Brief, App. I at 252, AR 7

**North Carolina Striped Bass Study Materials:**

Report to Congress Report to Congress for the North Carolina Striped Bass Study, Albemarle Sound and Roanoke River Basin, FWS, May 1992, AR 120

Director's Report Report of the Director of the FWS, contained in the Report to Congress, AR 120

Board Report Report on the Albemarle Sound-Roanoke River Stock of Striped Bass, North Carolina Striped Bass Study Management Board, November 1991, contained in the Report to Congress, AR 120

**Flow Committee Materials:**

1989 Flow Committee Report Roanoke River Water Flow Committee Report, February 1989, State's Initial Brief, App. Vol. IV, Tab 57, AR 29d

1990 Flow Committee Report Roanoke River Water Flow Committee Report for 1988 and 1989, April 1990, State's Initial Brief, App. Vol. VI, AR 29f

1991 Flow Committee Report Roanoke River Water Flow Committee Report for 1990, August 1991, State's Initial Brief, App. Vol. VII, AR 29g

1993 Flow  
Committee Report

Roanoke River Water Flow Committee Report  
for 1991-1993, November 1993, State's 2/15/94  
Brief, App. Vol. IV, Supplemental AR 15

**City and VEPCO Materials:**

Notice of Appeal

Notice of Appeal, submitted by Counsel for  
VEPCO and Counsel for the City with  
certification dated October 3, 1991, AR 3

Appellants'  
Initial Brief

Appellants' Statement of Reasons  
in Support of an Override and Supporting Data  
and Information, AR 6

Appellants'  
Initial Brief  
App.

Appellants' Appendices to Statement of  
Reasons, AR 7-16

City's 3/19/92  
Submittal

Virginia Beach's 3/19/92, Submittal to the  
Department of Commerce, AR 73a - 73e App.,  
AR 73a - 73e

Appellants'  
7/28/92 Brief

Appellants' Reply, July 28, 1992,  
AR 138

Appellants'  
7/28/92 Brief,  
App.

Appellants' July 28, 1992, Submittal,  
filed with Appellants' Reply, AR 138b - 138e

Appellants'  
Termination Brief

Motion for Expeditious Termination  
of CZMA Consistency Review Proceedings for  
Lack of Jurisdiction, July 28, 1992, AR 140

Appellants'  
Termination  
Reply Brief

Appellants' Reply in Support of Motion  
for Expeditious Termination of CZMA  
Consistency Review Proceedings for Lack of  
Jurisdiction, August 14, 1992, AR 146

Appellants'  
2/15/94 Brief

Appellants' Supplemental Brief,  
February 15, 1994, Supplemental AR 5

Appellants'  
2/15/94 Brief,  
App.

10/15/94 Submittal to Commerce Department  
by Appellants', Supplemental AR 6 - 10

Appellants'  
3/10/94 Brief

Supplemental Reply Brief, March 10, 1994,  
Supplemental AR 18

Appellants'  
3/10/94 Brief,  
App.

3/10/94 Submittal to Commerce Department  
by Appellants, Supplemental AR 19

City Comments on FERC EA	Letter From Samuel M. Brock, III, Counsel for the City, to Lois Cashell, FERC, enclosing comments of the City on the FERC EA, September 20, 1993, Appellants' 2/15/94 Brief, App. Vol. 1, Tab 9, Supplemental AR 6
City Reply Comments on FERC EA	Letter of Samuel M. Brock, III, to Lois Cashell, FERC, October 20, 1993, enclosing reply comments of the City on the FERC EA, Appellants' 2/15/94 Brief, App. Vol. 1, Tab 10, Supplemental AR 6
<b>State Materials:</b>	
State's Objection Letter	Letter of Roger N. Schecter, Director, Division of Coastal Management, NCDEHNR to Arnold H. Quint, Esq., Counsel for VEPCO, September 9, 1991, AR 1
State's Initial Brief	North Carolina's Response, AR 28
State's Initial Brief, App.	North Carolina's Appendices, AR 29a - 29h
State's 7/28/92 Brief	North Carolina's Reply Brief, July 28, 1992, AR 141
State's 7/28/92 Brief, App.	North Carolina's Appendix, Volume 9, AR 29i
State's 8/31/92 Brief	North Carolina's Supplemental Reply, August 31, 1992, AR 149
State's Termination Brief	North Carolina's Response to Motion for "Expeditious Termination" of CZMA Proceedings, AR 143
State's 2/15/94 Brief	North Carolina's Brief Describing Developments Since August 1992, February 15, 1994, Supplemental AR 11
State's 2/15/94 Brief, App.	North Carolina Appendix Department of Commerce, February 15, 1994, AR 12 - 15
State's 3/10/94 Brief	North Carolina's New Developments Rebuttal Brief, Supplemental AR 22

State's 3/10/94 Brief, App.	North Carolina's Appendix, Department of Commerce, Vol. 1994-5, Supplemental AR 23
Initial State Comments on FERC EA	Letter of Alan Hirsch, Special Deputy Attorney General, North Carolina, to Lois Cashell, FERC, September 21, 1993, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 6, Supplemental AR 12
State's Reply Comments on FERC draft EA	Reply of the State of North Carolina to Initial Comments on Staff's Environmental Assessment, October 21, 1993, State's 2/15/94 Brief, App. Vol. 1994-1, Tab 13, Supplemental AR 12
<b>Other Documents:</b>	
CWA § 401 Certification	Section 401 CWA Certification issued by the VSWCB, September 15, 1983, Appellants' Initial Brief, App. I at 569-571, AR 8
Bales Report	Bales, J., Strickland, A., and Garrett, R., "An Interim Report on Flows in the Lower Roanoke River, and Water Quality and Hydrodynamics of Albemarle Sound, North Carolina, October 1989-April 1991,' USGS and APES, 1993, State's 3/10/94 Brief, App. Vol. 1994-5 Tab 66 at 1, Supplemental AR 23
Boyle Report	Boyle Engineering Corp., Analysis of Alternative Water Supplies for Virginia Beach, Final Report, June 1992, AR 122dddd
Leitner Study	A Preliminary Analysis of the Total Cost for a City of Virginia Beach Blended Water Supply WHen Supplemental Water is Provided by: A Pipeline From Lake Gaston vs. A Seawater Desalination Plant by Leitner and Associates, State's Initial Brief, App. Vol. 1, Tab 1, AR 29a.

ADMINISTRATIVE RECORD - TABLE OF CONTENTS

Consistency Appeal of Virginia Electric and Power Company (VEPCO or Appellant) from an Objection by the State of North Carolina, Department of Environmental Health and Natural Resources (State)

AR No.      Description

VOLUME 1

- 1) STATE OBJECTION LETTER (Letter of Roger N. Schecter, Director, Division Coastal management, North Carolina Department of Environmental Health and Natural Resources to Arnold H Quint, Esq., Counsel for VEPCO, dated September 9, 1991).
- 2) COVER LETTER TO NOTICE OF APPEAL (Letter of Arnold H. Quint to the Honorable Robert Mosbacher, dated October 3, 1991).
- 3) NOTICE OF APPEAL (VEPCO) dated October 3, 1991 and Attachments; APPELLANT'S FILING FEE (Copy of check, dated October 1, 1991).
- 4) [Appellant's] REQUEST FOR AN EXTENSION OF TIME TO FILE A STATEMENT OF REASONS IN SUPPORT OF AN OVERRIDE AND SUPPORTING DATA AND INFORMATION dated October 3, 1991.
- 5) LETTERS ESTABLISHING AN INTIAL BRIEFING SCHEDULE; Letter of Margo Jackson, Assistant General Counsel for Ocean Services, NOAA to Roger N. Schecter, Director, Dept. Environment, Health & Natural Resources, State of NC and Arnold H. Quint, Esq., Counsel for VEPCO, dated October 11, 1991. (Appellant's check, previously docketed at 5, moved into docket #3.)
- 6) [Appellant's] STATEMENT OF REASONS IN SUPPORT OF AN OVERRIDE AND SUPPORTING DATA AND INFORMATION dated October 24, 1991. (Table of Contents; Statement contained in separate volume.)
- 6a) Letter of Arnold H. Quint, Esquire, to Mary Gray Holt, Esquire, dated October 23, 1991, forwarding Appellant's Statement of Reasons in Support of an Override.
- 7-16 APPENDICES to Appellant's Statement of Reasons in Support of an Override and Supporting Data and Information. (Tables of Contents only; Appendices are contained in separate volumes.)
- 7) APPENDIX I, Vol. 1 of 3



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8)	APPENDIX I, Vol. 2 of 3
9)	APPENDIX I, Vol. 3 of 3
10)	APPENDIX II
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12)	APPENDIX III, Vol. 2 of 3
13)	APPENDIX III, Vol. 3 of 3
14)	APPENDIX IV, Vol. 1 of 3
15)	APPENDIX IV, Vol. 2 of 3
16)	APPENDIX IV, Vol. 3 of 3
17)	DEPARTMENT LETTERS ESTABLISHING INITIAL BRIEFING SCHEDULE (Letter of Margo E. Jackson, Assistant General Counsel for Ocean Services, NOAA, to Roger N. Schechter, Director, North Carolina, Dept. Env. Health & Nat. Resources and to Arnold H. Quint, Counsel for Appellant, dated October 4, 1991).
18)	[State's] REQUEST FOR EXTENSION OF TIME TO FILE STATE'S RESPONSE TO APPELLANT'S BRIEF dated November 15, 1991, and Cover Letter of Alan S. Hirsch, Special Deputy Att. General, NC, to Mary Gray Holt, Attorney-Adviser, NOAA, dated November 15, 1991.
19)	City of Virginia Beach RESPONSE TO STATE'S REQUEST FOR EXTENSION OF TIME, (Letter of Samuel M. Brock, III, to Margo E. Jackson, NOAA, dated November 18, 1991).
20)	GRANT OF STATE'S REQUEST FOR EXTENSION OF TIME (Letter of Margo E. Jackson, NOAA, to Alan S. Hirsch (State's Counsel) dated November 18, 1991).
21)	Letter of Samuel M. Brock, III, to Mary Gray Holt, dated December 13, 1991.
22)	STATE'S SECOND REQUEST FOR ADDITIONAL TIME FOR FILING RESPONSE TO APPELLANT'S BRIEF (Letter of Alan S. Hirsch, State's Counsel, to Mary Gray Holt, Attorney-Adviser, NOAA, dated January 6, 1992 and ATTACHMENT (Decision of the United States Court of Appeals for the Fourth Circuit in <u>State of North Carolina, et al. v. City of Virginia Beach</u> ).

- | <u>AR No.</u> | <u>Description</u>   |
|---------------|--|
| 23)           | City of Virginia Beach OPPOSITION TO STATE'S SECOND REQUEST FOR ADDITIONAL TIME (Letter of Samuel M. Brock, III, Appellant's Counsel, to Margo E. Jackson, Asst. General Counsel for Ocean Services, NOAA, dated January 7, 1992). |
| 24)           | GRANT OF STATE'S SECOND REQUEST FOR EXTENSION OF TIME (Letter of Margo E. Jackson, NOAA, to Alan S. Hirsch, Counsel for Appellant, dated January 7, 1992).   |
| 25)           | FEDERAL REGISTER NOTICE, 57 <u>Fed. Reg.</u> 1456 (January 14, 1992).  |
| 25a)          | NEWSPAPER NOTICE - Virginian-Pilot Affidavits  |
| 25b)          | NEWSPAPER NOTICE - Richmond Times Affidavits   |
| 25c)          | NEWSPAPER NOTICE - News and Observer Affidavits  |
| 26)           | Letter of Mary Gray Holt, NOAA, to Samuel Brock, Arnold Quint, Alan Hirsch dated January 17, 1992.   |
| 27)           | FOIA REQUEST by State (Letter of Alan S. Hirsch, Counsel for State, to Mary Gray Holt, NOAA, dated January 21, 1992.   |
| 28)           | NORTH CAROLINA'S RESPONSE (State's Brief) dated January 21, 1992.  |
| 28a)          | Letter of Alan S. Hirsch, Special Deputy Attorney General to Mary Gray Holt dated January 21, 1992, forwarding State's Brief.  |
| 29)           | APPENDIX to State's Brief. (Tables of Contents Only. Separate Volumes.)  |
| 29a)          | APPENDIX to State's Brief. Volume I. (Table of Contents. See Separate Volume.)   |
| 29b)          | APPENDIX to State's Brief. Volume II. (Table of Contents. See Separate Volume.)  |
| 29c)          | APPENDIX to State's Brief. Volume III. (Table of Contents. See Separate Volume.)   |
| 29d)          | APPENDIX to State's Brief. Volume IV. (Table of Contents. See Separate Volume.)  |
| 29e)          | APPENDIX to State's Brief. Volume V. (Table of Contents. See Separate Volume.)   |

- | <u>AR No.</u> | <u>Description</u>  |
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| 29f)          | APPENDIX to State's Brief. Volume VI; Roanoke River Water Flow Committee Report, 1988-1989. (Cover Page. See Separate Volume.)  |
| 29g)          | APPENDIX to State's Brief. Volume VII; Roanoke River Water Flow Committee Report, 1990. (Cover Page. See Separate Volume.)  |
| 29h)          | APPENDIX to State's Brief. Volume 8; Letter of Alan S. Hirsch to Mary Gray Holt dated July 6, 1992, forwarding additional exhibits; labeled as Volume 8, Tabs 101-108. (Exhibits contained in separate folder labeled Docket 29h. No Table of Contents for Tabs 101-108.) |
| 29i)          | APPENDIX to State's Brief. Volume IX. (Table of Contents. See Separate Volume.)   |
| 30)           | REVISED TABLE OF CONTENTS to Appendix to State's Brief and Cover Letter of Alan S. Hirsch, Counsel for State, to Mary Gray Holt, NOAA, dated January 27, 1992.  |

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- |     |   |
|-----|---|
| 31) | DEPARTMENT REQUEST FOR AGENCY COMMENTS (Letters of Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, to William W. Fox, Jr., NMFS, Honorable William K. Reilly, EPA, Honorable John F. Turner, FWS, Lt. Gen. Henry J. Hatch, US Army; Honorable S. Scott Sewell, MMS; Honorable James M. Ridenour, Park Service; Honorable Nicholas F. Brady, Secretary of the Treasury; Honorable Manuel Lujan, Jr., Secretary of the Interior; Admiral James B. Busey, Acting Secretary of Transportation; Admiral J. William Kime, USCG; Honorable Martin L. Allday, FERC; Honorable James A. Baker III, Secretary of State; Honorable James A. Watkins, Secretary of Energy; Honorable Brent Scowcroft, Nat'l Security Council; Attorney General William P. Barr, Justice.) |
| 32) | RESPONSE TO FOIA REQUEST (Letter of Margo E. Jackson, GCOS, NOAA, to Alan S. Hirsch, Counsel for State, dated February 3, 1992).  |
| 33) | Letter [of Acknowledgement] of Mark Stephenson, Asst. to the Secretary and Director of Communications, Dept. of the Interior, to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, dated January 27, 1992.  |

- | <u>AR No.</u> | <u>Description</u>  |
|---------------|---|
| 34)           | [NC Congressional Delegation and Committee on Merchant Marine and Fisheries] REQUEST FOR EXTENSION OF COMMENT PERIOD, (Letter of Walter B. Jones, Chairman, U.S. House of Representatives Committee on Merchant Marine and Fisheries to Mary Gray Holt, NOAA, dated February 28, 1992). |
| 35)           | STATE REQUEST FOR EXTENSION OF COMMENT PERIOD, (Letter of Alan S. Hirsch, Counsel for State, to Mary Gray Holt, NOAA, dated March 2, 1992).   |
| 36)           | [National Wildlife Federation] REQUEST FOR EXTENSION OF COMMENT PERIOD, (Letter of David C. Campbell, NWF, to Mary Gray Holt, NOAA, dated March 2, 1992).   |
| 37)           | [Sierra Club Legal Defense Fund, Inc.] REQUEST FOR EXTENSION OF COMMENT PERIOD, (Letter of Ronald Wilson, Sierra Club, to Mary Gray Holt, NOAA, dated February 28, 1992).   |
| 38)           | DEPARTMENT REQUEST FOR NOTIFICATION OF OBJECTION TO EXTENSION OF COMMENT PERIOD, (Letter of Margo E. Jackson, GCOS, NOAA, to Arnold Quint, Samuel M. Brock, III, and Alan S. Hirsch, dated March 3, 1992).  |
| 39)           | [City of Virginia Beach] RESPONSE RE: EXTENSION OF COMMENT PERIOD, (Letter of Samuel M. Brock, III, Counsel for City of Virginia Beach, to Margo E. Jackson, GCOS, NOAA, dated March 4, 1992).  |
| 40)           | EXTENSION OF COMMENT PERIOD, (Letter of Margo E. Jackson, GCOS, NOAA, to Arnold H. Quint, Samuel M. Brock III, Alan S. Hirsch, dated March 5, 1992).  |
| 41)           | [U.S. Dept. of the Interior - FWS] REQUEST FOR [Additional] EXTENSION OF COMMENT PERIOD, (Letter of Assistant Secretary for Fish and Wildlife and Parks, to Mary Gray Holt, NOAA, dated March 5, 1992).   |
| 42)           | LETTER REQUESTING COMMENTS re: FWS Request for Additional Extension of Comment Period (Letter of Mary Gray Holt, NOAA, to Counsel for State, Appellant, and City of Virginia Beach, dated March 12, 1992).  |
| 43)           | [City of Virginia Beach] OBJECTION TO [Additional] EXTENSION OF COMMENT PERIOD, (Letter of Samuel M. Brock, III, Counsel for City of Virginia Beach to Margo E. Jackson, GCOS, NOAA, dated March 12, 1992).   |

<u>AR No.</u>	<u>Description</u>
44)	FINAL COMMENT DEADLINE, (Letter of Margo E. Jackson, GCOS, NOAA, to Counsel for Appellant, State and City of Virginia Beach, dated March 13, 1992).
45-54	FEDERAL AGENCY COMMENTS
45)	US COAST GUARD COMMENTS (Letter of Captain W.F. Holt, Chief, Marine Environmental Protection Division, USCG, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 3, 1992).
46)	NATIONAL SECURITY COUNCIL COMMENTS (Memorandum of William F. Sittmann, Executive Secretary, NSC, to Thomas Collamore, Assistant Secretary, Department of Commerce, dated February 13, 1992).
47)	FERC COMMENTS (Letter of Martin L. Allday, Chairman, FERC, to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, NOAA, dated February 20, 1992).
48)	COE COMMENTS (Letter of Lester Edelman, Chief Counsel, COE, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 21, 1992; with attachments 1-6).
49)	US DEPT. OF JUSTICE COMMENTS (Letter of Barry M. Hartman, Acting Assistant Attorney General, Justice, to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, NOAA, dated February 28, 1992).
50)	DOT COMMENTS (Letter of Roberta D. Gabel, Assistant General Counsel for Environment, Civil Rights and General Law, DOT, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 3, 1992).
51)	NAVY COMMENTS (Letter of Jacqueline E. Schafer, Assistant Secretary of the Navy, to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, dated March 6, 1992).
52)	NMFS COMMENTS (Memorandum of William W. Fox, Jr., Director, NMFS, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 10, 1992).
52a-g	NMFS COMMENTS Attachments (7 folders). (No master Table of Contents submitted.)

- | <u>AR No.</u> | <u>Description</u>   |
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| 53)           | EPA COMMENTS (Letter of Richard E. Sanderson, Director, Office of Federal Activities, EPA, to Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, dated March 11, 1992). |
| 53a)          | EPA Letter confirming time extension; Letter of Anne Norton Miller, Director, Federal Agency Liaison Division, EPA, to Mary Gray Holt, Attorney-Adviser, dated February 26, 1992.  |
| 54)           | FWS COMMENTS (Letter of Assistant Secretary for Fish and Wildlife and Parks, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 19, 1992).                                     |

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| 55-79 | PUBLIC COMMENTS   |
| 55)   | COMMENTS OF VIRGINIA SENATORS/CONGRESSMEN (Letter of the Hon. John Warner, Hon. Charles Robb, Hon. Owen Pick, Hon. Norman Sisisky, Hon. Herbert Bateman to Secretary Mosbacher, dated October 4, 1991).                 |
| 55A)  | COMMENTS OF UNITED STATES SENATOR Charles Robb (Letter of the Hon. Charles Robb to Secretary Mosbacher, dated October 3, 1991.)   |
| 56)   | COMMENTS OF HAMPTON ROADS PLANNING DISTRICT COMMISSION (Letter of Reba S. McClanan, Chairman, Hampton Roads PDC to Mary Gray Holt, Attorney-Adviser, NOAA, February 19, 1992).  |
| 56a)  | ATTACHMENT TO HAMPTON ROADS PLANNING DISTRICT COMMISSION COMMENTS; "Economic Impact of a Growth Moratorium and Desalination on the City of Virginia Beach" (Table of Contents only. For document, see separate folder). |
| 57)   | COMMENTS OF CITY OF NORFOLK (Letter of James B. Oliver, Jr., City Manager, to Mary Gray Holt, Attorney-Adviser, NOAA, February 25, 1992).   |
| 58)   | COMMENTS OF CITY OF FRANKLIN (Letter of John J. Jackson, City Manager, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 26, 1992).   |
| 59)   | COMMENTS OF VIRGINIA ATTORNEY GENERAL (Letter of Mary Sue Terry, Attorney General, to the Hon. William P. Barr, U.S. Attorney General, dated February 26, 1992).  |

<u>AR No.</u>	<u>Description</u>
60)	COMMENTS OF VIRGINIA DEPARTMENT OF HEALTH (Letter of Dr. Robert B. Stroube, State Health Commissioner, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 27, 1992).
61)	COMMENTS OF VIRGINIA STATE WATER CONTROL BOARD (Letter of Richard N. Burton, Executive Director, to the Honorable Rockwell Schnabel, Acting Secretary of DOC, dated February 27, 1992).
61a)	CORRECTION OF COMMENTS OF VIRGINIA STATE WATER CONTROL BOARD (Letter of Richard N. Burton, Executive Director, to the Honorable Rockwell Schnabel, Acting Secretary of DOC, dated March 6, 1992).
62)	COMMENTS OF CITY OF CHESAPEAKE (Letter of James W. Rein, City Manager, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 28, 1992).
63)	COMMENTS OF NATURAL RESOURCES DEFENSE COUNCIL (Letter of Sarah Chasis, Senior Attorney, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 28, 1992).
64)	COMMENTS OF SOUTHAMPTON COUNTY (Letter of Rowland L. Taylor, County Administrator, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 28, 1992).
65)	COMMENTS OF CITY OF SUFFOLK (Letter of William E. Harrell, Director of Public Utilities to Mary Grany Holt, Attorney-Adviser, NOAA, dated February 28, 1992).
66)	COMMENTS OF COUNTY OF ISLE OF WIGHT (Letter of Myles E. Standish, County Administrator, to Mary Gray Holt, Attorney-Adviser, NOAA, dated February 28, 1992).
67)	COMMENTS OF GOVERNOR OF VIRGINIA (Letter of Lawrence Douglas Wilder, Governor, to Hon. Barbara Franklin, Secretary, dated March 2, 1992).
68)	COMMENTS OF ROANOKE RIVER BASIN ASSOCIATION (Letter of Michael Hernandez, Counsel, RRBA, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 2, 1992).
68a)	EXHIBITS 1-35; ATTACHMENTS TO COMMENTS OF ROANOKE RIVER BASIN ASSOCIATION. (Table of Contents only; see separate folder.)
68b)	Letter of William Ewell Barr, Vice Chair for West Va., Roanoke River Basin Association to Governor Wilder, dated March 10, 1992.

<u>AR No.</u>	<u>Description</u>
69)	COMMENTS OF U.S. CONGRESSMAN L.F. PAYNE (Letter of Hon. Payne to Hon. Barbara Franklin, Acting Sec., March 4, 1992).
69a)	COMMENTS OF U.S. CONGRESSMAN L.F. PAYNE (Letter of Hon. Payne to Hon. Barbara Franklin, Secretary, March 20, 1992.)
69b)	Correspondence - Thank you for comments (Letter of Knauss to Payne, April 15, 1992)
70)	COMMENTS OF GOVERNOR JAMES G. MARTIN (Letter of Governor Martin to Hon. Barbara Franklin, Acting Sec., March 9, 1992).
70a)	Correspondence - Thank you for comments (Letter of Knauss to Martin, April 10, 1992)
71)	COMMENTS OF U.S. CONGRESSMAN SISISKY (Letter of Hon. Sisisky to Hon. Barbara Franklin, Acting Sec., dated March 12, 1992).
71a)	Correspondence - Thank you for comments (Letter of Knauss to Sisisky, April 13, 1992)
72)	COMMENTS OF U.S. CONGRESSMEN STUDDS, YOUNG AND HERTEL (Letter of Hon. Studds, Young and Hertel, Committee on Merchant Marine and Fisheries, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 16, 1992).
73)	COMMENTS OF CITY OF VIRGINIA BEACH (Letter of Thomas M. Leahy, III, Public Utilities Department, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 19, 1992, and Table of Contents for Tabs 1-67).
73a)	APPENDIX; VOLUME I, Tabs 1-26, COMMENTS OF CITY OF VIRGINIA BEACH. (Contained in separate volume; see Docket No. 73 for Table of Contents.)
73b)	APPENDIX; VOLUME II, Tabs 27-67, COMMENTS OF CITY OF VIRGINIA BEACH. (Contained in separate volume; see Docket No. 73 for Table of Contents.)
73c)	Letter of Thomas M. Leahy, III, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 20, 1992.
73d)	ADDENDUM, "Technical Response to January 1992 Leitner Study", COMMENTS OF CITY OF VIRGINIA BEACH. (Cover sheet only; see separate volume.)



<u>AR No.</u>	<u>Description</u>
73e)	ADDENDUM, "Excerpts From Past Agency Comments Regarding Potential Environmental Impacts in the North Landing River Area From Construction of Proposed Southeastern Expressway with Recent Photos of the North Landing River Watershed")
74)	COMMENTS OF NATIONAL WILDLIFE FEDERATION (Letter of David C. Campbell, Resources Economist, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 20, 1992).
75)	COMMENTS OF SIERRA CLUB (Letter of Ronald Wilson, of Counsel, Sierra Club, to Mary Gray Holt, Attorney-Adviser, NOAA, dated March 20, 1992).
76)	COMMENTS OF CONGRESSMAN OWEN PICKETT (Letter of Congressman Pickett to Hon. Barbara Franklin, dated March 16, 1992 and Exhibits.
76a)	Letter of Congressman Pickett to Hon. Barbara Franklin, dated March 19, 1992.
76b)	Letter of Congressman Pickett to Mary Gray Holt, Esq., NOAA, dated April 8, 1992.
76c)	Correspondence - Thank you for comments (Letter of Dr. Knauss to Congressman Pickett, dated April 15, 1992)
77)	COMMENTS OF CONGRESSMAN HERBERT BATEMAN (Letter of Congressman Bateman to Hon. Barbara Franklin, dated March 16, 1992.)
77a)	Correspondence - Thank you for comments (Letter of Knauss to Bateman, April 13, 1992)
78)	COMMENTS OF SENATOR JOHN WARNER (Letter of Senator Warner to Hon. Barbara Franklin, March 20, 1992.)
78a)	Correspondence - Thank you for comments (Letter of Knauss to Warner, April 13, 1992)
78b)	Letter of William P. Barr, Attorney General to the Honorable John Warner, dated March 8, 1992.
79-A)	COMMENTS of Mr. Bridges, consultant (Letter of Mr. Bridges to Department of Commerce, May 26, 1992)

- | <u>AR No.</u>   | <u>Description</u>  |
|-----------------|---|
| 79-B)           | COMMENTS OF US SENATORS JESSE HELMS & TERRY SANFORD, US CONGRESSMEN WALTER JONES, TIM VALENTINE, MARTIN LANCASTER, DAVID PRICE, STEPHEN NEAL, HOWARD COBLE, CHARLES ROSE, W.G. HEFNER, ALEX McMILLAN, CASS BALLENGER AND CHARLES TAYLOR (Letter to Mary Gray Holt dated March 16, 1992) |
| 79-C)           | APPELLANT'S List of Additional Comments Received; Letter of Shari Kreuer, Mays & Valentine, Counsel for Appellant's to Mary Gray Holt, NOAA, dated March 31, 1992.  |
| <b>VOLUME 4</b> |   |
| 80)             | DECISION ON PROCEDURAL ISSUES (Letters of Ray Kammer to Arnold H. Quint, Esquire, Samuel Brock III, Esquire, and Alan S. Hirsch, Esquire dated April 3, 1992)   |
| 80a)            | VIRGINIA BEACH REQUEST FOR PARTY STATUS DETERMINATION with Exhibits A - D; (Letter of Samuel Brock to Margo Jackson dated January 31, 1992)   |
| 80b)            | VIRGINIA BEACH FEDERAL REGISTER NOTICE OBJECTION (Letter of Samuel Brock and Arnold Quint to Thomas Campbell dated January 31, 1992)  |
| 80c)            | REQUEST FOR RESPONSES to Virginia Beach request for party status and fed. reg. objection (Letter of Margo Jackson to Arnold H. Quint, Esquire, Samuel Brock, III, Esquire and Alan S. Hirsch, Esquire, dated February 10, 1992 and Facsimile Transmission Report verifications.)        |
| 80d)            | VEPCO RESPONSE TO VIRGINIA BEACH REQUEST FOR PARTY STATUS DETERMINATION (Letter of Arnold H. Quint to Margo Jackson dated February 20, 1992)  |
| 80e)            | NC STATE RESPONSE TO VIRGINIA BEACH REQUEST FOR PARTY STATUS DETERMINATION (Letter of Alan S. Hirsch to Mary Gray Holt, February 20, 1992)  |
| 80f)            | VIRGINIA BEACH COUNTER RESPONSE (Letter of Samuel Brock to Margo Jackson dated February 28, 1992)   |
| 81)             | NOTICE OF DECISION ON PUBLIC HEARING (Letter of Thomas A. Campbell, NOAA GC, to Arnold H. Quint, Esquire, Samuel Brock, III, Esquire and Alan S. Hirsch, Esquire, dated April 16, 1992)   |

<u>AR No.</u>	<u>Description</u>
81a)	NC REQUEST FOR PUBLIC HEARING attaching REQUEST BY GOVERNOR JAMES G. MARTIN; Letter of Alan Hirsch to Mary Gray Holt, dated March 23, 1992, attaching Letter of Governor Martin to the Hon. Barbara Franklin, dated March 9, 1992.
81b)	REQUEST FOR RESPONSE TO NC REQUEST FOR PUBLIC HEARING; Letter of Margo Jackson to counsel, dated March 27, 1992.
81c)	APPELLANT'S OBJECTION TO NC REQUEST FOR PUBLIC HEARING; Letter of Sam Brock, III, Esq. to Margo Jackson, NOAA, dated April 3, 1992.
81d)	ROANOKE RIVER BASIN ASSOC/TOWN OF WELDON SUPPORT FOR PUBLIC HEARING; Letter of Michael Hernandez, on behalf of RRBA and Weldon township to Margo Jackson, NOAA, dated April 6, 1992.
81e)	APPELLANT'S RESPONSE TO ROANOKE RIVER BASIN ASSOC SUPPORT FOR PUBLIC HEARING; Letter of Sam Brock, III, Esq. to Margo Jackson, dated April 7, 1992.
81f)	NC REPLY TO APPELLANT'S OBJECTION TO NC REQUEST FOR PUBLIC HEARING; Letter of Alan Hirsch, Esq., to Margo Jackson, NOAA, dated April 9, 1992.
82)	Correspondence - Virginia Beach Thank you (Letter of Bob Mathias to Mary Gray Holt dated April 29, 1992)
83)	Correspondence - Public Hearing Logistics (Letter of Mary Gray Holt to Arnold H. Quint, Esquire, Samuel Brock, III, Esquire and Alan S. Hirsch, Esquire, dated May 4, 1992)
84)	Correspondence disseminating NMFS comments (Letter of Mary Gray Holt to Arnold H. Quint, Esquire, Samuel Brock, III, Esquire and Alan S. Hirsch, Esquire, dated May 7, 1992)
85)	REMOVED, NOAA INTERNAL WORKING FILE DOCUMENT: (Group Travel Request for Public Hearing.)
86)	FEDERAL REGISTER PUBLIC HEARING NOTICE dated May 27, 1992
87a)	NEWSPAPER NOTICE - Richmond Times Affidavits
87b)	NEWSPAPER NOTICE - News and Observer Affidavits

<u>AR No.</u>	<u>Description</u>
87c)	NEWSPAPER NOTICE - Virginian Pilot Affidavits
88- 122iiii	PUBLIC HEARING COMMENTS: COMMENTS OF PUBLIC OFFICIALS Dockets Numbered: 88-101B; COMMENTS OF STATE ENTITIES Dockets Numbered: 102-106B; COMMENTS OF COUNTY ENTITIES, Dockets Numbered: 107-121H; COMMENTS OF GENERAL PUBLIC: Dockets Numbered: 122a-iiii
88-101	COMMENTS OF PUBLIC OFFICIALS
88)	COMMENTS OF VIRGINIA STATE CONGRESSMAN WHITTINGTON W. CLEMENT
89)	COMMENTS OF VIRGINIA STATE SENATOR CHARLES R. HAWKINS
90)	COMMENTS OF U.S. SENATOR JESSE A. HELMS
91)	COMMENTS OF CONGRESSMAN L.F. PAYNE
92)	COMMENTS OF U.S. SENATOR JOHN WARNER
93)	COMMENTS OF VIRGINIA STATE SENATOR CLARENCE A. HOLLAND
94)	COMMENTS OF CONGRESSMAN NORMAN SISISKY
95)	COMMENTS OF VIRGINIA ATTORNEY GENERAL MARY SUE TERRY
96)	COMMENTS OF NC STATE SENATOR ROBERT MARTIN
97)	COMMENTS OF US CONGRESSMAN OWEN PICKETT
98)	COMMENTS OF VA BEACH MAYOR MEYERA OBERNDORF
99)	COMMENTS OF SENATOR TERRY SANFORD
100)	COMMENTS OF US SENATOR CHARLES ROBB (formerly #100A)
101)	COMMENTS OF REAR ADMIRAL BYRON TOBIN (formerly #100B)
102A)	COMMENTS OF CHESAPEAKE, VA, MAYOR WILLIAM WARD (formerly # 101A)
102B)	COMMENTS OF HONORABLE TIM VALENTINE (formerly # 101B)
103-106	COMMENTS OF STATE ENTITIES
103)	COMMENTS OF NC DIVISION OF MARINE FISHERIES (Note: Former docket #103, Comments of Farm Bureau, is not a state entity and has been moved to docket #121J)

<u>AR No.</u>	<u>Description</u>
104)	COMMENTS OF VIRGINIA DEPARTMENT OF HEALTH
105)	COMMENTS OF NC DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES
106A)	COMMENTS OF NC DEPARTMENT OF AGRICULTURE
106B)	COMMENTS OF NORTH CAROLINA DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
107-121J	COMMENTS OF CITY AND COUNTY AND OTHER ENTITIES
107)	COMMENTS OF CITY OF CHESAPEAKE DEPARTMENT OF PUBLIC UTILITIES
108)	COMMENTS OF ROANOKE VALLEY CHAMBER OF COMMERCE
109)	COMMENTS OF DIRECTOR WATER AND WASTEWATER TREATMENT, CITY OF DANVILLE
110)	COMMENTS OF TOWN OF ALTAVISTA TOWN MANAGER
111)	COMMENTS OF CITY OF NORFOLK DEPARTMENT OF UTILITIES
112)	COMMENTS OF ISLE OF WIGHT COUNTY
113A)	COMMENTS OF HAMPTON ROADS PLANNING DISTRICT COMMISSION
113B)	COMMENTS OF HAMPTON ROADS CHAMBER OF COMMERCE
114)	COMMENTS OF HENRY COUNTY PUBLIC SERVICE AUTHORITY
115)	COMMENTS OF HENRY COUNTY BOARD OF SUPERVISORS
116)	COMMENTS OF DANVILLE AREA CHAMBER OF COMMERCE
117)	COMMENTS OF WEST PIEDMONT PLANNING DISTRICT COMMISSION
118)	COMMENTS OF TOWN OF WILLIAMSTON
119)	COMMENTS OF CITY OF SUFFOLK, DEPARTMENT OF PUBLIC UTILITIES
120)	REPORT TO CONGRESS; ALBEMARLE SOUND AND ROANOKE RIVER BASIN, North Carolina Bass Study
121A)	COMMENTS OF EAST CAROLINA UNIVERSITY; (Exhibits contained in separate folder)
121B)	COMMENTS OF VIRGINIA LAKE COUNTRY CHAMBER OF COMMERCE

<u>AR No.</u>	<u>Description</u>
121C)	COMMENTS OF PATRICK COUNTY BOARD OF SUPERVISORS
121D)	COMMENTS OF NASH COUNTY MANAGER; NASH COUNTY BOARD OF COMMISSIONERS
121E)	COMMENTS OF RESOURCE CONSERVATION & DEVELOPMENT CONCIL: BEAUFORT, BERTIE, HERTFORD, MARTIN & PITT COUNTIES
121F)	COMMENTS OF EDGECOMBE COUNTY
121G)	COMMENTS OF CHOWAN COUNTY
121H)	COMMENTS OF WASHINGTON COUNTY BOARD OF COMMISSIONERS
121I)	COMMENTS OF VIRGINIA WESLEYAN COLLEGE
121J)	COMMENTS OF NC FARM BUREAU FEDERATION

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122a-iiii	COMMENTS OF GENERAL PUBLIC:
122a)	NC WILDLIFE FEDERATION
122b)	AMERICAN WATER RESOURCES ASSOCIATION
122c)	FRANK RUFF
122d)	JACK E. MCKEE
122e)	BANK OF TIDEWATER (2)
122f)	BAYVILLE FARMS
122g)	BOLLING LAMBETH, CHAIRMAN ROANOKE RIVER BASIN ASSOC.
122h)	RUSSELL THORNE
122i)	NAPOLITANO ENTERPRISES
122j)	NATIONS BANK
122k)	SIERRA CLUB; North Carolina Chapter
122l)	MARY ROSS
122m)	STUART ASHMAN, MD
122n)	WILEY & WILSON, ROBERT GREEN, P.E.

<u>AR No.</u>	<u>Description</u>
122o)	PAUL AND CAROLYN BROWN
122p)	JAMES RIVER BASIN ASSOCIATION
122q)	J. McCLINTOCK
122r)	CARROLL PALMORE
122s)	JANET M _____
122t)	DAVID AND NORRENE LEARY
122u)	BETTY FORRELL
122v)	DR & MRS RM PILCHER JR.
122w)	PAM HARRIS
122x)	THOMAS C. KYRUS
122y)	E. CLAIBORNE ROBINS
122z)	GEORGE A. BEADLES, JR.
122aa)	McDONALD GARDEN CENTER, EDDIE ANDERSON, PRESIDENT
122bb)	DR. JOE BUCHANAN (DEAN CAMPUS/COMM SERVICES TIDEWATER COMMUNITY COLLEGE)
122cc)	A.J. DeBELLIS
122dd)	THOMAS M. LEAHY
122ee)	DUKE ENERGY CORP., VICTOR CHOLLHORSE, VP
122ff)	CLEAN WATER ACTION, THOMAS E. PERLIC
122gg)	VIRGINIA WILDLIFE FEDERATION
122hh)	LAWRENCE E. POST
122ii)	ATLANTIC COAST CONSERVATION ASSOCIATION
122jj)	WATER RESOURCES RESEARCH INSTITUTE; DAVID MOREAU
122kk)	PETE RUDD, JR.
122ll)	JAMES C. BERRY
122mm)	CHARLES B. WOLFE

<u>AR No.</u>	<u>Description</u>
122nn)	WILLIAM CHIN
122oo)	DANIEL BOWEN
122pp)	HOTEL & MOTEL ASSOCIATION, RICHARD ANOIA
122qq)	DEAN A. ABLOWICH
122rr)	ROBIN BAREFIELD
122ss)	VIRGINIA RESTAURANT ASSOCIATION, CARTER TURPIN
122tt)	CLENTON W. SHANKS
122uu)	RUNNYMEDE CORPORATION, MICHAEL BARRETT
122vv)	DR. MARSHALL FELDMAN
122ww)	READ COMMERCIAL PROPERTIES
122xx)	C&P TELEPHONE; JF KEELING
122yy)	TALBOT GROUP, LTD
122zz)	CHRIS LLOYD
122aaa)	WILLIAM E. TURNER III
122bbb)	COLDWELL BANKER, JOAN D. GIFFORD
122ccc)	CRESTAR, DAVID FULLER
122ddd)	WEYERHAEUSER, JOHN PRITCHARD
122eee)	CHAMPION INTERNATIONAL CORPORATION, ROBERT SEEVERS
122fff)	ROBERT BELLITTO, LT CMDR US NAVY
122ggg)	AMERICAN WATER WORKS ASSOCIATION, JAMES RICHARDS, JR.
122hhh)	MARC REISNER, AUTHOR, <u>CADILLAC DESERT</u> (Separate folder)
122iii)	COUNCIL OF CIVIL ORGANIZATION OF VIRGINIA BEACH, MAURICE JACKSON
122jjj)	DAVID McMILLAN
122kkk)	VA COUNCIL ON ENVIRONMENT, KEITH BUTTLEMAN
122lll)	SMITH MOUNTAIN LAKE ASSOCIATION, DR. JOSEPH WAGONER



<u>AR No.</u>	<u>Description</u>
122mmm)	KATHERINE JACKSON
122nnn)	WILLIAM WALSH
122ooo)	DR CHARLES W. HOWE, PROFESSOR, UNIVERSITY OF COLORADO
122ppp)	TIDEWATER ASSOCIATION OF REALTORS, INC.
122qqq)	TAYLOR'S DO IT CENTERS, ROBERT N. TAYLOR
122rrr)	MARK R. HENNE, TOWN MANAGER, ROCKY MOUNT
122sss)	F.A. KEATTS
122ttt)	DAN RIVER INC.
122uuu)	DALE JONES
122vvv)	RAINBOW FARM
122www)	TIDEWATER BUILDERS ASSOCIATION
122xxx)	PITTSYLVANIA ECONOMIC DEVELOPMENT ORGANIZATION, INC., ROBERT PAYNE
122yyy)	GOVERNMENT FINANCE ASSOCIATES, CIN., CHESTER JOHNSON
122zzz)	NANCY LAWSON
122aaaa)	SARAH GOODRICH BAIRD
122bbbb)	MARSHALL GRANT
122cccc)	ILLEGIBLE
122dddd)	BOYLE ENGINEERING CORPORATION (See Separate folder)
122eeee)	REGIONAL DEVELOPMENT INSTITUTE, Janice Faulkner
122ffff)	WILLIAM J. FANNEY
122gggg)	RICHARD E. OLIVIERI
122hhhh)	FREDERICK J. NAPOLITANO
122iiii)	WILLIAM E. RAMBO, USN (Ret)

AR No.      Description

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- 123)      APPELLANT'S REQUEST THAT COLLINS REPORT BE INCLUDED IN ADMINISTRATIVE RECORD; Letter of Samuel M. Brock, III, Esquire, to the Honorable Barbara Franklin dated June 25, 1992.
- 124)      REQUEST FOR COMMENTS BY COUNSEL ON APPELLANT'S REQUEST FOR INCLUSION OF COLLINS REPORT; Letter of Margo Jackson, NOAA, to counsel dated July 7, 1992
- 124a)      NORTH CAROLINA OBJECTION TO APPELLANT'S REQUEST TO INCLUDE COLLINS REPORT; Letter of Alan Hirsch, Esquire, to Margo Jackson, Asst. Gen. Counsel for Ocean Services, NOAA, dated July 14, 1992.
- 124b)      APPELLANT'S REPLY TO NORTH CAROLINA'S OBJECTION TO INCLUSION OF COLLINS REPORT; Letter of Samuel Brock, III, Esquire to Margo Jackson, Asst. Gen. Counsel for Ocean Services, NOAA, dated July 17, 1992.
- 125)      Letter of Mary Gray Holt to Alan S. Hirsch, Esquire, Samuel M. Brock, III, Esquire and Arnold H. Quint, Esquire, dated June 26, 1992, forwarding written public hearing comments.
- 126)      REQUEST OF SENATOR TERRY SANFORD FOR ADDITIONAL PUBLIC HEARING; Letter of Senator Terry Sanford to the Honorable Barbara Franklin, dated June 23, 1992.
- 126a)      DECISION TO DENY REQUEST OF SENATOR TERRY SANFORD FOR ADDITIONAL PUBLIC HEARING; Letter of John A. Knauss, Under Secretary for Oceans and Atmosphere, NOAA, to the Hon. Terry Sanford, dated July 14, 1992.
- 126b)      Letter of US Congressmen Owen Pickett, Herbert Bateman, Norman Sisisky and Thomas Bliley, to the Honorable Barbara Franklin dated June 26, 1992, opposing request of Senator Sanford of NC for additional public hearing.
- 126c)      Thank you letters to the Honorables Sanford, Pickett, Bateman, Sisisky and Bliley from Knauss, dated July 14, 1992.
- 126d)      Letter of Governor John Warner re: Sanford request for additional public hearing.
- 126e)      Thank you to Hon. John Warner from Knauss, dated July 14, 1992.

<u>AR No.</u>	<u>Description</u>
126f)	Letter of Senator Charles Robb re: Sanford request for additional public hearing.
126g)	Thank you to Hon. Charles Robb from Knauss, dated July 14, 1992.
127)	STATUS REPORTS TO FERC; Letters of Arnold H. Quint, Esquire, to Lois Cashell, Secretary, FERC, dated March 31, 1992 and June 29, 1992.
128)	General Correspondence - Letter of Samuel M. Brock, III, Esquire, to Mary Gray Holt, NOAA, GCOS, dated July 1, 1992, requesting certain duplicate copies of written public hearing comments.
129)	General Correspondence - Letter of Brandy LeGrande, Paralegal, GCOS, to Samuel Brock, III, Esquire, dated July 2, 1992, forwarding duplicate copies of certain public hearing comments.
130)	General Correspondence - Letter of Brandy LeGrande, Paralegal, GCOS, to Alan Hirsch, Esquire, providing copy of docket sheet.
131)	Letter of Sam Brock to Alan Hirsch forwarding documents for possible inclusion in final brief, dated July 7, 1992. (Previously duplicate of revised docket # 124c)
132)	General Correspondence - Letter of Alan S. Hirsch, Esquire to Sam Brock dated July 9, 1992, enclosing copy of <u>Cadillac Desert</u> .
133A)	General Correspondence - Letter of Samuel Brock, III, Esquire to Alan Hirsch, Esquire dated July 10, 1992.
133B)	Letter of Mary Gray Holt to Counsel dated July 10, 1992, forwarding two documents received during the written comment period not previously forwarded to counsel; (dockets numbered 78 and 79B).
134)	General Correspondence - Letter of Alan Hirsch, Esquire to Samuel Brock, III, Esquire, dated July 14, 1992.
135)	General Correspondence - Letter of Alan Hirsch, Esquire, to Sam Brock, III, Esquire, dated July 17, 1992, enclosing "Reuse Rules".

AR No.      Description

- 136)      General Correspondence - Fax dated July 22, 1992, telefaxing cc of July 8, 1992, letter and original letter of Sam Brock, III, Esquire, to Mary Gray Holt, Esquire, NOAA, requesting copies of certain docketed documents.
- 137)      General Correspondence - Letters of Brandy LeGrande, paralegal, GCOS, NOAA, to Sam Brock, III, Esquire, dated July 23, 1992, forwarding requested documents.

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- 138)      APPELLANTS' REPLY; VEPCO and City of Virginia Beach Final Brief.
- 138a)      Letter of Sam Brock, III, Esquire, to Margo Jackson, NOAA, dated July 28, 1992, forwarding Appellants' Reply.
- 138b)      APPELLANTS' REPLY; Appendix; Volume 1 of 4. (Table of Contents. See Separate Volume.)
- 138c)      APPELLANTS' REPLY; Appendix; Volume 2 of 4. (Table of Contents. See Separate Volume.)
- 138d)      APPELLANTS' REPLY; Appendix; Volume 3 of 4. (Table of Contents. See Separate Volume.)
- 138e)      APPELLANTS' REPLY; Appendix; Volume 4 of 4. (Table of Contents. See Separate Volume.)
- 139)      APPELLANT'S MOTION FOR PARTIAL WAIVER OF RULES 2004 AND 2010(a) dated ; (City of Va. Beach Request to FERC for partial waiver of filing and service requirements for Appendices to Appellant's Reply.)
- 139a)      Letter of Sam Brock, III, Esquire, to Lois Cashell, FERC, enclosing motion for partial waiver of filing and service rules.
- 140)      APPELLANT'S MOTION FOR EXPEDITIOUS TERMINATION OF CZMA CONSISTENCY REVIEW PROCEEDINGS FOR LACK OF JURISDICTION dated July 28, 1992.
- 140a)      Letter of Sam Brock, III, Esq. to Margo Jackson, NOAA, dated July 28, 1992, forwarding Appellant's Motion for Expeditious Termination of CZMA Consistency Review Proceedings for Lack of Jurisdiction.

- | <u>AR No.</u>   | <u>Description</u>   |
|-----------------|--|
| 141)            | NORTH CAROLINA'S REPLY BRIEF dated July 28, 1992.  |
| 141a)           | Letter of Alan Hirsch to Mary Gray Holt, dated July 28, 1992 forwarding North Carolina's Reply Brief.  |
| 142)            | VIDEO TRANSCRIPT OF PUBLIC HEARING; Letter of Shari Kreuer, Mays & Valentine, Attorneys for Appellant, to Mary Gray Holt, Esquire, NOAA, dated August 5, 1992, forwarding cc's of video transcripts; Memo of Thomas Leahy attached to video tapes of public hearing. |
| 142a)           | VIDEO TRANSCRIPTS OF PUBLIC HEARING; Memo of Thomas Leahy, City of Virginia Beach, Distribution Copy. (See separate folder for videos.)  |
| 142b)           | TRANSCRIPT OF PUBLIC HEARING. (See separate folder.)   |
| <b>VOLUME 8</b> |  |
| 143)            | NORTH CAROLINA'S RESPONSE TO MOTION FOR "EXPEDITIOUS TERMINATION" OF CZMA PROCEEDINGS dated August 12, 1992.   |
| 144)            | NC REQUEST TO RESPOND TO NEW ITEMS IN RECORD FILED BY APPELLANT IN FINAL BRIEF; Letter of Alan Hirsch, Esq., to Mary Gray Holt, dated August 13, 1992.   |
| 145)            | APPELLANT'S OPPOSITION TO NC REQUEST TO RESPOND TO NEW ITEMS IN RECORD FILED BY APPELLANT IN FINAL BRIEF; Letter of Sam Brock, III, Esq., to Margo E. Jackson, dated August 14, 1992.  |
| 146)            | APPELLANTS' REPLY IN SUPPORT OF MOTION FOR EXPEDITIOUS TERMINATION OF CZMA CONSISTENCY REVIEW PROCEEDINGS FOR LACK OF JURISDICTION dated August 14, 1992.  |
| 146a)           | Letter of Samuel M. Brock III, Esquire, to Margo Jackson, dated August 14, 1992, forwarding Appellants' Reply in Support of Motion for Expeditious Termination.  |
| 147)            | NC REPLY TO APPELLANT'S OPPOSITION TO NC REQUEST TO RESPOND TO NEW ITEMS IN RECORD FILED BY APPELLANT IN FINAL BRIEF; Letter of Alan S. Hirsch, Special Deputy Attorney General to Margo E. Jackson and Mary Gray Holt, dated August 17, 1992.                       |
| 148)            | DECISION TO GRANT NC REQUEST TO RESPOND TO NEW ITEMS IN RECORD FILED BY APPELLANT IN FINAL BRIEF; Letters of Thomas A. Campbell, General Counsel, NOAA, to counsel, August 18, 1992; facsimile documentation.  |

<u>AR No.</u>	<u>Description</u>
149)	NORTH CAROLINA'S SUPPLEMENTAL REPLY dated August 31, 1992.

RECORD CLOSED

- 150) Termination of Appeal; Letters of Barbara Hackman Franklin, Secretary of Commerce, to Arnold H. Quint, Esquire, Alan S. Hirsch, Esquire and Samuel M. Brock, III, Esquire, dated December 3, 1992.
- 151) Letter of Ray Kammer, Deputy Under Secretary for Oceans and Atmosphere, U.S. Dept. of Commerce, to Samuel M. Brock, III, Esquire, dated December 4, 1992, re: inclusion of Collins Report.

DOCUMENTS RELATING TO REQUESTS FOR RECONSIDERATION OF SECRETARY FRANKLIN'S DECISION TO TERMINATE APPEAL

VOLUME 9

- 1) North Carolina request for reconsideration; Letter of Alan S. Hirsch, Special Deputy Attorney General, State of North Carolina to the Honorable Ron Brown, Secretary of Commerce, dated February 3, 1993.
- 2) Congressman L. F. Payne's request for reconsideration; Letter of Congressman L.F. Payne to the Honorable Ronald H. Brown, Secretary of Commerce, dated February 3, 1993.
- 3) Virginia Beach opposition to requests for reconsideration; Letter of M. Scott Hart, Esquire, Mays & Valentine, to the Honorable Ronald H. Brown, Secretary of Commerce, dated February 10, 1993, with Appendix.
- 4) Senator Charles Robb opposition to requests for reconsideration; Letter of Senator Charles S. Robb to the Honorable Ronald H. Brown, dated February 18, 1993.
- 5) Merchant Marine & Fisheries Committee Letter to the Honorable Ron Brown regarding requests for reconsideration; Letter of Owen Pickett, John Warner, Herbert Bateman, Charles S. Robb, Norman Sisisky & Robert Scott, dated February 25, 1993.

<u>AR No.</u>	<u>Description</u>
6)	Virginia State Senator Virgil Goode, Jr. request for reconsideration; Letter of Virgil Goode, Jr. to the Honorable Ronald H. Brown, dated March 8, 1993.
7)	Roanoke River Basin Association request for reconsideration; Letter of Allan A. Hoffman to the Honorable Ronald K. Brown, dated March 30, 1993.
8)	Honorable Ron Brown Letters to Senators and Congressmen regarding requests for reconsideration: Letters of Ron Brown to: Senator Charles Robb, Senator John Warner, Congressman Payne, Congressman Valentine, Congressman Pickett, Congressman Bateman, Congressman Sisisky, and Congressman Scott, dated April 6, 1993.
9)	Thank you to Virginia State Senator Goode; Letter of Diana H. Josephson to the Honorable Virgil H. Goode, Jr., dated April 9, 1993.
10)	Letter of Virginia's Attorney General Stephen D. Rosenthal to the Honorable Ronald H. Brown regarding requests for reconsideration, dated April 26, 1993; with attachments.
11)	Reponse Letter of Vice-President Al Gore to the Honorable L.F. Payne, dated April 27, 1993; with attachments.
12)	Mayor of Virginia Beach opposition to requests for reconsideration; Letter of Honorable Meyera Oberndorf to the Honorable Ronald H Brown, dated May 4, 1993.
13)	Response Letter of Diana Josephson to the Honorable Meyera E. Oberndorf, dated May 18, 1993.
14)	Letter of the Chairman of the House Committee on Merchant Marine and Fisheries requesting reconsideration; Letter of U.S. Congressman Gerry E. Studds to the Honorable Janet Reno, U.S. Attorney General, dated May 26, 1993.
15)	Letter of Jim Tozzi, Director, Multinational Business Services, Inc. to Secretary Brown requesting an expedited DOJ review.
16)	Response of James W. Brennan, Acting General Counsel, NOAA to Mr. Tozzi, dated June 16, 1993.

- | <u>AR No.</u> | <u>Description</u>  |
|---------------|---|
| 17)           | Response of Justice to the Senator Robb; Letter of Webster L. Hubbell, Associate Attorney General, U.S. Department of Justice, to the Honorable Charles S. Robb, dated June 25, 1993. |
| 18)           | Letter of Webster L. Hubbell, Associate Attorney General, U.S. Dept. of Justice to Carol C. Darr, Acting General Counsel, U.S. Dept. of Commerce, dated June 29, 1993.                |
| 19)           | Letter of Ronald H. Brown to Alan S. Hirsch, Esq., Arnold H. Quint, Esq. and Samuel M. Brock, III, Esq., dated July 30, 1993.   |

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- 6) [Appellant's] STATEMENT OF REASONS IN SUPPORT OF AN OVERRIDE AND SUPPORTING DATA AND INFORMATION dated October 24, 1991.
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- 138c)      APPELLANTS' REPLY; Appendix; Volume 2 of 4.  
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- 138e)      APPELLANTS' REPLY; Appendix; Volume 4 of 4.

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- 142a)      VIDEO TRANSCRIPTS OF PUBLIC HEARING.

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- 1            Correspondence of Webster L. Hubbell, Associate Attorney General, U.S. Department of Justice to Carol C. Darr, Esq., Acting General Counsel, U.S. Department of Commerce, dated December 14, 1993; withdrawal of March 12, 1992, opinion.
- 2            Correspondence of D. James Baker, Under Secretary for Oceans and Atmosphere and Administration, NOAA, to Distribution List (Alan S. Hirsch, Esq., Special Deputy Attorney General, North Carolina Dept. of Justice, Samuel M. Brock III, Esq., Mays & Valentine, Arnold H. Quint, Esq., Hunton & Williams), dated December 16, 1993; determination that NOAA will reopen proceeding.
- 3            Correspondence of Margo E. Jackson, Assistant General Counsel for Ocean Services, to Alan S. Hirsch, Esq., Special Deputy Attorney General, North Carolina Dept. of Justice, Samuel M. Brock III, Esq., Mays & Valentine, Arnold H. Quint, Esq., Hunton & Williams, dated January 7, 1994; setting briefing schedule.
- 4            Correspondence of Samuel M. Brock III, Esq., May & Valentine, to Margo E. Jackson, Esquire, Asst. Gen. Coun. Ocean Services, NOAA, dated February 14, 1994, enclosing Appellants' Supplemental Brief.
- 5            APPELLANTS' SUPPLEMENTAL BRIEF, February 15, 1994.

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6	2/15/94 SUBMITTAL TO COMMERCE DEPARTMENT BY APPELLANTS, Volume 1 of 5, Tabs 1-32.
7	2/15/94 SUBMITTAL TO COMMERCE DEPARTMENT BY APPELLANTS, Volume 2 of 5, Tabs 1-27.
8	2/15/94 SUBMITTAL TO COMMERCE DEPARTMENT BY APPELLANTS, Volume 3 of 5, Tabs 28-50.
9	2/15/94 SUBMITTAL TO COMMERCE DEPARTMENT BY APPELLANTS, Volume 4 of 5, APPENDIX 1, "A Technical Review of the North Carolina Striped Bass Study".
10	2/15/94 SUBMITTAL TO COMMERCE DEPARTMENT BY APPELLANTS, Volume 5 of 5, Tabs A-O, APPENDIX 2, "Compilation of Literature and Survey Data Regarding Possible Occurrence of Shortnose Sturgeon ( <i>Acipenser brevirostrum</i> ) in the Roanoke River Watershed of North Carolina".
11	NORTH CAROLINA'S BRIEF DESCRIBING DEVELOPMENTS SINCE AUGUST 1992 ("NEW DEVELOPMENTS BRIEF"), February 15, 1994.
12	NORTH CAROLINA APPENDIX, DEPARTMENT OF COMMERCE, Volume 1994-1.
13	NORTH CAROLINA APPENDIX, DEPARTMENT OF COMMERCE, Volume 1994-2.
14	NORTH CAROLINA APPENDIX, DEPARTMENT OF COMMERCE, Volume 1994-3.
15	NORTH CAROLINA APPENDIX, DEPARTMENT OF COMMERCE, Volume 1994-4, "Albemarle-Pamlico Estuarine Study".
16	Correspondence of Alan S. Hirsch, Special Deputy Attorney General, to Ms. Margo Jackson, NOAA Office of General Counsel, dated February 17, 1994; forwarding typographical corrections for North Carolina's Brief Describing Developments Since August 1992.
17	Typographically corrected NORTH CAROLINA'S BRIEF DESCRIBING DEVELOPMENTS SINCE AUGUST 1992 ("NEW DEVELOPMENTS BRIEF").
18	APPELLANTS' SUPPLEMENTAL REPLY BRIEF, March 10, 1994.
19	3/10/94 SUBMITTAL TO COMMERCE DEPARTMENT BY APPELLANTS, Volume 1 of 1, Tabs 1-23.

<u>AR No.</u>	<u>Description</u>
20	Correspondence of Samuel M. Brock, III, Esq., Mays & Valentine, to Margo E. Jackson, Esquire, Asst. Gen. Coun. for Ocean Services, dated NOAA, March 16, 1994, forwarding typographical corrections for Appellants' Supplemental Brief.
21	Typographically corrected Appellants' Supplemental Reply Brief.
22	NORTH CAROLINA'S NEW DEVELOPMENTS REBUTTAL BRIEF, March 10, 1994.
23	NORTH CAROLINA'S APPENDIX, DEPARTMENT OF COMMERCE, 1994-5.
24	Correspondence of Alan S. Hirsch, Special Deputy Attorney General to Ms. Margo Jackson, NOAA Office of General Counsel, dated March 14, 1994, forwarding typographical corrections for North Carolina's New Developments Rebuttal Brief.

**APPENDIX B**

May 2, 1989

Issue

Pursuant to section 307(c)(3)(A) of the Coastal Zone Management Act of 1972, as amended (CZMA), can one state review for consistency with its Federally-approved coastal management program an activity requiring a Federal permit or license if that activity, although occurring totally within another state, affects land or water uses in the coastal zone of the reviewing state?

Answer

Yes. The legislative purpose and intent of the CZMA, coupled with the long-standing regulatory interpretation and implementation by the National Oceanic and Atmospheric Administration (NOAA) support review pursuant to section 307(c)(3)(A) of the CZMA by one state for consistency with its Federally-approved coastal management program of an activity requiring a Federal permit or license if that activity, although occurring totally within another state, affects the land or water uses in the coastal zone of the reviewing state.

Background

During the late 1960's and early 1970's, Congress considered a number of bills establishing comprehensive national land use planning. Of particular concern was shoreline areas. Triggered by the report Our Nation and the Sea: A Plan for National Action (1969) (Stratton Commission Report) which detailed the unique problems of coastal areas and made specific recommendations, the House of Representatives (House) and the Senate proposed legislation focusing on coastal zone management. As stated by Representative DuPont during adoption of the Conference Report for the Coastal Zone Management Act of 1972: .

The coast of the United States and the adjacent waters represent one of this Nation's most precious resources, yet this resource has been subject to drastic degradation and uncontrolled development. While we all recognize the necessity of implementing a rational policy for the usage of all our lands, the coastal zone perhaps is the most endangered area and needs top priority.

CONG. REC. H9801 (daily ed. Oct. 12, 1972) (statement of Rep. DuPont).

The resultant legislation is basically a "water-related" coastal management program involving land use decisions. Recognizing the

uniqueness of the coastal zone and the increasing and competing demands being placed on this area, the CZMA is designed to:

- preserve, protect, develop and enhance coastal zone resources;
- encourage states to develop coastal management plans that:
  - protect natural resources
  - manage coastal development
  - give priority consideration to coastal dependent uses
  - provide public access
  - assist in redevelopment of deteriorating urban waterfronts and ports
  - preserve and restore historic, cultural and esthetic coastal features
  - simplify and expedite governmental decisionmaking
  - allow public and local government participation
- encourage preparation of special area management plans.

Sections 302 and 303.

During passage of the CZMA, Congress did note that upon enactment of national land use legislation, changes would be made in the states' coastal zone programs to conform with land use responsibilities. H.R. CONF. REP. NO. 1544, 92d Cong., 2d Sess. 13 (1972). No such national land use legislation has been enacted.

Congress focused much attention on the definition of the coastal zone. While the seaward boundary was quickly settled at the then three mile territorial sea of the United States, the inland boundary generated more discussion. For example, when sponsor Senator Tower introduced S. 638, he stated that the coastal zone would extend inland approximately fifty miles from the coast. CONG. REC. S958 (daily ed. Feb. 8, 1971) (statement of Sen. Tower). On the other hand, S. 582 established the inner boundary at seven miles from the mean high water line (although this boundary could be extended if it divided a political subdivision of a state). The intent behind this seven mile boundary was to define the inner boundary specifically to avoid overlap when Congress enacted national land use policy legislation. S. REP. NO. 526, 92d Cong., 1st Sess. 20-21 (1971). Ultimately, the Congress opted to keep the landward boundary flexible and to permit each state to define its own inner boundary. Thus, the CZMA defines the inner boundary of the coastal zone as "inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters." Section 304(a).



A state's definition of its coastal zone is important for two purposes under the CZMA as originally passed. First, it established the geographic area for which the state must develop a management plan. Second, it is the key concept for the Federal consistency provisions of section 307.

To encourage states to participate in the voluntary coastal management program, the CZMA offers two incentives - Federal matching funds for program implementation and Federal consistency. Federal consistency allows states to review direct Federal activities as well as private activities requiring Federal licenses or permits for consistency with a state's Federally-approved coastal management program. A state may object to those activities that it finds "inconsistent." See section 307(c). Echoing the sentiments of others, Senator Williams observed during consideration of S. 586 (a bill to amend the CZMA) that "[t]his 'consistency' provision is the key to a successful State program for coastal zone management." CONG. REC. S12811 (daily ed. July 16, 1975) (statement of Sen. Williams).

### Discussion

An examination of the various bills considered by the House and Senate reveals several proposed approaches to the consistency provisions, particularly to section 307(c)(1), direct Federal activities, and section 307(c)(3)(A), Federal licenses and permits (unless noted otherwise, statutory references are to the CZMA as amended). Some bills, which were considered but not passed, such as H.R. 9229, S. 638 and S. 582 limited the scope of sections 307(c)(1) and 307(c)(3)(A) review to activities occurring in a state's coastal zone. Section 307(c)(1), as reported and passed in both the House (H.R. 14146) and Senate (S. 3507), referred to "activities in the coastal zone."

Each Federal agency conducting or supporting activities in the coastal zone shall conduct or support those activities in a manner which is, to the maximum extent practicable, consistent with approved state programs.

H.R. 14146, 92d Cong. 2d Sess., § 307(c)(1) (1972) (emphasis added).

All Federal agencies conducting or supporting activities in the coastal zone shall administer their programs consistent with approved state management programs except in cases of overriding national interests as determined by the President.

S. 3507, 92d Cong., 2d Sess., § 314(b)(1) (1972) (emphasis added).

The "directly affecting" language of section 307(c)(1) did not appear until the bills reached the Conference Committee. As reported out, section 307(c)(1) read:

Each Federal agency conducting or supporting activities directly affecting the coastal zone shall conduct or support those activities in a manner which is, to the maximum extent practicable, consistent with approved state management programs.

H.R. CONF. REP. NO. 1544, 92d Cong., 2d Sess., § 307(c)(1) (1972) (emphasis added).

The legislative history of section 307(c)(3)(A) differs. Senate Bill 3507 provided, in part, that "any applicant for a Federal license or permit to conduct any activity in the coastal and estuarine zone . . ." (emphasis added). In contrast, H.R. 14146, as originally reported, stated that section 307(c)(3)(A) applied to "any applicant for a required Federal license or permit to conduct an activity affecting land or water uses in the coastal zone." (emphasis added) This wording was unchanged in the bill passed by the House, and the Conference Committee adopted it verbatim.

The legislative history at the time of passage of the CZMA offers no specific explanation for the wording of § 307(c)(3)(A). Unlike section 307(c)(1), there has been no judicial interpretation of the geographic scope of review available pursuant to section 307(c)(3)(A). Some attempt has been made recently to draw an analogy between section 307(c)(3)(A) and the scope of section 307(c)(1) as considered by the Supreme Court in Secretary of the Interior v. California, 464 U.S. 1065 (1984) (OCS oil and gas lease sales not subject to consistency review). The Court does not address section 307(c)(3)(A) activities. Shortly after the issuance of this decision, a representative of the Department of Justice testified that:

We do, indeed, interpret the Supreme Court's decision narrowly. We believe that what the Supreme Court addressed was Outer Continental Shelf lease sale activities. Other OCS activities, exploration, development, and production, would be found in section 307(c)(3). So the Supreme Court decision affects only the lease sale activities and section 307(c)(1).

CZM Federal Consistency: Hearings on H.R. 4589 Before the Subcomm. on Oceanography of the House Comm. on Merchant

Marine and Fisheries, 98th Cong., 2d Sess. 608  
(1984) (statement of Carol Dinkins, U.S. Deputy Attorney  
General).

The Justice Department conveyed a similar position to NOAA during a rulemaking to conform 15 C.F.R. Part 930, Subpart C, "Consistency for Federal Activities," to the Supreme Court decision. The Justice Department cautioned that "a total exclusion for all federal activities on the OCS (or landward of the coastal zone) may well be reading more into the Court's opinion than is there, and therefore may sweep more broadly than necessary." Letter to Peter L. Tweedt, Director, Office of Ocean and Coastal Resource Management (OCRM), from F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division, U.S. Department of Justice, dated February 28, 1984. Following this advice, NOAA limited its regulatory changes to provisions involving OCS oil and gas lease sale activities. 50 Fed. Reg. 35213 (Aug. 30, 1985).

Because of this narrow interpretation of Secretary of the Interior v. California, an extension of its rationale to section 307(c)(3)(A) activities is unwarranted. The Justice Department, however, has filed a brief in Federal district court that questions the applicability of section 307(c)(3)(A) to an activity landward of a state's coastal zone. The case involved a Corps of Engineer's decision to issue a permit to the City of Virginia Beach to construct a water intake structure and pipeline in a tributary of Lake Gaston. Lake Gaston is located in Virginia and North Carolina. One of North Carolina's challenges to the decision involved compliance with the requirements of section 307(c) of the CZMA. See North Carolina v. Hudson, 665 F. Supp. 428 (E.D.N.C. 1987) (Federal Defendants' Memorandum in Support of Motion for Summary Judgment, filed May 27, 1986). Justice based support for this position on two excerpts from the 1972 legislative history of the CZMA. The first excerpt related to the Senate's version of section 307(c)(3)(A) ("any activity in the coastal and estuarine zone"), which was not adopted by the conferees. The second is a brief reference in the report on H.R. 14146 which, in explanation of section 307(c)(3)(A) mentions Federal licenses or permits in the coastal zone -- a contradiction to the plain language of the bill. Because North Carolina dropped the consistency claim due to procedural questions, the court never reached the issue.

It is likely, however, that the House included the "activity affecting land or water uses in the coastal zone" language in section 307(c)(3)(A) to ensure consistency review for Federally licensed or permitted activities that, although not occurring in the coastal zone, affect land or water uses in the coastal zone. To hold otherwise would render the "affecting" language meaningless, a result not favored in statutory construction. See United States v. Wong Kim Bo, 472 F.2d. 720, 722 (5th Cir.

1972) ("Words in statutes should not be discarded as meaningless and surplusage when Congress specifically and expressly included them, particularly where the words are excluded in the other sections of the same act.")

This interpretation is bolstered by several other factors -- recognition by Congress that activities outside the coastal zone can adversely impact the coastal zone; subsequent legislative history; and agency interpretation.

During consideration of the various coastal zone management bills, Congressmen and witnesses at hearings acknowledged that coastal zone problems and impacts from activities do not recognize jurisdictional boundaries:

"Pollution and degradation ... knows [sic] no artificial barriers such as ... political boundaries."

Coastal Zone Management: Hearings on H.R. 2492, H.R. 2493 and H.R. 9229 Before the Subcomm. on Oceanography of the House Comm. on Merchant Marine and Fisheries, 92d Cong., 1st Sess. 126 (1971) (statement of James T. Goodwin, Coordinator of Natural Resources).

"We know that filling in an estuarine marsh in one place may affect the fisherman's catch miles away; a chemical factory at one location can affect the quality of recreational beaches somewhere else; a marine [sic] built at point A could wipe out a productive shellfish bed at point B."

CONG. REC. H7093 (daily ed. August 2, 1972) (statement of Rep. Keith).

"Individual states are unable to solve the many complexities of coastal zone problems which cross political and geographic boundaries ...."

Id. at H7095 (statement of Rep. Pelly).

"Activities undertaken by other (non-coastal) states affect the waters draining into the coastal states."

Letter from Comptroller General of the United States to Senate Comm. on Commerce, dated March 30, 1970, reprinted in S. REP. NO. 526, 92d Cong., 1st Sess. 46 (1971).

[During discussion of offshore terminals located beyond three miles] [T]he facility would be outside the jurisdiction of neighboring States. Yet, the coastal zones of these neighboring States could be severely and adversely affected by pollution that might come from such an offshore facility. While such a pollution discharge would be subject

to the cleanup provisions of the existing Federal Water Pollution Control Act, this might be insufficient protection for coastal States. Rather than protecting a State and its coastal zone subsequent to a discharge, I believe it is important that the affected States play a meaningful role in the plan to construct such a facility.

CONG. REC. S6669 (daily ed. Apr. 25, 1972) (statement of Sen. Boggs).

Besides this general recognition of the transboundary nature of many coastal zone problems, subsequent legislative history supports the application of section 307(c)(3)(A) to activities occurring outside of a state's coastal zone. In 1975, Congress began consideration of various amendments to the CZMA, including one for section 307(c)(3)(A). The Senate noted that "[t]he provisions of section 307(c)(3) include instances where a Federal entity issues a license, lease, or permit for any activity in or out of the coastal zone which may affect the state's coastal zone." S. REP. NO. 277, 94th Cong., 1st Sess., reprinted in 1977 U.S. CODE CONG. & ADMIN. NEWS 1804-05 (emphasis added). Reliance on more recent legislative history can demonstrate Congress' understanding of an issue and should be given weight in the search for legislative intent. See Andrus v. Shell Oil Co., 446 U.S. 657, 666 n. 8 (1980) (Subsequent legislative history should be weighed with extreme care but not rejected out of hand as a source that a court may consider in search for legislative intent.); Seatrain Shipbuilding Corp. v. Shell Oil Co., 444 U.S. 572, 596 (1980) ("While the views of subsequent Congresses cannot override the unmistakable intent of the enacting one, such views are entitled to significant weight and particularly so when the precise intent of the enacting Congress is obscure.").

NOAA has consistently interpreted section 307(c)(3)(A) as applying to activities landward or seaward of the coastal zone. This interpretation, as directed by Congress, emphasizes the affect of the activity on land or water uses of the coastal zone rather than considering only the location of the activity.

Section 317 of the CZMA directs the Secretary of Commerce to issue rules necessary to carry out the provisions of the CZMA. Although the Congress passed the CZMA in 1972, NOAA did not approve the first state coastal management program until June 1, 1976 (State of Washington). Due to the lack of approved plans, NOAA did not promulgate the Federal consistency regulations immediately. It was not until May 14, 1976, that NOAA solicited comments on draft consistency regulations. On that date, NOAA sent draft regulations to selected reviewers for their consideration prior to publication in the Federal Register. Reviewers included coastal states, relevant Federal agencies and the Advisory Commission on Intergovernmental Relations. That draft did not directly address the geographic scope of section

307(c)(3)(A), although by implication it appears to cover activities both inside and outside of the coastal zone. It stated:

Any person who contemplates engaging in an activity which requires a Federal license or permit shall obtain the views of the relevant Federal agency and of the state agency as to whether such activity could affect such state's coastal zone. For the purpose of the initial contacts prescribed by this subsection, it is presumed that such an activity would affect such state's coastal zone if it is to take place within the boundaries of that coastal zone.

Based upon the comments received and further consideration of the draft regulations, NOAA published proposed regulations in the Federal Register on September 28, 1976 (41 Fed. Reg. 42878 - 42891). In the preamble, NOAA noted the conflicting views of Federal agencies and coastal states concerning the scope of consistency.

The Federal agencies in many instances perceived a threat to their national mission objectives should States be permitted to frustrate Federal programs by virtue of the consistency requirements of the Act. Accordingly, the Federal community responses reflected a narrow view of the scope and impact of the consistency provisions. The State/local government community indicated a general concern with what it perceived as a Federal agency's effort to weaken and undermine the coverage of the consistency requirements, thereby diluting the effectiveness of State coastal zone management programs. Accordingly, the latter community requested comprehensive operational tools for enforcement of the consistency requirements.

Id. at 42879.

NOAA attempted to address these concerns and others when proposing the regulations to implement section 307(c)(3)(A). The preamble stated that "[w]hile NOAA recognizes the impracticality of requiring States to review all Federal license and permit activities affecting the coastal zone, we note that the broad language of the Act reflects a Congressional intent to assure that minor actions which incrementally could have an adverse impact on the coastal zone should also be consistent with State programs." To accommodate the necessity of a manageable state program and to satisfy "the Act's provisions for comprehensive coverage for Federal action," NOAA drafted provisions requiring States to "list" those activities subject to review. Id. at 42883.

The regulation dealing with section 307(c)(3)(A) activities, section 921.6, "consistency of Federal licenses and permits,"

explained "it shall be presumed that a proposed activity will affect land or water uses in the coastal zone if the activity is to take place within, adjacent, or in close proximity to the boundaries of the coastal zone."

On August 29, 1977, NOAA published another proposed rule on Federal consistency (42 Fed. Reg. 43586-43610). In the 1977 proposed rule, NOAA further addressed the geographic scope of section 307(c)(3)(A) (proposed as Subpart D of 15 C.F.R. Part 930, its current designation). In the preamble, NOAA explained that states will be required not only to list Federal license and permit activities subject to review "but also in terms of general location when the State agency wishes to review activities outside of the coastal zone which are likely to significantly affect coastal resources (e.g., activities on excluded Federal lands, within coastal counties, etc.). The necessity for specifying location is to avoid consistency review for Federal license and permit activities unlikely to significantly affect the coastal zone." Id. at 43592. NOAA continued by stating that:

[i]f a Federal permit subject to State agency consistency review is required for an activity where no State or local government permit is required (e.g., on excluded Federal lands, on the Outer Continental Shelf, on upland areas outside of the coastal permit jurisdiction, etc.) the State agency must rely upon the applicant's consistency certification or some other equivalent procedure to review the consistency of the proposed activity.

Id.

Subpart D, "Consistency for Activities Requiring a Federal License or Permit," provided, in part, at section 930.54(b):

In the event the State chooses to review Federal licenses and permits for activities outside of the coastal zone but likely to significantly affect the coastal zone, it must generally describe the geographic location of such activities.

(Comment: The location element should encompass only areas where Federal license and permit activities are likely to cause significant effects on coastal zone resources. For example, the management program could list a Federal land use permit (e.g., Forest Service right-of-way permits for logging roads) and require review whenever such permit is requested along riverine areas where development is likely to significantly affect downstream areas within the coastal zone. The State agency should exclude geographic areas outside of the coastal zone where Federal license and permit activities generally will have insignificant impacts on

coastal zone resources both in an individual and cumulative sense.)

Id. at 43601.

The preamble to the 1977 proposed rule notes that some comments "pointed out that the regulations failed to discuss ... instances where more than one State would be affected." NOAA responded that "each affected coastal State with an approved program is entitled to participate in the review of Federal actions (§ 930.59)." Id. at 43586. Section 930.59 provided for procedures if the requirements of the approved management programs conflict. It stated:

(a) In preparing consistency certifications for a license or permit activity affecting the coastal zone of more than one State, the applicant should determine whether the requirements of the management programs are in conflict with each other with respect to the proposed activity. If such a determination is made, the applicant should notify the State agencies, the Federal agency and OCZM of such conflict at the earliest practicable time.

(b) Upon receiving notification from an applicant that a license or permit activity may be subject to conflicting requirements from more than one management program, the agencies identified in subsection (a) shall consult with each other and with the applicant in an attempt to identify alternative means for complying with the requirements of the management programs.

Id. at 43602.

The final rule published at 43 Fed. Reg. 10510-10533 (Mar. 13, 1978) deleted section 930.59. The preamble explains:

This section [section 930.59] has been deleted.

Numerous Federal agencies pointed out that problems of interstate coordination applied with respect to all of the subparts and that conflicting State program requirements are more appropriately addressed as part of the section 305 and 306 provisions of the Act. Accordingly, instead of addressing this problem as a Federal consistency matter, the issue is covered instead in the Program Approval Regulations -- see 15 CFR 923.34 (directing each coastal State to consult with adjoining coastal States during the program development process in order to promote uniform management of a common resource and to minimize the possibility of conflicting uses occurring at the juncture of each State's boundaries) and 15 CFR 923.56 (directing coastal States to coordinate their efforts with other plans which interrelate



with the State's coastal management program). A number of industry reviewers urged that Secretarial intervention be required in the event coordination efforts did not prevent the development of conflicting State requirements. NOAA has rejected this recommendation. The Act does not compel uniform requirements among adjacent States. Accordingly, there may develop some cases where a proposed activity, while permissible in one State, is subject to an objection based upon significant inconsistent effects upon a neighboring State. In this event, the Secretary of Commerce, may intervene if such action is deemed appropriate (see subpart H). [Secretarial Review relating to the Objectives or Purposes of the Act and National Security Interests]

Id. at 10513-14.<sup>1</sup>

The deletion of section 930.59 did not obviate the need for an applicant for a Federal license or permit to certify consistency with all applicable coastal management programs. It merely replaced one mechanism of coordinating such conflicts with the option for Secretarial intervention. The consistency appeals procedure, outlined in Subpart H, could also provide another option for such an applicant.

Section 930.54(b) quoted earlier (renumbered section 930.53(b) in the 1978 rule making) was modified only slightly. It still required that the geographic area for review of activities outside the coastal zone be generally described in the Federally-approved coastal management program. This requirement is contained in the current regulations at 15 C.F.R. § 930.53(b).

This review of the regulatory history of the consistency provisions of section 307(c)(3)(A) demonstrates that NOAA has consistently interpreted this section to include activities either landward (whether in the reviewing state or in a neighboring state) or seaward of the coastal zone if such activities affect the land or water uses in the coastal zone of a state with a Federally-approved coastal management program.

Pursuant to Section 307(c)(3)(A) and NOAA's implementing regulations, states with approved coastal management programs have reviewed activities landward (including activities in neighboring states) and seaward of their coastal zones. If a state lists the types of Federal permits or licenses it intends to review in its Federally-approved coastal management program and generally describes the geographic area if outside the coastal zone, that state commences review upon notification of the proposed activity. A state also may review unlisted activities (both inside and beyond the coastal zone) by following the procedures established in 15 C.F.R. § 930.54, "Unlisted Federal license and permit activities." Those procedures require

states to monitor unlisted Federal license and permit activities and to notify Federal agencies and applicants of unlisted activities affecting the coastal zone which require State agency review. The state also must notify the Director of OCRM. Approval by the Director of OCRM to review unlisted activities is required before such review can begin. The Director must approve such a request if the proposed activity reasonably can be expected to affect the coastal zone of the State.

Listed below are examples of consistency review of activities outside a state's coastal zone:

- Savannah Coal Port -- The proposed project consisted of construction and maintenance of a docking facility at the north end of Hutchinson Island, Georgia, placement of riprap and dredging. On June 22, 1981, the South Carolina Coastal Council found that project consistent with South Carolina's coastal management program.
- New River Canal Project -- The project was part of a master drainage plan encompassing Ascension Parish, an area outside of Louisiana's coastal zone. The Director of OCRM approved the request to review the project as an unlisted activity in January, 1984. The Director found that the project along with the associated urban and agricultural development could reasonably be expected to affect the hydrology and water quality of nearby coastal areas.
- Chemical Waste Management Research Burn -- The proposed activity involved the transportation of waste fuel oils contaminated with polychlorinated biphenyls (PCBs) from the Port of Philadelphia, Pennsylvania through the Delaware River and Delaware Bay to a site approximately 140 miles east of Delaware Bay. The material would be transported through the coastal zones of Pennsylvania, New Jersey and Delaware. Maryland, pursuant to 15 C.F.R. § 930.54, requested review of the activity which was granted in February, 1986.<sup>2</sup>
- River's Edge Marina -- The proposed marina development was located landward of New York's coastal zone. New York expressed concerns about wetlands impacts, water quality, and recreational, social and physical impacts related to the capability of the Little Salmon River. The Director of OCRM granted New York's request to review the project as an unlisted activity in May, 1986.
- Gugel's Tai Mahal Artificial Island -- The proposed project was located approximately nine nautical miles south-southwest of Jones Inlet and east-southeast of

Ambrose Light. Because the proposed project was in close proximity to New Jersey state waters, the Corps of Engineers requested the applicant to obtain a consistency certification from both New Jersey and New York. New York requested the right to review the proposed project pursuant to 15 C.F.R. § 930.54, because, while the New York coastal management program lists Corps of Engineers Section 10 permits, the program document did not contain a general description of the geographic location for review outside the coastal zone. In August, 1988, OCRM granted New York's request.

These examples illustrate NOAA's practice of interpreting section 307(c)(3)(A) to permit review of activities outside the coastal zone if such activities affect the land or water uses in the coastal zone. As further evidence of NOAA's interpretation of permitting states to review activities outside of their coastal zone is NOAA's acceptance of the on-going review by Massachusetts of an activity occurring totally in New Hampshire. In January, 1989, Massachusetts notified the Town of Seabrook to submit a consistency certification for the proposed wastewater treatment facility. The proposed outfall is located approximately 875 feet from the Massachusetts/New Hampshire boundary line.

In considering the degree of deference to be accorded to an agency's interpretation, the courts have generally held that the standard of judicial review of agency action is narrow. See Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971). Courts show great deference to the interpretation given to a statute by the agency charged with its administration. Particular respect is due when there is a contemporaneous construction of a statute by those in charge of "setting the machinery in motion." The court need not find that an agency's construction is the only reasonable one, only that it is a reasonable construction. Deference is more clearly in order if the construction is of an administrative regulation. Udall v. Tallman, 380 U.S. 1, 16 (1965). In particular, long-standing administrative constructions tend to be favored. Aluminum Co. of America v. Central Lincoln People's Util. Dist., 467 U.S. 380, 390 (1984). Further, an interpretation that an agency has consistently followed deserves deference. Pattern Makers' League v. NLRB, 473 U.S. 95, 115 (1985).

In determining the degree of deference to accord, the Supreme Court has distinguished between legislative regulations, which have the force and effect of law, and interpretive rules, which are subject to a lesser degree of deference. Where Congress has expressly delegated to a Federal agency the authority to promulgate regulations such as in the CZMA, the resultant

legislative regulations are subject to the arbitrary and capricious standard of review. Such regulations should be upheld if they are consistent with Congressional purpose. Morton v. Ruiz, 415 U.S. 199, 237 (1974).

The Ninth Circuit upheld NOAA's interpretation and application of its coastal management approval regulations in American Petroleum Institute v. Knecht, 456 F. Supp. 889 (C.D. Cal. 1978), aff'd 609 F.2d 1306 (9th Cir. 1979). At issue was NOAA's approval of the California Coastal Management Program pursuant to the agency's regulations interpreting the state program requirements established by the CZMA. The district court reviewed at some length the law applicable to the standard of review appropriate for NOAA's regulations, and concluded that the arbitrary and capricious standard applied to the agency's interpretation of its own regulations and that "considerable deference" was due the agency's decisions based on its regulations interpreting the CZMA. 456 F. Supp. at 908. The Ninth Circuit Court of Appeals adopted, in full, that part of the district court decision dealing with the standard and scope of review. 609 F.2d at 1310.

The district court's analysis included the "narrow" standard of judicial review, the principle of deference to an agency's interpretation of its regulations and the statute it administers, and the distinction between "legislative" and "interpretive" rules. Further, the district court noted where an agency's interpretation of a statute has been brought to the attention of Congress, and Congress has acquiesced in the administrative construction, greater deference is due. 456 F. Supp. at 907. Specifically, the district court found that Congress:

fully cognizant of [NOAA's] efforts and activities in administering the CZMA since 1972, apparently determined [by enactment of the 1976 amendments to the CZMA] to reaffirm its original vesting of considerable discretion in NOAA, thereby calling into play the greater deference due "legislative" regulations noted above.

Id. at 908.

The discussion in American Petroleum Institute v. Knecht of the proper standard of review to be applied to NOAA's coastal management approval regulations, and the degree of deference due them by the court, is pertinent to this examination of NOAA's regulations implementing section 307(c)(3)(A). Congress charged NOAA with the responsibility of implementing the CZMA. NOAA's construction of the statute was a contemporaneous one made by those officials responsible for implementing the Federal coastal management program. NOAA's construction of the consistency provisions is long-standing, and NOAA has consistently followed its construction. NOAA's regulations are based on the

legislative history of section 307(c)(3)(A) of the CZMA, to the extent such history exists. The relationship between the regulations and section 307(c)(3)(A) is reasonable and rational and thus would be due considerable deference by a reviewing court.

Some, however, might argue that NOAA's section 307(c)(3)(A) regulations do not conform to section 307(e) because NOAA's interpretation increases state power at the expense of Federal agencies. Section 307(e) of the CZMA states:

Nothing in this title shall be construed --

(1) to diminish either Federal or state jurisdiction, responsibility, or rights in the field of planning, development, or control or water resources, submerged lands, or navigable waters; ...

(2) as superseding, modifying, or repealing existing laws applicable to the various Federal agencies ....

NOAA's interpretation of this provision is stated at 41 Fed. Reg. 42884 in response to several Federal agency reviewers who sought clarification. NOAA stated:

[a]s made clear at page 20 of the Senate Report [S. REP. NO. 753, 92d Congress, 2d Sess. (1972) accompanying S. 3507] this provision "is a standard clause disclaiming intent to diminish Federal or State authority in the fields affected by the Act ...." NOAA construes this provision as merely preserving for each Federal agency the responsibility for its own mission, subject to such additional requirements as the Act may impose. Thus the duty the Act imposes upon Federal agencies is not set aside by virtue of this Section. The Act was intended to effect substantive changes in the Federal agency decision-making within the context of the discretionary powers residing within such agencies ....

The United States Supreme Court when considering this provision in California Coastal Commission v. Granite Rock Co., 480 U.S. 107, 107 S. Ct. 1419, 1430-31 (1987) also stated that it was a "standard clause disclaiming intent to diminish Federal or State authority in the fields affected by the Act ...."<sup>3</sup>

Section 307(e) should be read in conjunction with section 307(c). A major purpose of the CZMA was to encourage states to develop coastal management programs. The legislative history of the CZMA documents that Congress intended to motivate states through the consistency provisions. S. REP. NO. 277, 94th Cong., 2d Sess. 9, reprinted in 1976 U.S. CODE CONG. & ADMIN. NEWS 1768, 1776. It would appear strange to conclude that Congress granted

the states authority to review Federal activities and Federal permit and license activities in section 307(c), only to eliminate that authority two subsections later.

The view that section 307(e) does not limit the authority granted by section 307(c) conforms to the rule of statutory construction that different provisions of the same statute should be read consistently with each other to avoid conflict. United States v. Stauffer Chemical Co., 684 F.2d 1174, 1186 (6th Cir. 1982). Therefore, a reasonable reading of section 307(e) leads one to conclude that it does not affect the substantive burden of Federal agencies and Federal permit and license applicants to comply with state coastal zone programs absent a clear conflict with another mandatory duty imposed by statute on that Federal agency. Under this interpretation, Federal agencies retain ultimate authority to administer applicable Federal statutes, although they must exercise their responsibilities consistent with the requirements of the CZMA.

Others might assert that allowing review of section 307(c)(3)(A) activities occurring in an adjacent state(s) could cause conflicts between states and provide the Federal licensing or permitting agencies with irreconcilable requirements. During consideration of coastal management legislation, members of Congress and witnesses at hearings acknowledged potential differences among the states. At the same time, they emphasized the necessity of each state developing its own, individual plan and expressed the hope that states would work together on regional problems or concerns.<sup>4</sup> The Stratton Commission Report noted that coastal waters of concern to more than one state can pose special problems:

Without underestimating the potential difficulties, the Commission is persuaded that in most cases, sound management and management undertaken by one state probably will not differ greatly from that undertaken by an adjacent state. When differences do arise, they may be settled by direct negotiations between the parties concerned or by the establishment of ad hoc interstate committees or an interstate commission or compact.

Stratton Commission Report at 60.

This position was reiterated by John Knauss, a member of the Stratton Commission, at a hearing held by the House. He also observed that state boundaries are not usually the natural division lines for the coastal zone. Coastal Zone Management: Hearings Before the Subcommittee on Oceanography of the House Committee on Merchant Marine and Fisheries, 91st Cong., 1st Sess. 14 (1969)(statement of John A. Knauss, Dean, Graduate School of Oceanography, University of Rhode Island).

When queried by Senator Stevens concerning interstate projects such as a pipelines, one witness replied:

I would also point out, I think, a more likely case is that States through which a given pipeline moved would have certain differences in their land use programs. The legislation does require each State to exchange information and otherwise consult with its neighboring States in the development of its programs; and we do not try to tell a State that "your plan must conform to what your neighbor does." We think that would be an interference with the State prerogatives. But we do say "you should at least work closely with them in the development of your plan." Hopefully thereby minimizing radical differences.

Coastal Zone Management: Hearings on S. 582, S. 632, S. 638 and S. 992 Before the Subcomm. on Oceans and Atmosphere of the Senate Comm. on Commerce, 92d Cong., 1st Sess. 131 (1971) (statement of Hon. Russell Train, Chairman, Council on Environmental Quality).

Representative Harrington expressed a similar view the following year. "Coastal waters flow freely across State boundaries, affecting many jurisdictions. The principle of compatible land uses applies to the entire stretch of coastal land, irrespective of legally created dividing lines. Clearly the answer is coordination between various jurisdictions in the planning of coastal zone management." CONG. REC. H7096 (daily ed. Aug. 2, 1972) (statement of Rep. Harrington).

The CZMA and its implementing regulations provide a variety of mechanisms to assist in interstate planning and to resolve conflicts between states, applicants and Federal agencies. Some of those mechanisms are listed below:

- Section 309 Interstate Grants -- The purposes of such grants include coordination of coastal zone planning for contiguous areas of coastal states; study, planning and implementation of unified coastal zone policies; establishment of an effective mechanism to identify and resolve mutual problems. Under NOAA's regulations implementing Section 309, states without Federally-approved coastal management programs are eligible if at least one state with a Federally-approved program participates in the proposed project or study. 15 C.F.R § 932.11(a)(4).
- Secretarial Mediation -- Pursuant to section 307(h), the Secretary is available to mediate serious disagreements between any Federal agency and a coastal state.

- Sections 307(c)(3) and (d) -- The Secretary, either on his own volition or at the request of an interested party or a Federal permit or license applicant, can override a state's objection to a proposed project. See also 15 C.F.R. § 930.125 and § 930.132.
- Informal Discussions -- Pursuant to 15 C.F.R. § 930.124, OCRM is available to assist parties to resolve their differences informally.

This array of conflict resolution provisions is designed to ease differences among interested parties. Thus, when a state objects to a proposed project, regardless of its location, the applicant can take a number of actions -- negotiate, modify the project, seek mediation, or file an appeal with the Secretary of Commerce. These options are equally available whether the proposed activity is geographically located in the objecting state, is located in a non-objecting state<sup>5</sup> or is subject to consistency review by more than one state.

### Conclusion

There is no indication that Congress intended to limit geographically the scope of section 307(c)(3)(A) consistency review. Rather, Congress recognized the interstate effect of coastal management problems and encouraged states to develop programs to address the particular problems of each state. While acknowledging that some interstate conflict is inevitable, Congress provided methods to resolve such conflicts.

The plain language of section 307(c)(3)(A), the legislative history and longstanding agency interpretation and implementation support the position that the CZMA provides for review of proposed activities, regardless of location, that require a Federal license or permit pursuant to section 307(c)(3)(A) by a state if the following conditions are met:

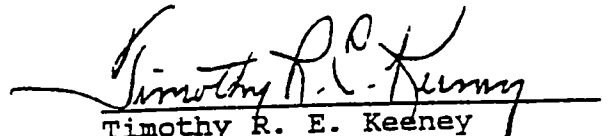
1. the reviewing state has a Federally-approved coastal management program;
2. the proposed activity affects land or water uses in the coastal zone of the reviewing state;
3. the required Federal permit or license is listed in the reviewing state's approved program or the state has requested and received approval to review the proposed project as an unlisted activity pursuant to 15 C.F.R. § 930.54;
4. if the proposed activity is located outside the reviewing state's coastal zone, the management program



must generally describe the geographic location of such activities (or invoke review pursuant to 15 C.F.R. § 930.54);

5. the review must be conducted within the time frames provided by section 307(c)(3)(A) and 15 C.F.R. Part 930, Subpart D; and

6. objections must conform to the requirements of 15 C.F.R. § 930.64.

  
Timothy R. E. Keeney  
General Counsel  
National Oceanic and  
Atmospheric Administration

## FOOTNOTES

1. The files on this rulemaking, which appear incomplete, reveal four industry comments on section 930.59. Texas Eastern Transmission Corporation noted, in part, "[t]his section needs the addition of specific mechanics that should be followed for resolving the problem of conflicting state programs." Letter to Michael Shapiro, National Programs Office, Office of Coastal Zone Management, from Clif Williams, General Manager, dated Oct. 26, 1977.

Exxon Company, U.S.A. stated:

"The regulations do not provide any remedy in the event the applicant and State agencies are unable to agree after the applicant notifies the agencies that a permit may be subject to conflicting coastal state requirements. The proper remedy should be mediation as provided for in section H."

Letter to Michael Shapiro, National Programs Office, Office of Coastal Zone Management, from H. B. Barton, Regulatory Affairs Manager, dated Oct. 26, 1977.

Gulf Energy and Minerals Company - U.S. observed "[B]ecause of the potential difficulty in resolving consistency review where two or more states' conflicting programs are involved, the Secretary should be included in the consultation provided by Subsection (b)." Letter to Federal Programs Division, Office of Coastal Zone Management, from J. M. Bibee, Vice President, dated Oct. 25, 1977.

The American Petroleum Institute pointed out:

This section's provision does not provide a mechanism for resolving problems which will arise if an applicant finds that the requirements of one state management program conflict with those of another state management program. It only provides that when those problems arise the State, the relevant Federal agency and the OCZM shall confer about them.

We suggest that when such consultation fails to resolve a conflict, the Secretary shall be required to invoke his override authorities under section 307(a)(3)(A). In the absence of this or some other process for a final determination, many applications for Federal licenses and permits will be forever in dispute.

Letter to Federal Programs Division, Office of Coastal Zone Management, From R. F. Nelson, Chairman, National CZM Steering Committee, dated Oct. 27, 1977.

2. Chemical Waste sued NOAA and others. It alleged that NOAA had acted beyond its statutory authority in granting Maryland's request for review. The complaint alleged that there was no reasonable likelihood that any material from the ship would reach Maryland's waters. The case was settled without reaching any coastal zone issues. Chemical Waste Management, Inc. v. U.S. Department of Commerce, et al., No. 86-624 (D.D.C. filed Mar. 7, 1986).

3. Further, a state's rights under other Federal statutes such as the Clean Water Act or the Outer Continental Shelf Lands Act remain unchanged. The consistency provisions of the CZMA grant additional rights to states which can be exercised concurrently with other rights granted by Congress or state legislatures. Additionally, because a state may be authorized to comment on a proposed activity under state statute or a Federal statute other than the CZMA such as the Clean Water Act, does not supercede or impair the state's authority to object independently to the proposed activity pursuant to section 307(c)(3)(A).

4. Congress encouraged this hope by providing for interstate grants in 1980, Pub. L. No. 94-464, which amended the CZMA to include section 309, a funding mechanism.

5. The sovereign rights of the non-objecting state are not lessened by an objection by a neighboring state. The non-objecting state may still issue all state and local permits and authorizations for the proposed project. Rather, the objection is directed to the Federal permitting or licensing agency -- a procedure specifically provided for by passage of the CZMA. Nor does the objection necessarily operate as veto of the project due to inclusion of dispute resolution provisions in the CZMA.

**APPENDIX C**



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
Washington, D.C. 20230

OFFICE OF THE GENERAL COUNSEL

AUG - 4 1992

MEMORANDUM FOR: L. J. HOOKER FILE  
FROM: Thomas A. Campbell  
General Counsel  
SUBJECT: 1990 Amendments to the Coastal Zone  
Management Act

ISSUE

On May 2, 1989, the National Oceanic and Atmospheric Administration (NOAA) issued an Opinion of the General Counsel (attached hereto and incorporated herein by reference) interpreting section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA) to allow consistency review by one state of an activity occurring totally within the borders of another state, if that activity affects the coastal zone of the reviewing state (hereinafter the "Hooker Opinion") Section 307 was amended by the passage of the Coastal Zone Act Reauthorization Amendments (hereinafter "CZRA") on November 5, 1990. Does the CZRA support or contradict NOAA's interpretation of section 307 of the CZMA as set forth in the Hooker Opinion?

ANSWER

The language and legislative history of the CZRA support and affirm NOAA's longstanding interpretation of section 307(c)(3)(A) as expressed in the Hooker Opinion. The Conference Report accompanying the CZRA explicitly endorses the statutory requirements of section 307(c)(3)(A) and (B) and (d) "as currently enforced" and as "outlined in the NOAA regulations." Congress intended the CZRA to confirm that the "affects" test of the CZMA consistency provisions is not subject to geographic limitation. Congress explicitly rejected the interpretation of section 307 adopted by the Army Corps of Engineers and the Department of Justice which restricted the application of section 307 to activities occurring "inside" the coastal zone.

DISCUSSION

The CZRA was passed as an amendment to the Omnibus Budget Reconciliation Act of 1990 and was the result of the marriage of H.R. 4450 and S. 2782. H.R. 4450 had previously subsumed H.R. 4030 offered by Rep. Walter B. Jones and replaced the Administration bill, H.R. 4438 offered by Rep. Norman Shumway. H. Rpt. No. 535, 101st Cong., 2d Sess. 19-20 (1990) (hereinafter the "HMMFC Report"). On the floor of the House, Rep. Jones offered a substitute bill, H.R. 5665, as an amendment to H.R.



4450, to include the non-point source water quality program that could not be considered by the House Merchant Marine and Fisheries Committee (hereinafter the "HMMFC") under the House rules. Id. and Cong. Rec. H8068 (daily ed. September 26, 1990).

The HMMFC Report acknowledges the controversy surrounding the interstate applications of federal consistency. HMMFC Report at 23. The HMMFC Report states:

Clearly, if a federal agency action within one state will affect any land use or water use within another state, the requirements of section 307 properly apply. This has been NOAA's longstanding interpretation and is clearly reflected in agency regulations." Id.<sup>1</sup>

On September 26, 1990, H.R. 4450 was brought to the floor of the House for a vote. Rep. Jones, Chairman of the HMMFC, and Rep. Bob Davis, ranking Minority Member of the HMMFC, managed the bill on the floor and provided a joint bi-partisan statement explaining the bill. Cong. Rec. H8068-79 (daily ed. September 26, 1990) (hereinafter the "Jones/Davis bipartisan statement"). The Jones/Davis bipartisan statement repeated the history of the HMMFC Report supporting the application of section 307 to all activities affecting the natural resources of the coastal zone, including those conducted wholly within one state but affecting the coastal zone resources of another state. The bipartisan statement explained that:

[t]he Committee is aware of recent controversial cases involving interstate applications of the federal consistency provisions. Clearly if a federal agency action within one state will affect any natural resource, land use or water use within another state, the requirements of section 307 properly apply. This has been NOAA's long-standing interpretation and clearly is reflected in the agency's regulations.

Cong. Rec. H8077.<sup>2</sup>

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<sup>1</sup> This statement was made to support a provision to amend the CZMA to provide the Administrator of NOAA explicit mediation authority "in case of serious disagreement . . . between two or more coastal states." HMMFC Report at 32. This amendment did not appear in S.2872 and was apparently dropped in the Conference Committee.

<sup>2</sup> In several places in the legislative history, reference is made to a project known as the Lake Gaston pipeline project. The Lake Gaston project has been in litigation for over a decade. It consists of a proposal by the City of Virginia Beach, Virginia to construct a pipeline from Lake Gaston, a reservoir created by a hydroelectric project in North Carolina, and to consumptively withdraw 60 million gallons of water per day for use in the municipal water system of the City of Virginia Beach. The Lake Gaston project has been adamantly opposed by the State of North Carolina and some southeastern Virginia municipalities. The litigation first involved the issuance of a permit pursuant to section 404 of the Clean Water Act by the Army Corps of Engineers. North Carolina v. Hudson, 665 F. Supp. 428 (E.D.N.C. 1987); North Carolina v. Hudson, 731 F. Supp. 1261 (E.D.N.C. 1990).

The first round of litigation included a claim by the State of North Carolina that the project was subject to its consistency authority under the CZMA and that the Army Corps had violated the CZMA in issuing

While the intent of the authors of H.R. 4450 was to provide certainty in the controversial area of interstate application of the consistency provisions, it was likewise the desire of the authors to provide additional mediation powers to the Administrator of NOAA to ensure "that the consistency provisions are neither used nor perceived as a method for one state to squash or delay legitimate economic development within another state." Cong. Rec. H8077. The Administrator of NOAA was encouraged to promptly provide mechanisms for the resolution of interstate disputes. Id. This provision for explicit authority to mediate disputes between two States was not included in S.2782 and was not present in the CZRA as it came from the Conference Committee. No explanation for the deletion is provided by the legislative history.

S. 2782, the Senate version of the Coastal Zone Reauthorization Act, was introduced on June 26, 1990 and favorably reported by the Senate Committee on Commerce, Science and Transportation. S. Rpt. 445, 101st Cong., 2d Sess., 1. One of the stated purposes of the bill was the "strengthening of the Federal consistency provisions." S. Rpt. No. 445, 101st Cong., 2d Sess. 1. The Senate Report, like that of the House, states as its express purpose the overturning of Secretary of the Interior v.

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the section 404 permit. See, Hooker Opinion at 5; Letter from Don Carr, Acting Assistant Attorney General, Department of Justice, to Timothy R.E. Keeney, General Counsel NOAA, dated April 27, 1989; Letter from Lester Edelman, Chief Counsel, Army Corps of Engineers to Timothy R.E. Keeney, General Counsel, NOAA, dated March 21, 1989. North Carolina's CZMA claim was later withdrawn and not addressed by the court. This litigation spawned the Department of Justice position on interstate consistency. See n. 6, infra.

The City of Virginia Beach, and certain members of the Virginia Congressional delegation, remained concerned that North Carolina may assert the application of section 307(c)(3) consistency in the context of some future permit required by the Lake Gaston project. As a result, Rep. Owen Pickett and Rep. Bateman proposed an amendment to the House bill providing that "nothing in H.R. 4450 affected any project or activity for which the Army Corps of Engineers had issued a permit under section 404 of the Clean Water Act prior to the date of enactment of the [CZRA]." Cong. Rec. H8077 (daily ed. Sept. 26, 1990). Rep. Jones opposed the amendment and requested that HMMFC counsel respond to Rep. Pickett's concerns. The counsel to the HMMFC assured Reps. Pickett and Bateman that the "bill made no change in existing law in the way in which states could exercise their consistency review authority under section 307(c)(3)(A)..." and that "nothing in the bill affects the validity of the section 404 permit that was issued to Virginia Beach." Id. "Chairman Jones noted his impression that the bill does not change the law with respect to the Lake Gaston case and counsel confirmed that impression. With this assurance, Mr. Pickett withdrew his amendment." Id.

The Conference report for the CZRA provides a similar statement: "Specifically, these changes do not affect or modify existing law or enlarge the scope of consistency review authority under (c)(3)(A) and (B), and (d) with respect to the proposed project to divert water from Lake Gaston to the City of Virginia Beach, Virginia for municipal water supply purposes. Conference Report at 972.

North Carolina v. Hudson did not present a judicial interpretation of the geographic scope of consistency. In addition, the section 404 permits were issued pursuant to an order from the Fourth Circuit Court of Appeals. Neither Rep. Pickett's proposed amendment, which was confined to permits already issued, nor the HMMFC counsel's assurances would have any effect on the law of that case. The "existing law" governing section 307(c)(3)(A) consists of the CZMA itself, NOAA's regulations at 15 C.F.R. Part 930, and NOAA's interpretations of those regulations, including the Hooker Opinion. While the references to the Lake Gaston project appear to suggest an exemption for that project from section 307 of the CZMA, in fact, the only assurance given in the legislative history is that "existing law" shall apply to any future federal approval required by the project.

Rep. Pickett was not satisfied by the Committee's assurances and voted against H.R. 4450, while Rep. Bateman voted in favor of it. Cong. Rec. H8103 (daily ed. Sept. 26, 1990).

California. Id. at 5-6, 8. The Senate amendments to section 307(c)(1) mirrored those in the House bill. No express mention is made of the interstate application of section 307 and no specific amendments to section 307(c)(3)(A) were included in the Senate bill.

On September 20, 1990, as H.R. 4450 was being brought to the floor of the House, a "Statement of Administration Policy" opposing H.R. 4450 was issued stating that the "Secretaries of the Interior, Defense, Agriculture, and Energy would recommend a veto" of H.R. 4450 as considered by the House because it would "likely be interpreted to ... broadly expand the application of the CZMA's 'consistency' provisions...." Statement of Administration Policy, Executive Office of the President, September 20, 1990. The veto threat was repeated on the floor of the House. Cong. Rec. H8083 (daily ed. Sept. 26, 1990) (Rep. Shumway). In spite of the veto threat, H.R. 4450 was passed 391 to 32. Cong. Rec. H8103 (daily ed. Sept. 26, 1990).

The CZRA was reported out of Conference and folded into the Omnibus Budget Reconciliation Act of 1990 on October 24, 1990.<sup>3</sup> Rather than an extensive legislative history from the Conference Committee, the CZRA was accompanied by a very brief summary of the effect and purposes of the amendments and a statement that the "Congressional Record from September 26, 1990 contains a detailed statement of explanation (pages H8068-79)."<sup>4</sup> Conference Report at 975. Senators Lautenberg and Kerry made statements supporting the strengthening of the consistency provisions to overturn Secretary of the Interior v. California and supporting the provisions concerning control of non-point source water pollution. Cong. Rec. S17526-27 (daily ed. October 27, 1990). There were no comments on the floor of the House on the Conference bill.

By overturning the Supreme Court's decision in Secretary of the Interior v. California, the conferees stated that:

"[t]his amended provision establishes a generally applicable rule of law that any federal agency activity (regardless of its location) is subject to the CZMA requirement for consistency if it will affect any natural resources, land uses or water uses in the coastal zone. No federal agency activities are categorically exempt from this requirement."

Conference Report at 970 (emphasis in original).

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<sup>3</sup> Omnibus Budget Reconciliation Act of 1990, P.L. 101-508, 104 Stat. 1388-1874, November 5, 1990. The Conference Report is cited as H. Rpt. No. 101-964 located in the Congress Record at H. 12513 and referred to herein as the "Conference Report."

<sup>4</sup> The reference is to the Jones/Davis bipartisan statement.



The Conferees provided a further explanation of the changes to section 307(c)(3)(A) and (B) and (d) stating they

do not alter the statutory requirements as currently enforced . . . [t]hese requirements are outlined in the NOAA regulations (15 C.F.R. 930.50-930.66) and the conferees endorse this status quo . . . the changes made ..are technical modifications. None of the amendments made by this section are intended to change the existing implementation of these consistency provisions. For example, none of the changes made to section 307(c)(3)(A) and (B), and (d) change existing law to allow a state to expand the scope of its consistency review authority... These technical changes are necessary to, and are made solely for the purpose of, conforming these existing provisions with the changes to section 307(c)(1) of the CZMA which are needed to overturn the Watt v. California Supreme Court decision.

Id. (Emphasis added).

In adopting the Jones/Davis bipartisan statement explaining H.R. 4450, while simultaneously stating that state consistency authority under section 307(c)(3)(A) has not been expanded by the CZRA, the conferees acknowledged both the controversy surrounding the interstate application of consistency and NOAA's existing regulatory interpretation allowing one state to review a project to be carried out wholly within the boundaries of another state.

The legislative history of the CZRA does not in any way contradict, and in fact supports the position articulated by NOAA in the Hooker Opinion. While the HMFRC provided explicit support for the interstate application of section 307(c)(3)(A), the Congress as a whole can more accurately be said to have adopted the rule that the application of the consistency provisions is determined by the effects of the project regardless of its location inside or outside the coastal zone. The Conference Report explicitly endorses the requirements of section 307(c)(3)(A) and (B) and (d) "as currently enforced" and "as outlined in the NOAA regulations."

The CZRA and its legislative history confirm that the "affects" test of section 307 is not limited by any geographic boundary.<sup>5</sup>

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<sup>5</sup> See, Jones/Davis bipartisan statement, H8072-3, H8076-78 (daily ed. September 26, 1990). Providing in pertinent part as follows:

the Committee dispels the misplaced notion that the CZMA's geographical scope is limited by inserting the phrase 'inside or outside the coastal zone' to modify the term 'federal agency activity'. Although the NOAA regulations clearly provide that the consistency provisions apply to activities outside the coastal zone, this phrase makes clear the congressional intent and puts to rest any questions about the shadow effect of the Court's decision. Since, explicit statutory reference might imply that other consistency review

The Congress expressly affirmed the "existing law" of section 307(c)(3)(A), which can only be interpreted to include NOAA's long-standing interpretations of the CZMA and the Hooker Opinion. Conference Report at 972, and Jones/Davis bipartisan statement, Cong. Rec. H8077 (daily ed. Sept. 26, 1990).

The focus of the CZRA's changes to section 307 was the reversal of the Supreme Court's decision in Secretary of the Interior v. California. In that case, the Court interpreted section 307(c)(1) to require a consistency determination only for "activities conducted or supported by federal agencies on federal lands physically situated in the coastal zone but excluded from the coastal zone as formally defined by the Act[CZMA]." (Emphasis added). Secretary of the Interior v. California, 464 U.S. 312, 330 (1984). In so holding, the Court adopted the position advocated by the Department of Justice. See Brief for Petitioners, No. 82-1326, at pp. 24 and 27. Subsequent to the Court's decision, the Department of Justice, on behalf of the Army Corps of Engineers and the Environmental Protection Agency advocated the limited scope of the consistency provisions.<sup>6</sup>

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authorities do not have similar geographical scope, the Committee inserted the same phrase in those subsections. The Committee considers this a technical change since the NOAA regulations clearly provide, pursuant to existing law, that those sections apply beyond the coastal zone (see 15 C.F.R. 930.53(b), and 930.95.(b)), and they have been applied in numerous instances to activities outside the coastal zone. Cong. Rec. H8076 (daily ed. Sept. 26, 1990).

See also, Conference Report at 970-2, providing in pertinent part as follows:

Whether a specific federal agency activity will be subject to the consistency requirement is a determination of fact based on an assessment of whether the activity affects natural resources, land uses or water uses in the coastal zone of a state with an approved management program...The conferees intend this determination to include effects in the coastal zone which the federal agency may reasonably anticipate as a result of its action, including cumulative and secondary effects. Therefore, the term "affecting" is to be construed broadly, including direct effects which are caused by the activity and occur at the same time and place and indirect effects which may be caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable. Conference Report at 970-71.

The Conference Report explains the "technical change" required to overturn Secretary of the Interior v. California and explains the language added to each of the provisions of section 307. No mention is made of any limitation on geographic scope nor is the consideration of state boundaries suggested as part of the required consistency determination. Only the effects of a proposed federally permitted activity, direct and indirect, are required to be examined.

<sup>6</sup> The advocacy of the Department of Justice of the limited application of the consistency provisions was referred to as the "shadow effect" of Interior v. California. The Department of Justice used the decision to cast a shadow over NOAA's interpretation of the CZMA and its own regulations in order to exempt other federal agencies from the application of federal consistency. See Jones/Davis bipartisan statement at Cong. Rec. H8076 (daily ed. Sept. 26, 1990) ("As disturbing than [sic] the central holding itself [referring to Interior v. California] is the so-called 'shadow effect' of the court's decision (i.e. its potentially erosive effect on the application of the federal consistency requirements to other federal agency activities)...the Committee intends to overturn the Court's holding, and also to dispel any doubt as to the applicability of this requirement to all federal agency activities that meet the standard for review.")

There can be no doubt that the central objective of the CZRA was to establish a rule of law that the consistency provisions apply to activities "inside or outside" of a state's coastal zone and reverse the "shadow effect" of the Department of Justice's interpretation of Secretary of the Interior v. California<sup>7</sup>. As reflected in the Statement of Administration Policy, it is clear that the federal agencies that had taken positions limiting the application of section 307 to their licensed and permitted activities, as well as the Department of Justice, fully appreciated the intent of H.R. 4450 to ensure that the consistency provisions were not limited in geographic scope and that did what they could to thwart its passage.<sup>8</sup>

Further, Congress' inclusion of the phrase "within or outside the coastal zone" throughout the consistency provisions explicitly rejects the past positions taken by the Departments of Justice, the Army Corps of Engineers and the Environmental Protection Agency. The legislative history confirms that the application of section 307 is based on the effect of the proposed activity on the natural resources of the coastal zone not its location in relation to the boundary of the coastal zone. By conforming each of the subparts of section 307 to the language adopted for section 307(c)(1), Congress affirmed the "affects" test for all applications of the consistency provisions, including section 307(c)(3)(A)<sup>9</sup>. The "conforming and technical" amendments in the CZRA confirm that the consistency provisions of the CZMA are intended to work as NEPA works, to determine whether activities carried out by federal agencies, (c)(1), licensed or permitted by federal agencies (c)(3), or financially assisted by federal agencies, (d), are consistent with the federally approved state coastal zone management programs whenever the activities affect any land or water use or natural resources of the coastal zone.

## CONCLUSION

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<sup>7</sup> See fn. 6, supra.

<sup>8</sup> Statement of Administration Policy, September 20, 1990 (stating that the Secretaries of Interior, Defense, Agriculture, and Energy, and the Attorney General would recommend a veto unless, inter alia, H.R. 4450 is amended to remove any role for States and consistency "outside the coastal zone".)

<sup>9</sup> Prior to the CZRA the pertinent part of section 307(c)(3)(A) read: "...any applicant for a required Federal license or permit to conduct an activity affecting land or water uses in the coastal zone...." 16 U.S.C. § 1456(c)(3)(A).

H.R. 4450 proposed to amend that section to read: "Any applicant for a required federal license or permit to conduct an activity in or outside the coastal zone, affecting any natural resources, land uses or water uses in the coastal zone of a State...."

The S. 2782 changed only section 307(c)(1) and the conferees made the "technical and conforming changes" to section 307(c)(3)(A) to read in final adoption: "Any applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone...."

In essence, the language of H.R. 4450 was adopted by the conferees.

By passing the CZRA, Congress affirmed NOAA's interpretation of the CZMA and its own regulations as articulated in the Hooker Opinion. The legislative history is replete with affirmation of the "status quo", "existing law" "current enforcement" and NOAA's longstanding interpretation of its regulations. The Hooker Opinion is the embodiment of NOAA's "current enforcement" and the "existing law" of section 307(c)(3)(A) and was likewise affirmed.

Even the most restrictive interpretation of Congressional intent would find the CZRA neutral in its effect on the Hooker analysis of the CZMA. The most logical interpretation of the CZRA legislative history affirms NOAA's longstanding regulatory application of section 307 as set forth in the Hooker Opinion.