

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

**JD Status: DRAFT**

## SECTION I: BACKGROUND INFORMATION

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 20-Jun-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Norfolk District, NAO-2008-01927-gdc-JD3

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : VA - Virginia  
 County/parish/borough: Chesapeake  
 City:  
 Lat: 36.774722222222  
 Long: -76.355833333333  
 Universal Transverse Mercator: []  
 Name of nearest waterbody: Paradise Creek  
 Name of nearest Traditional Navigable Water (TNW): Paradise Creek  
 Name of watershed or Hydrologic Unit Code (HUC): 2080208



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



20-Jun-2008

Office Determination Date:



09-Jun-2008

Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

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**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There  "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There  "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
Sandler NTW 2	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS****A. TNWs AND WETLANDS ADJACENT TO TNWs****1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):****1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size: 50 acres

Drainage area: 50 acres

Average annual rainfall: 45 inches

Average annual snowfall: 2 inches

**(ii) Physical Characteristics****(a) Relationship with TNW:** Tributary flows directly into TNW. Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 1 (or less) river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project Waters are 1 (or less) aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

The Flow Track from the Sandler Site to interstate tidal waters is from the wetland, through ditches or swales into a permanently flooded storm-water lake to the north, then northward through additional lakes around Camelot Subdivision. This lake flows into Saint Julian Creek and then into the Southern Branch Elizabeth River (see flow map in file).

**Tributary Stream Order, if known:**

Not Applicable.

**(b) General Tributary Characteristics:****Tributary is:**

Not Applicable.

**Tributary properties with respect to top of bank (estimate):**

Not Applicable.

**Primary tributary substrate composition:**

Not Applicable.

**Tributary (conditions, stability, presence, geometry, gradient):**

Not Applicable.

**(c) Flow:**

Not Applicable.

**Surface Flow is:**

Not Applicable.

**Subsurface Flow:**

Not Applicable.

**Tributary has:**

Not Applicable.

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:****High Tide Line indicated by:**

Not Applicable.

**Mean High Water Mark indicated by:**

Not Applicable.

**(iii) Chemical Characteristics:****Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**

Not Applicable.

**(iv) Biological Characteristics. Channel supports:**

Not Applicable.

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW****(i) Physical Characteristics:****(a) General Wetland Characteristics:****Properties:**

Not Applicable.

**(b) General Flow Relationship with Non-TNW:****Flow is:**

Not Applicable.

**Surface flow is:**

Not Applicable.

**Subsurface flow:**

Not Applicable.

**(c) Wetland Adjacency Determination with Non-TNW:**

Not Applicable.

**(d) Proximity (Relationship) to TNW:**

Not Applicable.

**(ii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**

Not Applicable.

**3. Characteristics of all wetlands adjacent to the tributary (if any):**

All wetlands being considered in the cumulative analysis:

Wetland Name	Directly Abuts	Size (Area) (m <sup>2</sup> )
Sandler NTW 2	No	178061.664
<b>Total:</b>		<b>178061.664</b>

**Summarize overall biological, chemical and physical functions being performed:**

Wetland Name	Functional Summary
Sandler NTW 2	<p>6. Volume and flow of Tributaries: Estimated flow from the tributaries out of the storm-water ponds is approximately 1-3 Cubic Feet Per Sec time of year (seasonal flow in spring). This flow is equivalent to a range of 646,317 to 1.94 million gallons per day of discharge to the Elizabeth River. 7. Significant Nexus to Interstate Waters: Alone, the un-mitigated loss of ~44.5 additional acres of wetlands in this watershed will contribute to a degraded condition of the watershed, which was formerly all wetlands. For the sub-watershed of area collecting precipitation on and around this wetland, the effect would be substantial. In the aggregate, these acres with the other remaining acres in the watershed will have a significant effect on the Saint Julian Creek, its watershed, and the Southern Branch of the Elizabeth River. These wetlands are adjacent to RPWs. 8. Significant Nexus Factors: A. These wetlands provide a source of higher quality water to the tributary system and receiving navigable waters. By detaining water and allowing it to settle at the wetland's filtering properties, the water that runs from this site into interstate waters is of higher quality. Retention of water on site and less sedimentation means less phosphorous bound with sediments is washed into receiving waters. B. If this site's wetlands were filled and developed without permit review and protections; there would inherently be more discharge of sediment into the tributaries to interstate waters. Long term water quality of the inputs to interstate waters would be degraded. C. Flood Storage: This wetland holds precipitation that falls within its limits due to its geographic setting and soil properties. This decreases the amount of water running from this area into receiving waters in a flashy manner. D. Denitrification: Once the setting goes anaerobic, nitrogen is used in place of oxygen by soil microbes, reducing its entry into receiving waters. E. Recreation: Interstate recreation is enhanced by the water quality benefits noted above. F. Fisheries: The fisheries and seafood industry is enhanced by the water quality benefits noted above. 9. Analysis of Waters/Wetlands on a Cumulative Basis: Due to our request for treatment of applicants, we must consider our deliberations and determinations for this site in the aggregate for all properties with wetlands. If we treat this property one way, we should then treat all properties the same way. In the aggregate, the hundreds or thousands of acres of wetland part of the watershed would be similarly affected, and the detriments to interstate waters outlined above would be multiplied by the loss across the system or watershed over time. With development pressures in this area, unregulated wetlands would rapidly be impacted and converted to agriculture. The negative impact would actually be exponential, because the sum of the whole, if lost, would be greater than the proportion of any individual wetland potentially cause a significant degradation to the navigable capacity (sedimentation) and water quality of the receiving waters. We have seen similar degradations on other watersheds that have experienced similar development and loss of wetlands in their upstream reaches. 10. Development Use: Regulation of these types of wetlands has not impeded development of land in this region. In fact, an Exxon Gas station exists on an oil lease on site, and a permit for 9.73 acres of impacts was previously issued for this site. Future permits are also possible. Regulation of these wetlands in no way is substituted for the local and state government oversight of land use, which remain fully in effect with no involvement by the Corps of these wetlands is solely from the standpoint of the benefits provided by and the effect of their loss upon resources within the federal interest in interstate navigable waters.</p>

**C. SIGNIFICANT NEXUS DETERMINATION**

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Findings for: Sandler NTW 2**

6. Volume and flow of Tributaries: Estimated flow from the tributaries out of the storm-water ponds is approximately 1-3 Cubic Feet Per Second, depending on time of year (seasonal flow in spring). This flow is equivalent to a range of 646,317 to 1.94 million gallons per day of discharge to the Elizabeth River. 7. Significant Nexus to Interstate Waters: Alone, the un-mitigated loss of ~44.5 additional acres of wetlands in this watershed will contribute to the already degraded condition of the watershed, which was formerly all wetlands. For the sub-watershed of area collecting precipitation on and around this wetland, the effect would be substantial. In the aggregate, these acres with the other remaining acres in the watershed will have a significant effect on the Saint Julian Creek, its watershed, and the Southern Branch of the Elizabeth River. These wetlands are adjacent to RPWs. 8. Significant Nexus Factors: A. These wetlands provide a source of higher quality water to the tributary system and receiving navigable waters. By detaining water and allowing it to settle and be subjected to the wetland's filtering properties, the water that runs from this site into interstate waters is of higher quality. Retention of water on site and less sedimentation means less phosphorous bound with sediments is washed into receiving waters. B. If this site's wetlands were filled and developed without permit review and protections; there would inherently be more discharge of sediment into the tributaries to interstate waters. Long term water quality of the inputs from this site to receiving waters would be degraded. C. Flood Storage: This wetland holds precipitation that falls within its limits due to its geographic setting and soil properties. This decreases the amount of water running from this area into receiving waters in a flashy manner. D. Denitrification: Once the setting goes anaerobic, nitrogen is used in place of oxygen by soil microbes, reducing its entry into receiving waters. E. Recreation: Interstate recreation is enhanced by the water quality benefits noted above. F. Fisheries: The

fisheries and seafood industry is enhanced by the water quality benefits noted above. G. Waterfront Property Values: Waterfront property values, including interstate land sales, are enhanced and protected by the water quality benefits noted above. H. Contribution to Red Algal Blooms, effect on Virginia Beach tourism: With less nitrogen and phosphorous, the occurrence and duration of red algae blooms is reduced. Accordingly, the effect on beach water quality is enhanced. 9. Analysis of Waters/Wetlands on a Cumulative Basis: Due to our requirement for equal treatment of applicants, we must consider our deliberations and determinations for this site in the aggregate for all properties with wetlands in the watershed. If we treat this property one way, we should then treat all properties the same way. In the aggregate, the hundreds or thousands of acres of wetlands in this part of the watershed would be similarly affected, and the detriments to interstate waters outlined above would be multiplied by the loss across the entire system or watershed over time. With development pressures in this area, unregulated wetlands would rapidly be impacted and converted to hardened areas. The negative impact would actually be exponential, because the sum of the whole, if lost, would be greater than the proportion of any individual loss. It could potentially cause a significant degradation to the navigable capacity (sedimentation) and water quality of the receiving waters. We have seen similar degradations on other watersheds that have experienced similar development and loss of wetlands in their upstream reaches. 10. Development and Land Use: Regulation of these types of wetlands has not impeded development of land in this region. In fact, an Exxon Gas station exists on an out-parcel of this site, and a permit for 9.73 acres of impacts was previously issued for this site. Future permits are also possible. Regulation of these wetlands and waters also in no way is substituted for the local and state government oversight of land use, which remain fully in effect with no involvement by the Corps. The regulation of these wetlands is solely from the standpoint of the benefits provided by and the effect of their loss upon resources within the federal interest and purview, interstate navigable waters.

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:**

**1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Wetland Name	Type	Size (Linear) (m)
Sandler NTW 2	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs	-
<b>Total:</b>		<b>0</b>

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF**

**WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:



Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:



Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):



Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):



Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**

Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**

Not Applicable.

**SECTION IV: DATA SOURCES.****A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Not Applicable.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review

consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.