

HUNTER ARMY AIRFIELD APPENDIX G **TOTAL MAXIMUM DAILY LOADS (TMDLs) PLAN**

The Hunter Army Airfield (HAAF) Municipal Separate Storm Sewer System (MS4) discharges stormwater into the following surface waters: Lamar Canal (which drains into the Little Ogeechee River, also known as the Forest River), Harmon Canal (which drains to Savannah and into the Vernon River), and to the Casey Canal under White Bluff Road (upper name for Hayners Creek which drains into the Vernon River).

In Chatham County surrounding the HAAF MS4, Hayners Creek (known upstream as Casey Canal), Vernon River, tributary to Hoovers Creek #1 (Headwaters [Skyline Rd] to Hoover Creek, Little Ogeechee River and the Springfield Canal (headwaters to Savannah River) are 2008 303(d) listed streams (*Georgia Environmental Protection Division's "Total Maximum Daily Loads" Web Page*). The 303(d) list includes all surface waters in the State for which beneficial uses of the water, such as for drinking, recreation, aquatic habitat, and industrial use, are impaired by pollutants.

It does not appear as though stormwater discharges from the HAAF MS4 contribute directly or indirectly to a 303(d) listed (impaired) water bodies. Casey Canal (Head of Canal to Montgomery Crossroad, Savannah) and Hayners Creek (Montgomery Crossroad to Vernon River) were on the 303(d) listing during the 2008 cycles for fish consumption, fecal coliform (FC) and dissolved oxygen (DO). Little Ogeechee River (Little Ogeechee Pond to below US Hwy. 17 near Burroughs) was on the 303(d) listing during the 2008 cycles for FC and DO. Total Maximum Daily Loads (TMDLs) were developed and approved for Casey Canal, Little Ogeechee and Vernon River's. The tributary to Hayners Creek #1 has an Assessment Pending. The Springfield Canal [assessment pending] flows are north, and the HAAF MS4 does not discharge to this water body.

The Stormwater Management Plan (SWMP) applies to the HAAF MS4 Urbanized Areas, which includes miles of roadways and stormwater sewer utilities, and several stormwater discharge areas. The storm sewer system draining the Urbanized Area is considered an MS4. Information on the HAAF MS4, including pipes, canals, ditches, outfalls, and drainage areas is illustrated on the enclosed map titled HAAF-MS4 Appendix G-TMDLs Sampling Locations Map.

HAAF MS4 outfalls discharge into stream segments. The northern, central, western, and southwestern portions of the HAAF MS4 drain into a wetland area inside the HAAF MS4, which drains into the Forest River, and ultimately discharges into the Little Ogeechee River. The central, northeastern, and eastern portions of the HAAF MS4 drain into the Casey Canal (Hayners Creek). The HAAF MS4 southeastern portions drain into Harmon Canal and discharges into an un-named tributary which ultimately discharges to the Vernon River. Casey Canal (Hayners Creek) ultimately discharges into the Vernon River.

HAAF performs Industrial Activity Stormwater inspections quarterly and annually. Hazardous materials are stored undercover and/or are indoors, and spill prevention and clean up measures have been implemented for any accidental spills. Wastewater treatment facilities, lift stations, and septic tank systems are inspected daily by the Directorate of

Public Works (DPW) Services Division Operators, and inspected quarterly and annually by DPW Environmental Division program media personnel. Additionally, weekly Erosion & Sedimentation compliance construction inspections are performed by DPW Environmental Stormwater personnel, to ensure Erosion & Sedimentation Pollution Control Plans best management practices have been implemented and are functioning as designed at construction sites.

Water Quality in stream grab samples are collected once annually during non-rain events from the stream segments which discharge into the 303(d) listed impaired water bodies; these grab samples are collected utilizing automatic samplers illustrated on the enclosed map titled 2008 303(d) Listed Streams-HAAF Discharge Outfalls. The annual quantitative samples are collected and analyzed for Five-Day Carbonaceous Biochemical Oxygen Demand (CBOD5) and Ammonia (NH3) with calculations IAW Part III.C.1.b.1 of the National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater Permit and results must be under the applicable benchmark value of Ultimate Oxygen Demand (UOD) of 125.0 mg/l to maintain compliance with the NPDES Permit.

Annual in stream non-rain event grab sampling (2006-2009) of the stream segments which discharge into the listed impaired waters, documents HAAF MS4 does not exceed the TMDLs. The Fort Stewart/HAAF DPW Environmental Division will continue to monitor the MS4 outfalls and the stream segments which discharge into the 303(d) listed waters, and make required adjustments if conditions change or the TMDLs are exceeded. Enclosed is documentation of the parameters and results from 2009 sampling.

Hunter Army Airfield implemented a compliance evaluation outfall screening program for Phase I Industrial Activities and outfalls for non-stormwater discharges (NSWDs) as part of Phase I Industrial Stormwater Permit requirements.

Additionally, the stream segments of the HAAF MS4 which discharge into the listed impaired waters are visually monitored during and after each rain event for the presence of stormwater parameters (color, odor, turbidity, floating solids, settled solids, suspended solids, foam, and oil sheen). There are visual grab samples collected on the stream segments which discharge into these listed impaired water bodies which are photo documented with date/time stamp and placed in the Industrial Master Stormwater Pollution Prevention Plan.

Sampling of the Phase II MS4 303(d) listed impaired water bodies for dissolved oxygen and fecal coliform will be performed once annually for the TMDL compliance requirements. Dissolved oxygen will be sampled by utilizing a sampling probe, and documented on a field inspection report with date, time, and the individual performing the sampling, instrument calibration, sample results, and a certification statement on the form. Samples for fecal coliform will be collected, handled and stored properly for submittal to a state certified lab, once annually for analyses. Documentation for these sampling events will be kept with the MS4 Stormwater Management Plan and submitted to the state during the annual reporting cycle.