

**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-JD1

**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:



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 OW 1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
Sandler NTW 1	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: 1987 Delineation Manual.  
 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: [ ]  
 Drainage area: [ ]  
 Average annual rainfall: inches  
 Average annual snowfall: 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 [ ] river miles from TNW.  
 Project waters are [ ] river miles from RPW.  
 Project Waters are [ ] aerial (straight) miles from TNW.  
 Project waters are [ ] aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

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

**Tributary Stream Order, if known:**

Order	Tributary Name
1	Sandler OW 1

**(b) General Tributary Characteristics:**

**Tributary is:**

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
Sandler OW 1	-	-	-	X	deloss soils, ditch channels excavated from wetlands along with stormwater management

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

Tributary Name	Width (ft)	Depth (ft)	Side Slope
Sandler OW 1	15	4.5	2:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation
Sandler OW 1	X	X	-	-	-	X	-	X

**Vegetation Explained:**

Tributary Name	Percent Cover	Vegetation Explained
Sandler OW 1	2	emergent

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

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry
Sandler OW 1	stable banks. old ditches. often with standing water.	none	Relatively straight

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime
Sandler OW 1	Seasonal flow	20 (or greater)	primarily groundwater inputs through B and C horizon of soil into tribs. when water table is up in winter and spring, these ditches are hydrated or flow constantly.

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
Sandler OW 1	Discrete and confined	with some overland sheet flow during rain events.

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other)
Sandler OW 1	Yes	see above	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	
Sandler OW 1	X	X	-	-

**Tributaries with OHWM<sup>6</sup> - (as indicated above)**

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted/Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Event:
Sandler OW 1	X	-	X	-	X	-	-	X	X	X	-	X	X

**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.).

Tributary Name	Explain	Identify specific pollutants, if known
Sandler OW 1	water is clear, with some tannic staining, and some iron flock.	none known for sure.

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

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics
Sandler OW 1	X	forested, 100-500 feet	-	-

**Habitat for: (as indicated above)**

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish\Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	
Sandler OW 1	X	-	-	X	minnows in ditches.	-	-	X	are ar

**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 1	No	178061.664
<b>Total:</b>		<b>178061.664</b>

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

Wetland Name	Functional Summary
	1-4. 1987 Delineation Manual Conclusion: Based on the above, I believe that the parameters for the 1987 Delineation Manual have been met Section G, problem areas. 5. Connection to Interstate Waters: The Flow Track from the Sandler Site to interstate tidal waters is from the wet

Sandler NTW 1	<p>ditches or swales into a permanently flooded storm-water lake to the north, then northward through additional lakes around Camelot Subdivi flows into Saint Julian Creek and then into the Southern Branch Elizabeth River (see flow map in file). 6. Volume and flow of Tributaries: Est 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 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 mitigated loss of ~44.5 additional acres of wetlands in this watershed will contribute to the already degraded condition of the watershed, whi wetlands. For the sub-watershed of area collecting precipitation on and around this wetland, the effect would be substantial. In the aggregat the other remaining acres in the watershed will have a significant effect on the Saint Julian Creek, its watershed, and the Southern Branch o River. These wetlands are adjacent to RPWs. 8. Significant Nexus Factors: A. These wetlands provide a source of higher quality water to th and receiving navigable waters. By detaining water and allowing it to settle and be subjected to the wetland;s filtering properties, the water l site into interstate waters is of higher quality. Retention of water on site and less sedimentation means less phosphorous bound with sedime receiving waters. B. If this site;s wetlands were filled and developed without permit review and protections; there would inherently be more c sediment into the tributaries to interstate waters. Long term water quality of the inputs from this site to receiving waters would be degraded. ( This wetland holds precipitation that falls within its limits due to its geographic setting and soil properties. This decreases the amount of wate this area into receiving waters in a flashy manner. D. Denitrification: Once the setting goes anaerobic, nitrogen is used in place of oxygen by reducing its entry into receiving waters. E. Recreation: Interstate recreation is enhanced by the water quality benefits noted above. F. Fisher and seafood industry is enhanced by the water quality benefits noted above. G. Waterfront Property Values: Waterfront property values, incl land sales, are enhanced and protected by the water quality benefits noted above. H. Contribution to Red Algal Blooms, effect on Virginia Be less nitrogen and phosphorous, the occurrence and duration of red algae blooms is reduced. Accordingly, the effect on beach water quality i Analysis of Waters/Wetlands on a Cumulative Basis: Due to our requirement for equal treatment of applicants, we must consider our deliber determinations for this site in the aggregate for all properties with wetlands in the watershed. If we treat this property one way, we should the properties the same way. In the aggregate, the hundreds or thousands of acres of wetlands in this part of the watershed would be similarly a detriments to interstate waters outlined above would be multiplied by the loss across the entire system or watershed over time. With develop this area, unregulated wetlands would rapidly be impacted and converted to hardened areas. The negative impact would actually be expone 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 capacity (sedimentation) and water quality of the receiving waters. We have seen similar degradations on other watersheds that have experi development and loss of wetlands in their upstream reaches. 10. Development and Land Use: Regulation of these types of wetlands has no 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 w 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 oversight of land use, which remain fully in effect with no involvement by the Corps. The regulation of these wetlands is solely from the stanc benefits provided by and the effect of their loss upon resources within the federal interest and purview, interstate navigable waters.</p>
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**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.

Significant Nexus: Not Applicable

**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:

Wetland Name	Flow	Explain
Sandler OW 1	SEASONAL	Wetlands are PFO non tidal, which are adjacent to and occasionally abutting RPWs that flow to tidal waters.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	
Sandler OW 1	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	1981.2	-
<b>Total:</b>		<b>1981.2</b>	<b>0</b>

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 1	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.

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### **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.

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<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.