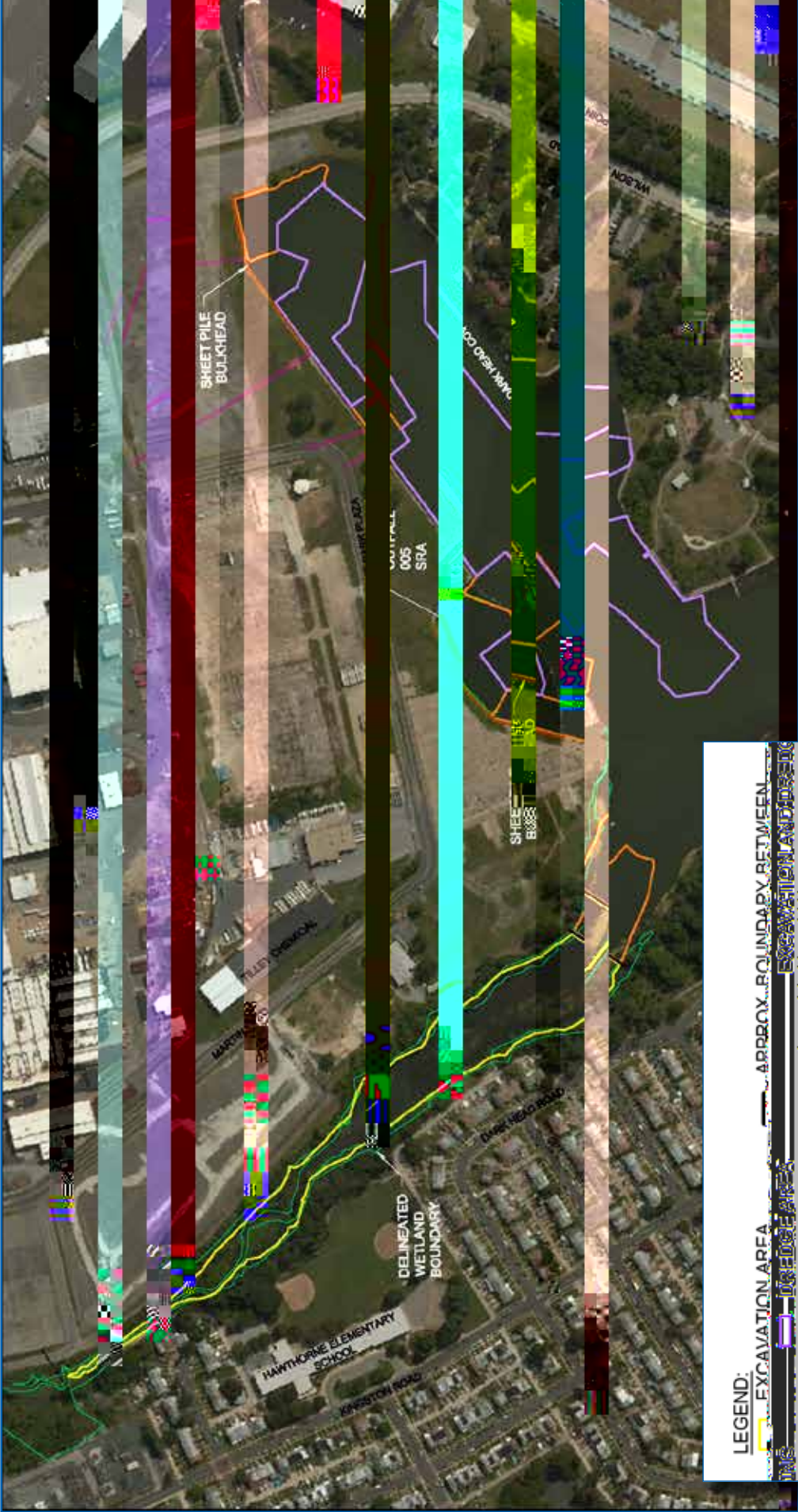


## **Middle River Complex:** **Plans For Sediment Cleanup Move Forward In Dark Head Cove And Cow Pen Creek**

Lockheed Martin's plans for cleaning up the sediment in Dark Head Cove and Cow Pen Creek are proceeding. Presuming that all required permits are approved in a timely manner, the cleanup work is expected to start in late this fall in Dark Head Cove and the mouth of Cow Pen Creek when the in-water winter work window opens.



**LEGEND:**

- EXCAVATION AREA
- APPROX. BOUNDARY BETWEEN EXCAVATION AND SEDIMENT REMEDIATION AREA
- DELIMITED WETLAND BOUNDARY
- 005 SRA
- SHEET PILE BULKHEAD

*Sediment Remediation Areas*

ycvgt"ukfg"qh"vjg"qnf."eqttqfgf"ugevkqpu0"Vjg{"yknn"Łnn"vjg"  
icr"dgvyggp"vjg"qnf"cpf"pgy"ujggv"ogvcn"ykvj"uvqpg"cpf"vqr"  
with concrete. Four storm drains on the northeastern portion  
qh"vjg"eqxg"vjcv"ftckp"Dnqemu"G"cpf"F"yknn"cnuq"dg"engcpgf"  
cpf"tgrcktg"cpf"gzvpgfgf"vj tqw i j"vjg"pgy"dwnmjgcf0

Ftgfi kpi"yknn"dgikp"cu"ugevkqpu"qh"vjg"dwnmjgcf"ctg"  
tgrncegf0"Cv"ngcuv"39.222"ewdke"{ctfu"\*qt"cr rtqzk o cvgn{ "  
:72"vtwemncfu"qh"ugfk o gpv"yknn"dg"tg o qxgf"fwtkpi"vjg"  
dredging operation in Dark Head Cove and the mouth  
qh"Eqy"Rgp"Etggm"cpf"yknn"dg"vtepurqtvgf"hq"fkurqucn"  
cv"nkegpugf"hccknkvgu0"Vjg"ftgfi kpi"etcp"yknn"dg"nqecvgf"  
qp"cdeti g0"Ftgfi g"ugfk o gpv"yknn"dg" o qxgf"vq"vjg"ujqtg"  
y jgtg"kv"yknn"dg"cnmqygf"vq"ftckp"kp"urgekcn{"eqpuvtwevgf"  
eqpvckp o gpv"ctgcu"dg"hgq"vtepurqtv0"Cf fkvkxgu"oc{"dg"okzgf"  
kp"vq"vjg"ugfk o gpv"vq"ceengtcvg"ft{kpi"qt"rtqkfg"vjg"dqf{"  
required for disposal. This process was also used to help  
jcpfng"vjg"ugfk o gpv"vjcv"ygtg"ftgfi g"pgct"Qwvhcn"227"  
fwtkpi"vjg"ykpvtg"qh"4236/370"Cu"kp"vjcv"gctnkg"engcpwr."c"uknv"  
ewtckp"yknn"ci ckp"dg"rncegf"vq"kuqncvg"vjg"gpvktg"yqtm"ctgc0"  
Vjg"enqwf kpguu"qh"vjg"ycvgt"kp"vjg"ftgfi kpi"ctgc"yknn"dg"  
o qpkvqtg"eqpvkpwqun{0"Kh"vjg"ycvgt"dgeq o gu"ogcuwtcdn{"

Hgdtwct{"423:0"Dgecwug'cnn'cswcvke"xgi gvcvkqp" yknn"dg"  
tgoqxgf"kp"yqtm"ctgeu."kv"ku"dgvvgt"vq"fq"vjg"yqtm"oqtg"  
swkemn{"uq"kvu"tgeqxtg{"ecp'dgi kp'hcuvtg="vjgtghqtg"vjg"  
work will occur during the protection period for aquatic  
xgi gvcvkqp."cnnqy kpi"vjg"gpvktg"rtqlgev"vq"eqo rnvvg"kp"qpg"  
yqtm"ugcuqp0"Qxgt"45.222"ewdke" {ctfu"\*qt"cdqww"3422"  
vtwemncfu+"qh"ugfkogpv"yknn"dg"gzecxcvgf"htqo"Eqy"  
Pen Creek. To do this, cofferdams, which are temporary  
ycvgtvki jv"ycnnu"qt"ycvgt"Lnngf"dncffgtu."yknn"dg"rnecgf"  
qp"vjg"uvtgcodgfo"Vjg"ycvgt"dgj kpf"vjgug"vgo rqtct {"  
fco u"yknn"vjgp"dg"rworgf"qww."gzrqkpi"vjg"etggm"dqvvo"  
hqt"gzecxcvkqp0"Eqhhgtfco u"yknn"dg"dwknv"cpf"tgoqxgf"kp"  
sequence as the work proceeds. The Lockheed Martin team  
yknn"cnuq"tgoqxgcp{"fgdku"cpf"ycuvg"ocvgtkcnu"kv"Łpfu0"  
Cnuq"kp"ugcuqp"vyq."c"nc{gt"qh"cevkxcvgf"ectdqp."uwej"cu"ku"  
hqwpf"kp"jqwugjqnf"ycvgt"Lnvgtu"qt"cswctkw o"Lnvgtu."yknn"  
dg"urtgcf"qxgt"vjg"tgo ckpki "36"cetgu"qh"vjg"eqxg0"Vjku"  
vtgcvogpv"ko o qdknk | gu"eqpvcokpcvkqp0"Chvgt"vjku"yqtm"ku"  
eqo rnvvg."ucorngu"yknn"dg"vcmgp"cv"tgi wnc"kpvgtxcnu"qxgt"  
vjg"pgzv"Łxg" {gctu"vq"eqpŁto"vjcv"tguwnvu"ctg"ykvj kpnko kvu"  
ceegrvcndg"vq"vjg"W0U0"Gpxktqogpvcn"Rtqvgevkqp"Cigpe {"  
and the Maryland Department of the Environment. The  
eqo o wpkv {" yknn"dg"mgrv"kphtogf"qh"tguwnvu0



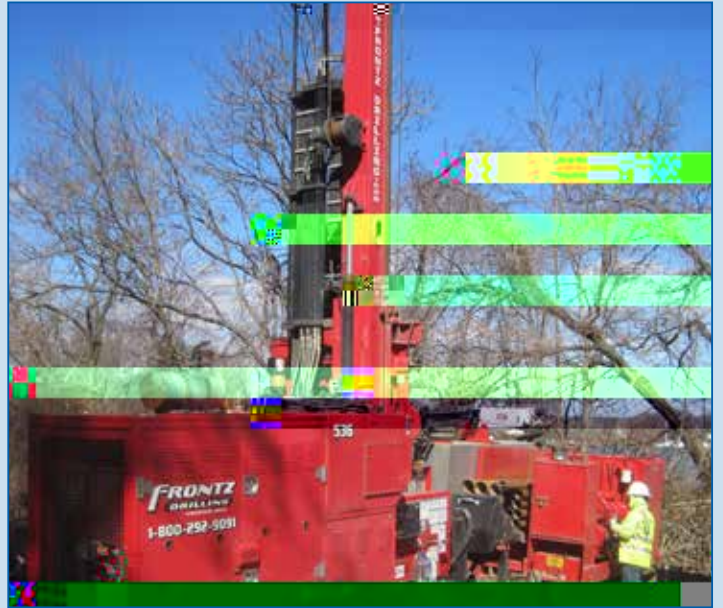
htq o "7"vq"9"r0 o 0."cpf" c" hqt o cn" rtgugpvckqp" v j cv" y km" dgi kp"  
at 7 p.m. The poster session will cover all aspects of  
Nqem jggf" Octv k p u" tg o g f k c v k q p" r t q l g e v u" c v" O k f f n g" T k x g t" c p f"  
Octv k p" U v c v g" C k t r q t v." c p f" y k m" k p e n w f g" v j g" n c v g u v" c x c k n c d n g"  
k p h q t o c v k q p" q p" v j g" c n i c n" d n q q o" c p f" u w d u g s w g p v" L u j" f k g/ q h h"

**Martin State Airport:**





V jg"dwknfkipi"ukvg"ycu"i tcfgf"kp" Fgego dgt"cpf"Lcpwct {0"  
*The treatment system building will measure 170 feet by 60 feet, by 36 feet high at the roof peak.*





Uwduvpegu"rtqi tc o0"Vjku"kpvtqfwegf"vjg"tgs wktg o gpv"hqt"  
an Administrative Consent Order. None of this changed  
how we operate. We've always worked closely with all the  
government agencies that oversee our work. It's good to  
get the Administrative Consent Order completed. From  
vjg"Łtuv"fc{"vjku"rtqlgev"dgi cp."Nqemjggf"Octvkp"jcu"dggp"  
committed to getting the cleanup done and getting it done  
tki jv0"Cu"Køxg"uckf"dghqtg."vjg"Cf o kpkuvtcvkxg"Eqpugpv"Qtfgt"  
ku"c"uvcvg o gpv"kp"dncem"cpf"y jkvq"qh"y jcv"ygøxg"cnyc{u"  
intended to do."

Nqemjggf"Octvkp"Łtuv"dgi cp"tgcejki"qww"vq"vjg"Okfng"



dwnm jgc f0" Yqtm"kp"Dnqem" I "y knn"cnuq"kpenwfg"tg o qxkpi "  
a pipe related to the underground storage tank that was  
tg o qxf"kp"42370

Hqt"ctgcu"vjcv"ygtg"kfgpvkLgf"cu"pggfkpi"tg o gfkcvkqp."  
contaminated s20.300486.600-17.1(i)-18kM6.64(1/C20 1 Tf0.0 1e2

---



Martin relied on a food (sodium lactate) produced from the  
uwictu"qh"eqtp."dggvu."cpf"qvjgt"rncpvu"kp"Dnqemu" I "cpf"K."cpf"

drain or other easy pathway. Lockheed Martin expects to

## The November 2015 Fish Die-off in Middle River

C"uki pkŁecpv"Łuj" fkg/qhh"qeewttgf"kp"vjg"wr rgt"Okf fng" River, Norman Creek, Hopkins Creek, Dark Head Cove, Cow Pen Creek and the upper reaches of Frog Mortar Creek  
kp" o kf/Pqxo dgt"42370"Vjg"pw o dgt"qh"Łuj"vjcv"fkf"y cu" so high that the story was covered for several days in local  
o g fkc0"Nkmg" o g o dgtu"qh"vjg"eq o o wpkv{."Nqemjggf"Octvkv" y cu"eqpegtpgf"d{ "v jku"gxgppv."cpf"y gpv"vq"gzvqcqf kpcct { " lengths to support the resulting investigations.

The Maryland Department of the Environment (MDE)  
kpxgukivcgf"vjg"kpekfgpv"cpf"vj tqw i j"kvu"ncd"cpn{ ugu" fgvgt o kpgf" c"vqzkp"tgngcugf"d{ " f { kpi"cnicg"ecwugf"vjg" fkg/ qhh0"Wpwuwcn{ " yct o "ygcvjgt" o c{ "jcxg"eqvtdwvqf"vq" c" nct ig"cnicn"dnqq o 0"Gzeguukxg"pwvtkgpvu"kp"vjg"Ejgucrgcmg" Bay are also known to encourage algae growth. The warm  
ygcvjgt"y cu"hqmqygf"d{ "c"eqnf"upcr"vjcv"nkmg{ "mkngf"vjg" algae, releasing the toxins. Salinity levels were also higher than usual.

As part of the 2015-2016 season, the following areas were sampled: Middle River (MDE 9(e)4.1(v)2.4(h),(l)-9.1(i)-18.40020.3004 ro-16.5030)3.5(f05)-8(tg t)-14.2.6(t)-sTw T8(i).

