

AT A SPECIAL MEETING OF THE BOARD OF SUPERVISORS OF THE COUNTY OF JAMES CITY, VIRGINIA, HELD ON THE 16TH DAY OF AUGUST, NINETEEN HUNDRED EIGHTY-EIGHT, AT 5:30 P.M. IN THE COUNTY GOVERNMENT CENTER BOARD ROOM, 101 MOUNTS BAY ROAD, JAMES CITY COUNTY, VIRGINIA.

A. ROLL CALL

Jack D. Edwards, Chairman, Berkeley District
 Thomas D. Mahone, Vice-Chairman, Jamestown District
 Perry M. DePue, Powhatan District
 Thomas K. Norment, Jr., Roberts District
 Stewart U. Taylor, Stonehouse District

David B. Norman, County Administrator
 Frank M. Morton, III, County Attorney

Mr. Edwards made a motion to convene into executive session to discuss a legal matter pursuant to Section 2.1-344(a)(6) of the Code of Virginia, 1950, as amended.

On a roll call, the vote was AYE: Norment, Taylor, Mahone, DePue, Edwards (5). NAY: (0).

Mr. Edwards reconvened the Board into open session at 6:35 p.m.

Mr. DePue made a motion to approve the resolution to endorse the mitigation plan for the Ware Creek Reservoir as set forth in the Final Environmental Impact Statement, excluding the proposed establishing and managing of new wetlands habitat in the reservoir shallows, and including: 1) a land acquisition program in the Yarmouth Creek Watershed; 2) acquisition of easements in the Powhatan/Longhill Swamp Watershed; 3) provision for an interconnection of the Ware Creek Reservoir with the Newport News raw water system; and 4) enhanced water conservation through a summer surcharge.

Mr. Taylor made a motion to amend the resolution by deleting reference to the transfer of property acquired for environmental mitigation in the Yarmouth Creek Watershed to State or other agency.

On a roll call, the vote was: AYE: Taylor (1). NAY: Norment, Mahone, DePue, Edwards (4).

Mr. Edwards asked for a vote on Mr. DePue's motion.

On a roll call, the vote was: AYE: Norment, Mahone, DePue, Edwards (4). NAY: Taylor (1).

JOINT RESOLUTION

Ware Creek Reservoir Mitigation/James City County/
 James City Service Authority

WHEREAS, James City County (the "County") has been seeking a Section 404 permit under the Clean Water Act for the Ware Creek Reservoir (the "Reservoir") for approximately eight years; and

WHEREAS, the Corps of Engineers (the "Corps") by letter dated July 11, 1988, filed a Notice of Intent to Issue a permit for the Reservoir; and

WHEREAS, the Environmental Protection Agency by letter dated August 5, 1988, notified the Corps of intent to issue a public notice under Section 404(c) of a proposal to prohibit or restrict the use for specification as a disposal site that area or portion of property included in the County's application; and

WHEREAS, the County is desirous of presenting a proposal to the regulatory agencies that would alleviate their concerns that the reservoir may have unacceptable adverse effects on fishery or shellfish areas, wildlife and recreational areas; and

WHEREAS, the Authority joins in this resolution to both endorse the mitigation offered by the County and to commit the sum of one million dollars to the funding of certain elements thereof.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of James City County, Virginia, (the "Board") and the Board of Directors of the James City Service Authority (the "Authority") that the Board and the Authority endorse the mitigation plan for the Ware Creek Reservoir as set forth in the Final Environmental Impact Statement, excluding that element which proposed the establishing and managing of new wetlands habitat in the reservoir shallows (which the regulatory agencies considered speculative and therefore extended no credit). 63

BE IT FURTHER RESOLVED, that the Board and the Authority endorse additional mitigation as set forth in a document dated August 17, 1988, and entitled "James City County, Ware Creek Reservoir - Proposal of James City County," a copy of which is attached hereto and made a part hereof, which proposal sets forth in detail the following additional mitigation elements:

1. A land acquisition program in the Yarmouth Creek Watershed.
2. Acquisition of easements in the Powhatan/Longhill Swamp Watershed (funds to be used from the Environmental Protection Fund).
3. Provision for an interconnection of the Ware Creek Reservoir with the Newport News raw water system.
4. Enhanced water conservation through a summer surcharge.


The Board of Supervisors strongly encourages the use of negotiations to acquire property referenced in paragraphs 1 and 2 above, but recognizes that condemnation may be necessary in certain instances.

BE IT ALSO RESOLVED by the Board of Directors of the James City Service Authority that it hereby commits the sum of one million dollars to be used in implementing the mitigation plan as set forth in the proposal.

Mr. Edwards made a motion to adjourn the meeting.

On a roll call, the vote was AYE: Norment, Taylor, Mahone, DePue, Edwards (5). NAY: (0).

The Board adjourned at 6:40 p.m.


David B. Norman
Clerk to the Board

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JAMES CITY COUNTY
WARE CREEK RESERVOIR
August 17, 1988

PROPOSAL OF JAMES CITY COUNTY

I. Introduction

James City County ("the County") presents this proposal to the regulatory agencies with jurisdiction affecting the planned Ware Creek Reservoir in an effort to resolve remaining concerns regarding the County's application for a permit for the project under Section 404 of the Clean Water Act. This proposal consists of three elements intended to address each of the principal issues raised by the regulatory agencies. Those issues are: (1) the adequacy of the existing mitigation plan to compensate for unavoidable environmental effects; (2) the potential for more regional water supply alternatives to avert or delay the need for additional projects in the area; and (3) possible efforts to promote water conservation.

II. The Proposal

To reach agreement on these issues and secure the necessary governmental approvals for the Ware Creek Reservoir, the County hereby proposes the following steps.

A. Additional Environmental Mitigation

The County hereby offers to perform additional mitigation in lieu of the reservoir shoreline mitigation described in the Revised Wetlands Mitigation Plan (October 31, 1986).

The Final Environmental Impact Statement for the Ware Creek Reservoir ("Final EIS") presents the expected effects of the project on wetland areas in the absence of any mitigation efforts. Through studies conducted jointly by the Corps of Engineers, the Fish and Wildlife Service, and the Environmental Protection Agency, it was determined that 425 acres of wetlands would be flooded. Of that number, 44 acres are presently open water and 381 acres contain emergent wetland vegetation.¹

The mitigation plan evaluated in the Final EIS included elements intended to compensate for both the functional values and the habitat values of wetlands. The plan included the following elements:

1. Reopening a nearby, presently impounded watershed (Yarmouth Creek) to the Chesapeake Bay system;
2. Creating new tidal wetlands downstream from the proposed reservoir;
3. Maintaining the ecological function of wetlands in the Ware Creek watershed that are presently impounded by Richardson's Mill Pond;

¹ Final EIS at 2-14 and 4-25.

4. Creating wetlands using reservoir perimeter arm and headwater impoundments;
5. Establishing and managing new wetlands habitat in the reservoir shallows;
6. Managing the open water / forest edge area for wildlife enhancement; and
7. Establishing a wetland conservation zone.

The Final EIS assessed the likely effectiveness of the above mitigation plan. It praised the elements of the plan aimed at compensating for functional values, but found that the establishment of wetlands habitat in the reservoir shallows (the fifth item above) was speculative. Accordingly, the Final EIS did not give mitigation credit for this habitat creation. Nevertheless, the Final EIS concluded the plan:

would recreate at least 167 acres of wetlands, with another 128 acres possible [citation omitted]. The County would also protect an additional 145 acres of wetlands in the watershed.²

Thus, of the 381 acres of vegetated wetlands flooded, the Final EIS concluded the existing plan would restore between 167 and 295 acres, and protect another 145 presently owned by a forest products company.

² Final EIS at 4-25.

The County hereby proposes to eliminate the fifth item of the existing mitigation plan described above. In place of this costly feature of the prior mitigation plan -- for which no environmental credit was given -- the County proposes to preserve large areas of presently threatened, ecologically valuable wetlands located near Ware Creek. This preservation would be accomplished in two ways.

1. Land Acquisition Program

First, the County will apply \$1 million directly to acquire and preserve wetlands and adjacent habitat that are both ecologically valuable and presently threatened with significant degradation or destruction. Once acquired, these areas will be donated by the County to The Nature Conservancy or to the Natural Areas System operated by the Virginia Department of Conservation and Historic Resources for stewardship.

At the request of the Virginia Council on the Environment, the Virginia Natural Heritage Program ("Natural Heritage") prepared a report surveying and prioritizing numerous candidate wetlands in the general project area satisfying the requirements specified above.³ With subsequent assistance from Natural Heritage, the Virginia Council on the Environment, The Nature

³ Virginia Natural Heritage Program, Synthesis of Available Data for Ware Creek Reservoir Mitigation Plan (July 21, 1988, as revised August 12, 1988).

Conservancy, and its own biological consultants, the County has further focused on the Yarmouth Creek watershed.⁴

Yarmouth Creek is a tributary of the Chickahominy River, which is a tributary of the James River. It contains a large palustrine, intertidal, emergent wetland complex downstream of Cranston's Pond, and a large, palustrine forested wetland system upstream of the pond. A map of the watershed is included in the Appendix.

Breaching the existing dam at Cranston's Pond, as proposed in the existing mitigation plan, will reconnect approximately 500 acres of palustrine emergent scrub-shrub and forested wetlands to the large 1800-acre estuarine complex downstream in Yarmouth Creek, and eventually to the James River and Chesapeake Bay. Re-establishment of this free-flowing system will result in a large, functional wetland complex with several important ecological features not found in the Ware Creek system. At least 37 acres of existing open water in Cranston's Pond will be converted to palustrine emergent, scrub-shrub, and forested wetlands by breaching the dam.

⁴ The organizations mentioned have graciously assisted the County with preparation of this mitigation proposal, based on their desire that the final mitigation plan provide the greatest environmental protection possible. Their participation in this effort does not indicate either support for or opposition to the proposed Ware Creek Reservoir.

The upstream, palustrine wetlands in Yarmouth Creek have not been impacted by beaver activity to the extent similar habitat in Ware Creek has. The upper canopy of bottomland hardwood forest is largely intact and viable. The creek is bounded by a large stand of bald cypress (Taxodium distichum) which begins below Cranston's Pond and continues into the pond and around its edges to about its mid-point. The palustrine forested wetlands above the pond are characterized by saturated soils and standing water for most of the growing season. The typical upper canopy of the Yarmouth bottomland hardwood forest is dominated by red maple (Acer rubrum), green ash (Fraxinus pennsylvanica), black gum (Nyssa sylvatica), sweet gum (Liquidambar styraciflua) and tulip tree (Liriodendron tulipifera). The typical scrub-shrub layer consists of spicebush (Lindera benzoin), sweet pepperbush (Clethra alnifolia), buttonbush (Cephalanthus occidentalis), black willow (Salix nigra), highbush blueberry (Vaccinium corymbosum) and alders (Alnus spp.), jewelweed (Impatiens capensis), marsh marigold (Caltha palustris), tear thumb (Polygonum arifolium), smartweeds (Polygonum spp.), bulrush (Juncus spp.), cutgrass (Leersia oryzoides), sedges (Carex spp.) and ferns (Osmunda spp.).

The tidal estuarine system in Yarmouth Creek downstream of Cranston's Pond is approximately 1800 acres. Functionally valuable species such as arrow arum (Peltandra virginica), pickerelweed (Pontederia cordata) and wild rice (Zizania aquatica)

dominate this wetland community of the lower Yarmouth Creek system. This area has been identified as significant by The Nature Conservancy and Natural Heritage due to its lack of disturbance and the presence there of a globally rare plant species, Aeschynomene virginica, a candidate for federal and state listing. In addition, this type of wetland community has been characterized as the highest priority category for preservation based on its productivity, its value as a detritus source, its role as a fish nursery and its value as a food source for waterfowl.⁵

The objective of this aspect of the County's proposal is to protect and preserve as much of the Yarmouth Creek watershed as possible through a combination of acquisition of fee titles and easements, and potential land use restrictions. Emphasis will be placed on acquiring both threatened wetlands and the headwaters areas vital to their future health.

Land ownership within the Yarmouth Creek watershed is characterized by holdings of large tracts. In upper Yarmouth Creek (above the dam), the North side of the Creek and its headwater tributaries lies primarily within three tracts owned by individuals. High density residential and commercial developments exist less than one half mile from these three tracts and James

⁵ Virginia Institute of Marine Science, James City County Tidal Marsh Inventory, (September 1980).

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City County projects that, unimpeded, development will soon encroach on them. Almost the entire South side of the Creek and its tributaries lies within a 735-acre parcel owned by the Boy Scouts of America and used as a camp and nature preservation area. The lower portion of Yarmouth Creek (below the dam) also consists primarily of large tracts. Of these, the largest tract is Wright Island. Protection of lower Yarmouth Creek is tied to preservation of the upper Yarmouth Creek. The anticipated degradation of the vegetation and water quality of upper Yarmouth Creek due to development will result in direct negative effects on the valuable wetlands in lower Yarmouth Creek without preservation and management of both areas.

From among these parcels, the County and The Nature Conservancy have identified two important parcels for initial preservation and have verified their present availability:

The Wright Island Tract: At the confluence of the Chickahominy River, Shipyard Creek and Yarmouth Creek lies an exemplary freshwater tidal marsh. The Wright Island tract consists of 1,320 acres, of which approximately 873 are wetlands.⁶ Included in the wetlands are 589 acres of tidal, emergent palustrine wetlands and 284 acres of non-tidal palustrine wetlands. The tidal emergent, palustrine wetlands are dominated

⁶ A map of the Wright Island Tract and photographs are set forth in the Appendix.

by arrow arum (Peltandra virginica), pickerelweed (Pontederia cordata) and wild rice (Zizania aquatica). The palustrine wetlands (scrub/shrub and bottomland hardwoods) are dominated by red maple (Acer rubrum), green ash (Fraxinus pennsylvanica), black gum (Nyssa sylvatica), sweet gum (Liquidambar styriflua) and tulip tree (Liriodendron tulipifera). Additionally, this site contains a globally rare species, Aeschynomene virginica. The tract is currently owned by a hunt club, and preliminary contacts by The Nature Conservancy strongly indicate a preservation easement can be obtained at modest or no cost as part of the effort to protect this critical marsh habitat.

The Geddy Tract: Located along the North side of Cranston's Pond, this tract consists of 167 acres, of which approximately 27 acres are palustrine wetlands.⁷ These wetlands are dominated by the forested class and also include emergent and scrub-shrub classes. The dominant species is bald cypress. Other tree species present include black gum, sweet gum and red maple. The typical scrub-shrub layer consists of black willow, alders, spicebush, pepperbush and buttonbush. The herbaceous layer includes lizard's tail, jewelweed, tearthumb, smartweeds, bulrush, cutgrass, sedges and ferns. Aquatic bed and emergent vegetation

⁷ A map of the Geddy Tract and photographs are set forth in the Appendix.

adjacent to open water includes yellow pond lily, sedges and cattails.

Preservation and management of the Geddy Tract would enhance water quality in upper Yarmouth Creek. The property forms most of the northern boundary to Cranston's Pond, while the southern boundary is owned by the Boy Scouts of America. Preservation of the tract will thus enhance the conversion of the Cranston's Pond basin to functioning wetlands as described in the existing mitigation plan. The parcel is owned by Mr. Bert Geddy, who has offered to sell it to the County for \$145,000.

To initiate this program, the County will acquire, on or before the date that reservoir construction commences, the interests in the Yarmouth Creek watershed identified above. As indicated, the availability of these interests has been confirmed by the County in conjunction with The Nature Conservancy.

The significant funds remaining from the \$1 million acquisition fund following the above initial acquisitions will be expended prior to reservoir completion to acquire additional important parcels in the Yarmouth Creek watershed, or in other watersheds that have been recommended in the Natural Heritage report.⁸ The County will identify the particular parcels after

⁸ With assistance from The Nature Conservancy, the County has confirmed the availability for purchase of two large tracts in two other watersheds identified as priority candidates for preservation by Natural Heritage. These are the Union Camp property on the Pamunkey River in New Kent County, and the

inviting recommendations from an advisory group including representatives of Natural Heritage, the Council on the Environment, and The Nature Conservancy.

To complement these efforts, The Nature Conservancy has agreed to use its best efforts to acquire donations of land and easements in the Yarmouth Creek watershed. Between the County's purchases and the donations received by The Nature Conservancy, as much of the important areas of the Yarmouth Creek watershed as possible will be preserved.

2. Powhatan Creek / Long Hill Swamp Conservation Project

The second aspect of the County's preservation program involves the acquisition of easements in the Powhatan Creek / Long Hill Swamp watershed in James City County. This is separate from and in addition to the Land Acquisition Program discussed above. The necessary easements therefore would be acquired without using the \$1 million fund previously discussed. The Powhatan Creek / Long Hill Swamp area has been identified by Natural Heritage as

Chesapeake Corporation property at the mouth of Heartquake Creek on the Mattaponi River in King and Queen County. The Union Camp property offers an opportunity to protect an entire watershed which flows into the freshwater marshes of the Pamunkey River, an area of great environmental significance. The Chesapeake Corporation property encompasses transition wetlands between freshwater and brackish marshes, and may contain several rare plant species.

its top priority for preservation, but is rapidly developing at present.

In 1986, the County began to consider acquisition of preservation easements in Powhatan Creek / Long Hill Swamp "to protect this 'environmentally fragile area [by] removing portions of it from development pressures."⁹ Completely separate and apart from the Ware Creek project, the County has since budgeted funds to accomplish this purpose. However, the County has never implemented the program by approving actual expenditures and acquisitions. Of the amounts budgeted to accomplish the various purposes of the project, \$150,000 currently is available for acquisition of preservation easements.

Immediately upon final regulatory approval of the Ware Creek Reservoir, the County will begin acquisition of these easements. The particular areas protected will be determined by the County after receiving recommendations from the same advisory group discussed above.

B. Regional Water Supply Enhancement

To enhance the benefits of the Ware Creek Reservoir to the Peninsula region, the County will provide for interconnection of the Ware Creek Reservoir with the Newport News raw water system.

⁹ Brian E. Shull, Powhatan Creek / Longhill Swamp Conservation Project (April 25, 1986).

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This will increase the effective yields of both the Newport News and James City County systems by allowing optimal use of reservoir storage capacity. It also will allow use of the Ware Creek Reservoir's surplus yield during its early years to help meet regional demand. This will reduce or delay the need for other water supply projects in the area, supplying much needed time to study emerging technologies and other long range possibilities. Newport News already is studying water supply alternatives to meet its future needs, including various surface water impoundments.

These advantages are available without any increase in the environmental effects of the project. Whereas the County had originally contemplated constructing its water treatment plant near the proposed reservoir and running a finished water pipeline South, it now intends to run a raw water pipeline South from the reservoir and to locate the water treatment plant adjacent to an existing raw water pipeline operated by Newport News. This will facilitate an interconnection between the two raw water systems, boosting their efficiencies and safe yields without further affecting wetlands or other environmental resources.

C. Water Conservation

The County also proposes to adopt a summer surcharge on water to discourage peak use. Like peak-period pricing concepts used by other utilities, a summer surcharge has potential to

levelize demand and thereby reduce the required maximum capacity of the water supply system.

The summer surcharge would become effective July 1, 1989, and thereafter would apply each year from May through October. The amount of the surcharge would be 27 cents per thousand gallons of water. This represents a 12.7% increase over the County's existing rates.

III. Summary

To summarize, the County proposes to augment its environmental mitigation plan, enhance the regional benefits of the proposed reservoir, and encourage additional water conservation through imposition of a summer surcharge.

The newly proposed mitigation would include the immediate preservation of a large wetland area at the mouth of Yarmouth Creek and a valuable tract upstream. This would be followed by acquisition of additional easements and fee titles in conjunction with The Nature Conservancy to protect as much of the currently threatened Yarmouth Creek watershed as possible. The County has allocated \$1 million to this program. In addition, the County would acquire preservation easements in the Powhatan Creek area, and has set aside \$150,000 for that purpose.

The regional benefits of the Ware Creek Reservoir will be enhanced by providing for the interconnection of the reservoir

with the Newport News raw water system. The result will be more efficient use of water resources on the Peninsula, and the reduced need for future water supply projects in the area.

Finally, a summer water rate surcharge would be imposed to encourage additional water conservation.

Should these measures satisfy the remaining concerns of the regulatory agencies regarding the proposed Ware Creek Reservoir, the County will enter into or accept as appropriate binding agreements or permit conditions.

Respectfully submitted:
James City County

By: J Edwards