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ENVIRONMENTAL AUDIT

2011

Acknowledgements

Executive Summary

Curriculum

Stewardship

TXDQWLWLHV 'LQLQJ 6HUYLFHV VRXUFHV RI WKHLU IRRG ORFDOO\ DOWKRXJK WKHUH LV VRPH XQFHUWDLQW\ DV WR ZKDW µORFDO¶ HQFRPSDVVHV 7KRXJK WKH\ ZRUN WR VHUYH IRRG LQ VHDVRQ ILQDQFLDO UHVWULFWLRQV FRQWLQXH WR UHVWULFW WKH XVH RI RUJDQLF LQJUHGLHQWV 2QH RI WKH PRVW VLJQLILFDQW GHYHORSPHQWV VLQFH WKH SUHYLRXV DXGLW LV WKH HVWDEOLVKPHQW RI D 8QLYHUVLW\ IDUP GXULQJ WKH VXPPHU RI 7KRXJK LW LV WRR HDUO\ WR MXGJH WKH VXFFHVV RI WKLV LQLWLDWLYH WKH IDUP KDV WKH SRWHQWLDO WR EH D YDOXDEOH UHVRXUFH IRU FRPPXQLW\ FROODERUDWLRQ H[SHULHQWLDO OHDUQLQJ DQG D JUHDWHU XQGHUVWDQGLQJ RI DQG FRQQHFWLRQ WR WKH IRRG ZH HDW

Solid Waste

$OWKRXJK WKH :HW 'U\ V\VWHP XVHG DW 0RXQW $OOLVRQ KDV EHHQ LQ SODFH IRU VHYHUDO \HDUV QRZ DQG WKXV PRVW VWDII DQG IDFXOW\ DUH DFFXVWRPHG WR LW XQGHUVWDQGLQJ KRZ LW ZRUNV VWLOO SUHVHQWV D FKDOOHQJH IRU VWXGHQWV IURP RXW RI FRXQW\ 7KH DEVHQFH RI HGXFDWLRQDO HIIRUWV RQ WKH SDUW RI WKH 8QLYHUVLW\ LQ UHFHQW \HDUV OHDGV WR LPSURSHU VRUWLQJ DQG XQQHFHVVDU\ ZDVWH GHVWLQHG IRU WKH ODQGILOO 6LQFH WKH SUHYLRXV DXGLW 0RXQW $OOLVRQ LV PRUH GLUHFWO\ LQ FRQWURO RI LWV RZQ ZDVWH DV JDUEDJH LV QR ORQJHU EURXJKW WR D 6DFNYLOOH WUDQVIHU VWDWLRQ (IIRUWV KDYH EHHQ PDGH WR LQFUHDVH ODQGILOO GLYHUVLRQ DQG HQFRXUDJH ZDVWH UHGXFWLRQ VXFK DV WKH LPSOHPHQWDWLRQ RI FHQWUDOL]HG VRUWLQJ

Water

7KHUH KDYH EHHQ VHYHUDO VLJQLILFDQW GHYHORSPHQWV VLQFH

Methodology

7KH 0RXQW $OOLVRQ (QYLURQPHQWDO $XGLW WKH $XGLW LV EDVHG RQ 3RLF\ DQG WKH (QYLURQPHQWDO 3URWHFWLRQ 5HGXFWLRQ 3RLF\ DQG (QYLURQPHQWDO 3RLF\ UHVSHFWLYHO\ 7KHVH SROLFLHV DUH PHDQW WR JXLGH WKH 8QLYHUVLW\ WRZDUGV HQYLURQPHQWDO VXVWDLQDELOLW\ &KDSWHU WRSLFV ZHUH FKRVHQ EDVHG RQ VHFWLRQV ZLWKLQ WKH SROLFLHV DQG WKHLU LQFOXVLRQ LQ WKH SUHYLRXV DXGLWV 3HUIRUPDQFH LQGLFDWRUV ZLWKLQ WKH FKDSWHUV ZHUH FKRVHQ LQ WKH VDPH PDQQHU

7KH $XGLW ZDV FRQGXFWHG XVLQJ LQWHUYLHZV VXUYH\ TXHVWLRQQDLUHV YRXQWLQJ $XGLW WRROV UHSRUWV GRFXPHQWV DQG SUHYLRXV DXGLWV 8QLTXH TXHVWLRQV ZHUH FUHDWHG IRU HDFK LQWHUYLHZHG JURXS ZKR ZHUH PRVW DEOH WR SURYLGH DQ LQIRUPHG DVVHVVPHQW LQ HDFK DUHD RI WKH $XGLW ZHUH VHOHFWHG IRU LQWHUYLHZV WKH TXHVWLRQV ZHUH PDLQO\ TXDOLWDWLYH LQ QDWXUH DQG ZHUH UHOHYDQW WR WKH LQGLYLGXDO¶V SRVLWLRQV TXHVWLRQQDLUHV ZHUH RQO\ XVHG ZKHQ WZHQW\ RU PRUH LQGLYLGXDOV QHHGHG WR EH FRQVXOWHG IRU RQH FKDSWHU $JDLQ WKH TXHVWLRQV ZHUH TXDOLWDWLYH LQ QDWXUH DQG ZHUH UHOHYDQW WR WKH LQGLYLGXDO¶V SRVLWLRQ IXQFWLRQ DW WKH)DFLOLW\ 8QLW WKH TXHVWLRQV ZHUH FRQGXFWHG WR KHOS WKH DXGLWRUV JDLQ D PRUH LQ GHSWK XQGHUVWDQGLQJ RI WKH WRSLFV EHLQJ DVVHVVHG 2IILFLDO UHFRUGV UHSRUWV DQG GRFXPHQWV ZHUH XVHG WR FROOHFW TXDQWLWDWLYH

L QQp K H H Ð @ p IÁ P H R`RÐ @

,Q WKH 8QLYHUVLW\ DGRSWHG DQ (PLVVLRQV 5HGXFWLRQ 3ROLF\ 07$ 3ROLF\ 7KH SROLF\ RXWOLQHV VSHFLILF VWUDWHJLHV WR UHGXFH HPLVVLRQV UHVXOWLQJ SULPDULO\ IURP WUDQVSRUWDWLRQ KHDWLQJ DQG HOHFWULFLW\ 2QH RI WKH PRVW VLJQLILFDQW IHDWXUHV RI WKLV SROLF\ LV WKH UHTXLUHPHQW WR FDOFXODWH WKH 8QLYHUVLW\¶V \HDUO\ FDUERQ IRRWSULQW DQG UHSRUW LWV WKH $QQXDO 5HYLHZ RI 2SHUDWLRQV ZKLFK LV SUHVHQWHG WR WKH %RDUG RI 5HJHQWV SOHDVH UHIHU WR µ(PLVVLRQV¶ FKDSWHU IRU LQIRUPDWLRQ RQ WKLV $OWKRXJK WKH SROLF\ UHTXLUHV EDVHOLQHV WR KDYH EHHQ HVWDEOLVKHG E\ $SULO DQG LQWHULP WDUJHWV E\ 'HFHPEHU WKHVH KDYH QRW \HW EHHQ FUHDWHG 7KLV VHHPV WR EH WKH UHVXOW RI FRQIXVLRQ UHJDUGLQJ H[DFWO\ ZKRVH UHVSRQVLELOLW\ WKLV ZHOO DV XQFHUWDLQW\ DERXW KRZ WR FDOFXODWH UHDVRQDEOH WDUJHWV DQG EDVHOLQHV LW KDV EHHQ LPSOLHG WKDW ZLWKRXW DQ LGHD RI KRZ WR GR LW µZHOO¶ LW VLPSO\ KDV QRW EHHQ GRQH DW DOO DQG WKXV FXUUHQWO\ UHPDLQV D ZRUN LQ SURJUHVV 7KRXJK LW LV XQGHUVWDQGDEOH WKDW WKH 8QLYHUVLW\ ZDQWV WR JHQHUDWH UHDOLVWLF WDUJHWV WKLV FDQQRW EH XVHG DQ H[FXVH IRU YLRODWLQJ WKH GLFWDWHV RI WKH SROLF\ LW LV LPSRUWDQW WKDW 0RXQW $OOLVRQ DGKHUHV WR WKH JRDOV LW KDV VHW RXW IRU LWVHOI DQG VHWV WDUJHWV VRRQ

Sub-Indicator 2: External- The University has demonstr4.005 (2)-8160056>12.998.By0057>-4.00n2>-3.995 <005600520052>2.998

IRXQGDWLRQ 2QFH VXIILFLHQW IXQGV H[LVW LQ WKH DFFRXQW SURMHFWV WKDW DUH PRUH FDSLWDO LQWHQVLYH RU KDYH D ORQJHU SD\EDFN RU HQFRPSDVV SURPRWLRQDO EHKDYLRXUDO FKDQJH FDQ EH FRQVLGHUHG

$OWKRXJK SD\EDFN LV WKH SULPDU\ FRQVLGHUDWLRQ SURMHFW VHOHFWLRQ FULWHULRQ DQG WKH HFRQRPLF EHQHILW\ LQ WKH),0 WHFKQRORJ\ UHWXUQ RQ LQYHVWPHQW FRQVLGHULQJ LQFHQWLYHV SURMHFW GHYHORSPHQW DQG LPSOHPHQWDWLRQ FRVWV WKH JUHHQ EXGJHW EDODQFH DQG ORQJ WHUP VWUDWHJ\ GHIHUUHG PDLQWHQDQFH SULRULWLHV SURPRWLRQDO RU PDUNHWLQJ YDOXH DELOLW\ WR PHDVXUH DQG YHULI\ SHUIRUPDQFH DQQXDO VDYLQJV RU RQH WLPH VDYLQJV

%XGJHWV DUH DGPLQLVWHUHG DQG DFFRXQWHG IRU VHSDUDWHO\ EHWZHHQ WKH 5HVLGHQFH DQG $FDGHPLF SURMHFW FRVW FHQWUHV ,Q WKH ILUVW \HDU WKH $FDGHPLF FRVW FHQWUH KDG LQLWLDO IXQGLQJ RI DQG WKH 5HVLGHQFH FRVW FHQWUH KDG LQLWLDO IXQGLQJ RI

,Q LWV ILUVW \HDU SURMHFWV LQFOXGHG

- &RQYHUVLRQ RI WKH +3 ERLOHU WR QDWXUDO JDV
- 9HQWLODWLRQ LQ WKH /LEUDU\ DQG &RQYRFDWLRQ +DOO
- 9HQWLODWLRQ LQ &DPSEHOO -HQQLQJV DQG +DUSHU
-)OHPLQJWRQ *URZWK &KDPEHU OLJKWLQJ
- &RQYRFDWLRQ +DOO OLJKWLQJ

&RPELQHG WKHVH SURMHFWV KDYH DQ DYHUDJH SD\EDFN RI \HDUV 7KH\ ZHUH SURMHFWHG WR VDYH RYHU PHWULF WRQQHV RI &2 EHLQJ HPLWWHG LQWR WKH DWPRSKHUH *- RI RLO DQG JDV DQG NK RI HOHFWULFLW\ 0RVW VLJQLILFDQWO\ IURP WKH ILUVW \HDU¶V SURMHFWV DORQH WKH VFKRRO ZDV H[SHFWHG WR VDYH WR EH LQMHFWHG EDFN LQWR WKH *UHHQ (YROYLQJ %XGJHW 'XH WR XQH[SHFWHG VDYLQJV ODUJHO\ DV D UHVXOW RI WKH QDWXUDO JDV FRQYHUVLRQ WKH 8QLYHUVLW\ KDV DSSUR[LPDWHO\ IRU WKH $FDGHPLF &RVW &HQWUH DQG IRU WKH 5HVLGHQFH &RVW &HQWUH WR EH XVHG IRU SURMHFWV LQ WKH \HDU

EH XSGDWHG WR HQVXUH WKDW LW LV RSHUDWLQJ HIIHFWLYHO\ DQG DGGUHVVLQJ FXUUHQW LVVXHV DQG LQWHUHVWV

Indicator #5: Communication of Environmental Initiatives

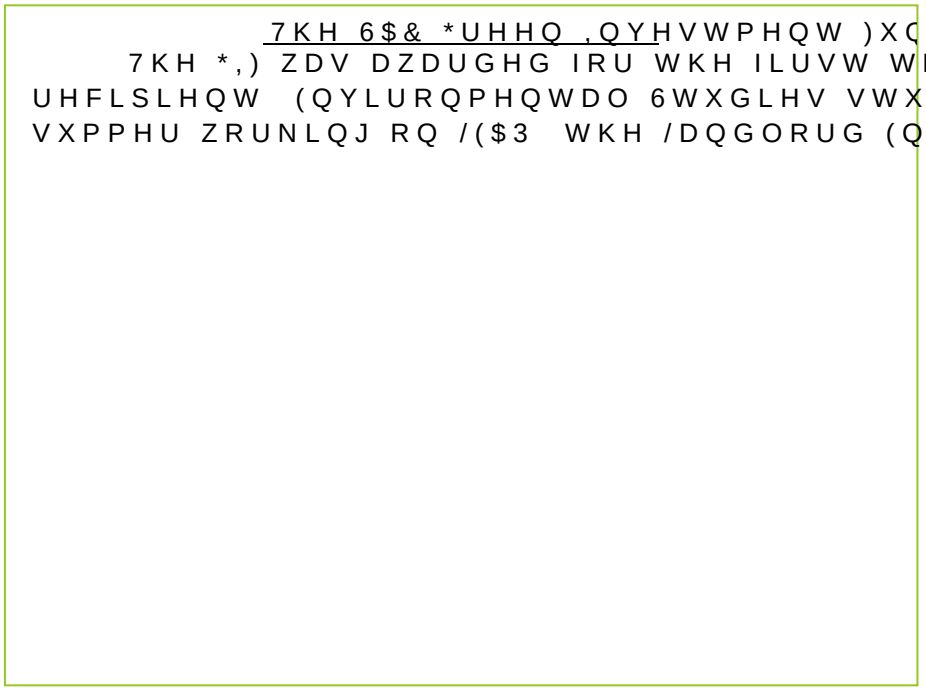
'XULQJ WKH VXPPHU RI WKH 8QLYHUVLW\ KLUHG FRQVXOWDQWV IURP (VVHQFH &RPPXQLFDWLRQV WR GHYHORS D FRPPXQLFDWLRQ SODQ DERXW WKH HQYLURQPHQW DW 0RXQW $OLVRQ)URP WKLV SODQ HPHUJHG D VLJQDJH FDPSDLJQ LQYROYLQJ µOLJKWV RXWWWLFNHUV E\ DOO OLJKW VZLWFKHV SRVWHUV E\ SKRWRFRSLHUV DERXW SDSHU XVDJH DQ (FR /RJLF ORJR WR LQGLFDWH HQYLURQPHQWDO LQLWLDWLYHV DQG ZHW GU\ PDJQHWV IRU UHVLGHQFH

DFWLYHO\ XVHG UHPQDQWV RI WKLV FDPSDLJQ FDQ VWLOO EH IRXQG LQ WKH FRQWLQXHG SUHVHQFH RI VWLFNHUV DQG WKH RFFDVLRQDO SOVWHU DURXQG

Q •ð S`ÀDÀP SXV P 0

CG ZH D °R `€ “R

-ÆSHMÐ ÞVORUP@°Å Pp V@<ÆD` 8@P`Å EM¬˜ÀXgHLD´À FHF@ @Þ •ÞÆD L0@LH¶W HÞLÅÅ00HP°ÞÆ€ ÞS€SR D † P


7KH 6$& *UHHQ ,QYHVWPHQW)XQ
7KH *,) ZDV DZDUGHG IRU WKH ILUVW WLPH L
UHFLSLHQW (QYLURQPHQWDO 6WXGLHV VWXGHQW
VXPPHU ZRUNLQJ RQ /($3 WKH /DQGORUG (QHUJ\

(PLVVLRQV 5HGXFWLRQ 3RLF\ $QG HQYLURQPHQWDO LQLWLDWLYHV QHHG WR EH FRPPXQLFDWHG PXFK PRUH HIIHFWLYHO\ ± DPRQJ GHSDUWPHQWV ZLWKLQ WKH FDPSXV DQG WR WKH JHQHUDO SXEOLF ± LQ RUGHU WR HGXFDWH DQG UHPLQG LQGLYLGXDOV WKDW ³JUHHQLQJ WKH LYRU\ WRZHU´ UHPDLQV

,QGLFDWRUV	6WDWH RI $II	6WDWH RI $	6WDWH RI	6KRUW 7HUI 5HFRPPHQGDW	/RQJ 7HUP 5HFRPPHQGDW
6WXGHQW HQYLURQPHQ FRQFHUQL DQG DFWLYLV	1R 5HFRPPHQ	6WXGHQW HQYLURQPHQ DFWLYLVP KI UHVXUJLQJ 6$& DQG RWK VWXGHQW UHSUHVHQWI (QYLURQPHQ ,VVXHV &RPP 0HHWLQJV KI LQFRQVLVWH	6WXGHQWV DFWLYH RQ 7KHQ8LYHUV SDUWLFLSDWH VWXGHQW/L 2XW 0RXQW (FR$FWLRQ 7KH VWXGH IXQGHG 6$& *UHHQ ,QYH)XQG MXVW XS LWV VHF \HDU	[redacted]	

,QWHUQDO &RPPLWPHQW ZULWWHQ HQYLURQPHQ H[LVWV WR ³H FRPPLWPHQW HFRORJ\ VXUY DPRQJ FRPSH SULRULWLHV IXQGV DQG S WXUQRYHU LQ FI OHDGHUVKLS´

0RXQW $OOLV (QYLURQPHQ ZKLFK DGR +RZHYHU LW LQ QHHG RI X

$PHQGPHQW \ (QYLURQPHQ 3ROLF\ KDYH SURSRVHG E SUHVHQWHG %RDUG RI 5H DSSURYDO

(QYLURQPH 3ROLF\ LQ C PDMRU UHY XSGDWH UH DQG DGG LQGLVDWRU

,Q WKH 8hA ó‘7Hyá€eçž 9“

Curriculum

7KH 8QLYHUVLW\ HQFRXUDJHV IDFXOW\ DQG VHQDWH WR FRQVLGHU ZKHUH DSSURSULDWH WDNLQJ VWHSV WR LQFRUSRUDWH HQYLURQPHQWDO FRQWHQW WKURXJKRXW H[LVWLQJ FXUULFXOXP LQFUHDVLQJ HQYLURQPHQW UHODWHG FRXUVH RIIHULQJV DQG SURJUDPV VHHNLQJ PRUH UHVRXUFHV WR GHGLFDWH WR HQYLURQPHQWDO UHVHDUFK 07$ 3ROLF\

Introduction

0RXQW $OLVRQ UHFRJQL]HV WKH HYROYLQJ HQYLURQPHQWDO FRQGLWLRQV SULGLQJ LWVHOI RQ LWV FRPPLWPHQW WR WKH GHYHORSPHQW RI WKH ³ZKROH SHUVRQ´ 0RXQW $OLVRQ LV SULPDULO\ DQ XQGHUJUDGXDWH OLEHUDO DUWV DQG VFLHQFH XQLYHUVLW\ ZKLFK RIIHUV RYHU GLIIHUHQW GHJUHH RSWLRQV :KLOH WKHUH DUH PHFKDQLVPV LQ SODFH LQFOXGLQJ GLVWULEXWLRQ FUHGLWV PLQRUV DQG FHUWLILFDWHV WR HQFRXUDJH DOO VWXGHQWV WR WU\ FRXUVHV LQ DOO DUHDV RI VWXG\ LW LV VWLOO SRVVLEOH IRU D VWXGHQW WR OHDYH 0RXQW $OLVRQ ZLWKRXW DQ H[SRVXUH WR HQYLURQPHQWDO LVVXHV 7KLV VHFWLRQ RI WKH $XGLW HYDOXDWHV KRZ HQYLURQPHQWDO DZDUHQHVV LV LQFRUSRUDWHG RU DEVHQW DFDGHPLF SURJUDPV RIIHUHG E\ 0RXQW $OLVRQ

RIIHULQJ DQ XQGHUJUDGXDWH GHJUHH DLPHG DW LQWHJUDWHG FRPPXQLW\ VXVWDLQDELOLW\ 7KH\ GHHPHG LW WR EH SURJUDP WKDW ZRXOG ILOO D QHHG IRU SODQQHUV ZLWKLQ WKH PXQLFLSDOLW\ EXW LW ZLOO WDNH WLPH DQG FRQWLQXHG VXSSRUW IURP DOO OHYHOV RI WKH 8QLYHUVLW\ WR PDNH WKHVH SURJUDPV D UHDOLW\

7KH $FDGHPLF 5HQHZDO SODQ DOVR PHQWLRQV WKH FUHDWLRQ RI WZR QHZ WHFKQLFDO GHJUHH RSWLRQV ELRORJ\ WHFKQLFLDQ DQG *,6 WHFKQLFLDQ 7KHVH SURJUDPV ZRXOG PHDQ SDUWQHULQJ ZLWK 1HZ %UXQVZLFN &RPPXQLW\ &ROOHJH 1%&& DQG ZRXOG EH DQ DGGLWLRQ WR 0RXQW $OOLVRQ¶V LQWHUGLVFLSOLQDU\ SURJUDPV &XUUHQWO\ 1%&& VWXGHQWV FDQ

8QOLPLWHG %LUG 6WXGLHV &DQDGD DQG VHYHUDO RWKHU 6WDWHV SURYLGH H[SHULHQFH GXH WR WKH IRU FRPSOHWH OLVW

,Q FRQMXQFWLRQ ZLWK WKH 7DQWUDPDU LQWHJUDWHG UHJLRQDO PLQRU 7KLV W\SH RI FHUWLILFDWLRQ FRXOG VXVWDLQDELOLW\ SODQ WKH *HRJUDSK\ DQG (QYLURQPHQW -HSDUWPHQW LV LQ VWXGHQWV WKURXJK H[LVWLQJ SURJUDPV VX WKH SURFHVV RI VXEPLWWLQJ DQ DSSOLFDWLRQ WR EHFRPH D 8QLWHG 1DWLRQV $OOLDQFH VHH)LJXUH 5HJLRQDO &HQWUH RI ([SHUWLVH RQ 6XVWDLQDEOH (GXFDWLRQ 7KH IXQFWLRQ RI VXFK D FHQWUH LV WR FUHDWH D QHWZRUN IRU UHVHDUFK DQG WUDLQLQJ 7KLV FHQWUH ZRXOG IDFLOLWDWH FROODERUDWLRQ RI UHVHDUFK GHYHORSPHQW DQG JRYHUQDQFH DPRQJ LWV PHPEHUV 7KLV FHQWUH ZLOO HVWDEOLVK D FRPPXQLW\ OHYHO WUDQVIRUPDWLYH HGXFDWLRQ SURJUDP DFURVV WKH 7DQWUDPDU UHJLRQ 0RXQW $OOLVRQ 8QLYHUVLW\ LV VSHDUKHDGLQJ WKLV SURMHFW DQG UHFHQWO\ VXEPLWWHG WKH VHFRQG SRUWLRQ RI WKH DSSOLFDWLRQ ,I WKH DSSOLFDWLRQ LV DFFHSWHG LW ZLOO EH WKH ILIWK 5HJLRQDO &HQWUH RI ([SHUWLVH RQ 6XVWDLQDEOH (GXFDWLRQ LQ &DQDGD DQG WKH ILUVW LQ $WODQWLF 1RUWK $PHULFD

Indicator 4: Cases and examples derived from the audit or other on campus environmental work are incorporated into coursework.

,QFRUSRUDWLRQ RI WKH HQYLURQPHQWDO DXGLWV (QYLURQPHQWDO 3ROLF\ RU RWKHU FDPSXV HQYLURQPHQWDO ZRUN ZLWKLQ FRXUVHZRUN ZDV QRW UHSRUWHG +RZHYHU WKHUH DUH UHSRUWV RI FODVVHV LPSOHPHQWLQJ WKHLU RZQ SURMHFWV RQ FDPSXV DQG LQ WKH FRPPXQLW\ )RU H[DPSOH D FRXUVH OHG E\ 'U :DOWHUV FRQGXFWHG WKH SUHOLPLQDU\ ZRUN UHTXLUHG IRU GUDIWLQJ WKH FXUUHQW H[HFXWLYH RUGHU [SRSOH LQFOXGH D &RPPHUFH FODVV DW WKH FRPPXQLW\ JDUGHQ DQG DQ (QYLURQPHQWDO 6WXGLHV FODVV FUHDWLQJ D SODQ IRU WKH)DUPHU¶V 0DUNHW VHH ,QGLFDWRU RI 6WHZDUGVKLS IRU PRUH GHWDLOV RQ FODVV LQYROYHPHQW LQ WKH FRPPXQLW\

Indicator 5: An environmental certificate acknowledging that a student is graduating with an understanding of environmental issues, resulting from taking a certain number of related courses, is awarded upon graduation.

7R GDWH WKHUH LV QR FHUWLILFDWH DFNQRZOHGJLQJ WKDW D VWXGHQW L JUDGXDWLQJ ZLWK DQ XQGHUVWDQGLQJ RI HQYLURQPHQWDO LVVXHV 7KLV

&DQDGD UHVHDUFK JUDQWV DQG LQYROYH VWXGHQWV LQ WKHLU ZRUN)DFXOW\ UHVHDUFK FDQ EH YLHZHG RQ LQGLYLGXDO DFDGHPLF GHSDUWPHQW ZHEVLWHV

,QGLYLGXDO IDFXOW\ DQG VWXGHQW SXEOLFDWLRQV DUH RIWHQ FRQWHQW 'XH WR WKH VPDOO QDWXUH RI D QXPEHU RI GHSDUWPHQWV VWDII WXUQRYHU FDQ KDYH D PRUH VLJQLILFDQW LPSDFW RQ FRXUVH FRQWHQW DQG DYDLODELOLW\ WKDQ DW ODUJHU XQLYHUVLWLHV

Summary

:LWK LQFUHDVHG HQUROPHQW LQ WKH 'HSDUWPHQW RI *HRJUDSK\ DQG (QYLURQPHQW DQG WKH GLPLQLVKHG HQUROPHQW LQ HQYLURQPHQWDO FRXUVHV LQ RWKHU GHSDUWPHQWV RQH KDV WR ZRQGHU LI VWXGHQWV DUH UHO\LQJ RQ WKH 'HSDUWPHQW RI *HRJUDSK\ DQG (QYLURQPHQW IRU DOO RI WKHLU HQYLURQPHQWDO LVVXHV HGXFDWLRQ :KLOH HQYLURQPHQWDO LVVXHV DUH RQH RI WKH GHSDUWPHQW V PDLQ IRFXV LW VKRXOG QRW EH IRUJRWWHQ WKDW WKHUH LV FURVVRYHU RI WKH HQYLURQPHQW LQWR PDQ\ RWKHU GLVFLSOLQHV -XVW OLNH WKHUH LV FURVVRYHU RI RWKHU GLVFLSOLQHV LQWR *HRJUDSK\ DQG (QYLURQPHQW 2YHUDOO GHSDUWPHQWV FRQWLQXH WR VSHDUKHDG LQYROYHPHQW ZLWK FRPPXQLW\ JURXSV DQG EH\RQG DV ZHOO DV FRQGXFW HQYLURQPHQWDO UHVHDUFK $ QXPEHU RI LQWHUYLHZHHV GLG QRW VHH WKH QWF´ P €Ä0 Ä€ RQGQYLURQPHQWDO •WLRHU WKH H UWKHV FM((HVH

P € •0 Ä€

,QGLFDWR	6WDWH RI $LUV	6WDWH RI $II	6WDWH RI $II	6KRUW 7HU 5HFRPPHQGD	/RQJ 7HUP 5HFRPPHQGD
3URJUHVV RI HQYLURQPHQ FXUULFXOXP	)DFXOW\ DQG DGGLWLRQV V KDYH LPSURYH SURJUHVV RI ($OOLVRQ¶V HQ				

Paper

³3HRSOH ZKR ZLOO QRW VXVWDLQ WUHHV ZLOO VRRQ OLYH LQ D ZRUOG WKDW ZLOO QRW VXVWDLQ SHRSOH´ ±%U\FH 1HOVRQ

Introduction

VSHFLILF SXUSRVHV VXFK DV DQ DUFKLYHG FRS\ NHSW DW WKH 5HJLVWUDU¶V 2IILFH

Food

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU WKURXJK WKH 'HSDUWPHQW RI $GPLQLVWUDWLYH 6HUYLFHV WR PLQLPL]H WKH HFRORJLFDO LPSDFW RI IRRG FRQVXPSWLRQ RQ FDPSXV 07$ 3ROLF\

Introduction

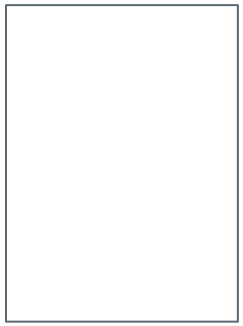
:H OLYH LQ D VRFLHW\ ZKHUH WKH FKRLFH RI ZKDW JRHV RQ RXU SODWH DQG LQ RXU EHOOLHV LV YDVW 7KHUH LV JURZLQJ FRQFHUQ RYHU WKH HQYLURQPHQWDO FRQVHTXHQFHV RI RXU IRRG 7R PLWLJDWH WKH LPSDFW RXU IRRG KDV RQ WKH HQYLURQPHQW LQGLYLGXDOV FDQ HDW ORFDOO\ FRQVXPH OHVV PHDW JURZ WKHLU RZQ SURGXFH DQG VXSSRUW RUJDQLF DQG EHVW SUDFWLFHV IDUPLQJ :LWK DQ KDOI RI WKH VWXGHQW ERG\ OLYLQJ RQ FDPSXV LW

ZDVWH DQG UHVRXUFHV XVHG WR ZDVK WUD\V 'LQLQJ 6HUYLFHV FRQWLQXHV WR GR VRPH RQ GHPDQG FRRNLQJ VR DV WR PLQLPL]H IRRG ZDVWH 6HUYLQJV DQG SRUWLRQV FRQVXPHG SHU PHDO DUH DOVR WUDFNHG WR EH XVHG IRU IXWXUH PHDO SODQQLQJ

$V SDUW RI D 'LQLQJ 6HUYLFHV EXVLQHVV VWUDWHJ\ LPSOHPHQWHG LQ 6HSWHPEHU SRUWLRQ VL]HV KDYH EHHQ UHGXFHG WR DOORZ VWXGHQWV WR VDPSOH D ZLGHU YDULHW\ RI FKRLFHV DV ZHOO DV UHGXFH ZDVWH ,Q PDQ\ FDVHV D VPDOOHU VL]H RI LQGLYLGXDO GLVKZDUH ZDV SXUFKDVHG VXFK DV YHVVHOV IRU EDNHG SDVWD

°XFEOðXOS°`W
6HUYL@Ò 0@V@€E@@0 IH 6Q PDQ

WWPZ6P...PHK LP@t@´@:00S WA0` WAÜSP:0@@



\HW PHW 7KH IDUP FRRUGLQDWRU KDV GUDZQ XSRQ ORFDO UHVRXUFHV VXFK

Recommendations

Short Term

-)DUP VSHFLILF
  - ,PSOHPHQW WKH IDUP DGYLVRU\ FRPPLWWHH LQ RUGHU WR HQJ

&KLQD RU UH
SODVWLFV D

Solid Waste

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU XQGHU WKH VXSHUYLVLRQ RI WKH 'HSDUWPHQW RI)DFLOLWLHV 0DQDJHPHQW WR PLQLPL]H VROLG ZDVWH SURGXFWLRQ 07$ 3ROLF\

Introduction

7DNLQJ D FORVHU ORRN DW WKH DPRXQW DQG W\SH RI ZDVWH ZH SURGXFH DV LQGLYLGXDOV DQG DV FRPPXQLWLHV LV RIWHQ DSSURDFKHG KHVLWDQWO\ DV LW FDQ TXLFNO\ EHFRPH D FRPSOLFDWHG DQG PHVV\ SURFHVV 8QGHUVWDQGLQJ KRZ WKH 0RXQW $OLVRQ FRPPXQLW\ GHDOV ZLWK VROLG ZDVWH LV LQWHJUDO WR UHGXFLQJ UH XVLQJ DQG UHF\FOLQJ SURGXFWV LQ RUGHU WR OHVVHQ RXU IRRWSULQW DV FRQVXPHUV)XUWKHUPRUH UHYLHZLQJ FXUUHQW SURFHVVHV LV WKH NH\ WR LGHQWLI\LQJ RXU EHKDYLRXU DQG UHFRJQL]LQJ ZKDW HIIRUWV DUH DOUHDG\ EHLQJ PDGH WR LQFUHDVH ODQGILOO GLYHUVLRQ UDWHV PDNH OLIHF\FOH FRQVFLRXV FKRLFHV DQG GHFUHDVH RXU FDPSXV¶ HQYLURQPHQWDO LPSDFW ZKHQ LW FRPHV WR VROLG ZDVWH PDQDJHPHQW

,Q WDNLQJ WKH FDUH GHS SURDFK ZKHQ DXGLWLQJ VRPH W\SHV RI ZDVWH DUH QRW DGGUHVVH@@P @ W@ àH UH N àHt6€

†r `UZÀDWWFQpQCpK R€D T ¸H • R€Q W HI

• U• GL`PSDVDO 0GG

PDWHULDO WKDW DUH FKXUQHG LQ ODUJH SLOHV WR EH UHF\FOHG

XVHG RQ 5HLQLQJ :HVWZDVWH LV DGGHG WR WKH :$6:& VLWH

7DEOH([DPSOHV RI PDWHULDOV VHQW IURP :$6:& WR EH UHF\FOHG

More than paper and pizza boxes

:DVWH WKDW GRHV QRW ILW LQWR WKH :HVW\VWHP LV GHDOW ZLWK LQ D YDULHW\ RI ZD\V :KLOH QRW DV DSSDUHQW RQ FDPSXV DV VRUWLQJ VWDWLRQV DQG PHWDO JDUEDJH ELQV VSHFLILF ZDVWH VWUHDPV DUH GHDOW ZLWK E\ FHUWDLQ GHSDUWPHQWV RQ D GDLO\ EDVLV 6RPH XQFRQYHQWLRQDO ZDVWH JRHV WR WKH :$6:& ODQGILOO VLWH VHH ,QGLFDWRUV :DVWH WKDW :$6:& FODVVLILHV DV µ+RXVHKROG +D]DUGRXV :DVWH¶ LV QRW DFFHSWHG IURP FRPPHUFLDO LQVWLWXWLRQV OLNH 0RXQW $OLVRQ 7KLV LQFOXGHV FRPSDFW IOXRUHVFHQW OLJKWV EDWWHULHV DQG SDLQW 7KHVH DUH GLVSRVHG RI E\ D &DQDGLDQ LQGXVWULDO ZDVWH PDQDJHPHQW FRPSDQ\ FDOOHG 1HZDOWD ZKLFK VWULYHV WR UH XVH UHF\FOH DQG GLVSRVH RI PDWHULDOV LQ DQ HQYLURQPHQWDOO\ UHVSRQVLEOH PDQQHU WKHLU IDFLOLW\ LV ORFDWHG LQ 6XVVH[1% &DUGHUDUG LV SURHQG LQJ DLQ 6WHHQG LQ 6XVVH[+DOO WKH ODUJHVW SURGXFHU RI FDUGERDUG ZDVWH RQ FDPSXV DQG WDNHQ DZD\ E\ 0', WR EH UHF\FOHG DW :$6:&

Indicator 1: There is an effective waste reduction program

7KHUH LV QR FDPSXV ZLGH FRRUGLQDWHG ZDVWH UHGXFWLRQ SURJUDP LQ SODFH 7KH :DVWH $XGLW LQFOXGHG D *UHHQ 3ODQ ZLWK

VLPSOH TXDQWLWDWLYH WDUJHWV DV D PHDV RI IOXFWXDWLQJ VWXGHQW QXPEHUV VWDII HQFRXUDJLQJ KRDUGLQJ ± DQ DFWLYLW\ ZKLF VWRUDJH VSDFH RQ FDPSXV LQ HIIRUWV WR U PHHW WDUJHWV)DFLOLWLHV 0DQDJHPHQW WKH 'XPS 'RQDWH SURJUDP LQ WKH %DUFOD\ )OHPLQJWRQ EXLOGLQJ¶V *DUEDJH HQFRXUDJLQJ WKH UHPRYDO RI H[FHVV HTXLS LPSRUWDQW VWUDWHJLHV LQ DQ RYHUDOO ZDVWH UHGXFWLRQ SURJUDP WKDW ZKLOH D ZDVWH UHGXFWLRQ SURJUDP HIIHFWLYHQHVV RI VXFK D SURJUDP QHHG WR EH IHD

Indicator 2: The wet/dry program is utilized effectively.

7KHUH LV QR FDPSXV ZLGH FRRUGLQDWHG ZDVWH UHGXFWLRQ SURJUDP LQ SODFH 7KH :DVWH $XGLW LQFOXGHG D *UHHQ 3ODQ ZLWK

GRHV QRW SURPRWH XQGHUVWDQGLQJ WKH :$6:& VRUWLQJ V\VWHP ,W ZDV IXUWKHU UHSRUWHG WKDW ZKHQ VPDOOHU ELQV ZHUH LQLWLDOO\ UHPRYHG VWXGHQWV ZRXOG RIWHQ OHDYH JDUEDJH LQ FODVVURRPV WKXV FUHDWLQJ PRUH ZRUN IRU VWDII DOWKRXJK RQH LQWHUYLHZHH DUJXHG WKDW WKLV ZDV DOZD\V WKH FDVH VLPSO\ GXH WR ODFN RI UHVSHFW (LWKHU ZD\ LW ZDV UHSRUWHG WKDW WKLV WUDQVLWLRQ SHULRG DSSHDUV WR EH FRPLQJ WR D FORVH DQG WKH VHFRQG \HDU RI FHQWUDO VRUWLQJ LV SURYLQJ VXFFHVVIXO IURP WKH SHUVSHFWLYH RI FXVWRGLDO VWDII :HW UHFHSWDFOHV DUH DOVR EHLQJ UHPRYHG IURP RIILFHV WR SURPRWH JRRG VRUWLQJ EHKDYLRXU SODFH PRUH UHVSRQVLELOLW\ RQ XVHUV LQVWHDG RI &XVWRGLDO IRU HPSW\LQJ ELQV DQG GHFUHDVH WKH QXPEHU RI EDJV XVHG

OH@CW CW ÀRI W WU0 tð VR # ÀW0WKH PV YLSHD VW 0Lp @À€D VWR0@ R H $ I LQJ VXFFHDVH EPVp P À

E Q U

'LG \RX NQRZ"

&RPSRVW IURP :$6:& FDQQRW FXUUHQWO\ EH VROG FRPPHUFLDOO\ GXH WR WKH FRQWDPLQDWLRQ RI JODVV SLHFHV IURP LPSURSHU VRUWLQJ VR PDNH VXUH WR SXW JODVV LQWR WKH 'U\ VWUHDP

Indicator 4: Construction waste is recycled and re-used as much as possible.

&RQVWUXFWLRQ ZDVWH LV GLUHFWHG WR WKH :$6:& ODQGILOO ZLWK RWKHU XQFRQYHQWLRQDO ZDVWH VXFK DV WKDW IURP WKH)LQH $UWV 'HSDUWPHQW &RQVWUXFWLRQ ZDVWH XQGHUJRHV VLPLODU SURFHGXUHV IRU VDOYDJLQJ PDWHULDOV DV IXUQLWXUH ZDVWH LQ WKH SUHYLRXV LQGLFDWRU)DFLOLWLHV 0DQDJHPHQW ORRNV FORVHO\ DW ZDVWH LQ LWV UHVSHFWLYH

,QGLFDW	6WDWH RU $ILQ	6WDWH RI $II	6WDWH RI $IID	6KRUW WHU 5HFRPPHQGD	/RQJ WHUP 5HFRPPHQGD
7KHUH LV HIIHFWLYH UHGXFWLF SURJUDP	7KHUH LV QR Z UHGXFWLRQ SU FDPSXV	6DPH 6KRUW WHUP J UHGXFWLRQ FRRUGLQDWH SXEOLFL]H H[L UHGXFWLRQ SU /RQJ WHUP JRD UHGXFWLRQ	1R FKDQJH	5HYLHZ SURFH UHVXOWV IURP :DVWH $XGLW HIIHFWLYHQHV FRPPXQLFDWLQ DQG FRQVLGHU ZDVWH DXGLW\ @ @ @ @ D¼!“ N	

Hazardous Materials

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU XQGHU WKH VXSHUYLVLRQ RI WKH 'HSDUWPHQW RI)DFLOLWLHV 0DQDJHPHQW DQG RWKHU GHSDUWPHQWV WR OLPLW DQG PRQLWRU WKH XVH RI KD]DUGRXV PDWHULDOV RQ FDPSXV JURXQGV LQ FOHDQLQJ DQG LQ ODERUDWRULHV 07$ 3ROLF\

Introduction

,Q &DQDGD WKHUH KDV \HW WR EH D XQLIRUP IHGHUDO GHILQLWLRQ RU FODVVLILFDWLRQ VFKHPH IRU KD]DUGRXV ZDVWHV $ FRPPRQ GHILQLWLRQ LV ³Z@DVWH LV DQ\ VXEVWDQFH IRU ZKLFK WKH RZQHU JHQHUDWRU KDV QR

WXUSHQWLQH :KLOH LW LV D PLOGHU FKHPLFDO LWV ODFN RI RGRXU VKRXOG QRW IRRO WKH XVHU $V ZLWK WXUSHQWLQH VWXGLRV VKRXOG VWLOO EH SURSHUO\ YHQWLODWHG ZKHQ SDLQWLQJ 1R QHZ OHVV KD]DUGRXV VXEVWLWXWHV KDYH EHHQ SXUVXHG VLQFH WKH ODVW DXGLW

Buildings

$OWKRXJK VRPH EXLOGLQJV DW 0RXQW $OOLVRQ FRQWDLQ KD]DUGRXV PDWHULDOV VXFK DV DVEHVWRV)ODNH ERDUG 3&% V DQG PRXOG 0DQDJHPHQW KDV SURFHVVHV LQ SODFH WR GHDO ZLWK WKHVH PDWHULDOV

$Q DVEHVWRV LQYHQWRU\ ZDV FUHDWHG IROORZLQJ H[WHQVLYH WHVWLQJ DQG LQYHUVLW\ 3ROLF\ ZDV IRUPXODWHG WR RXWOLQH WKH 8QLYHUVLW\¶V SUDFWLFHV ZKHQ LW FRPHV WR GHDOLQJ ZLWK DVEHVWRV 3URSHU SODQQLQJ DQG DGKHUHQFH WR WKH GHWDLOHG DVEHVWRV SURWRFROV DUH HVVHQWLDO ZKHQ GLVWXUELQJ DQ\ PDWHULDO ZKLFK FRQWDLQV DVEHVWRV)DFLOLWLHV 0DQDJHPHQW VWDII LV WUDLQHG LQ WKH ZRUNLQJ ZLWK WKHVH PDWHULDOV RQ D VPDOO VFDOH DQG H[SHULHQFHG DQG NQRZOHGJHDEOH FRQWUDFWRUV DUH XVHG IRU ODUJHU RSHUDWLRQV $VEHVWRV LV RQO\ FRQVLGHUHG KD]DUGRXV ZKHQ DLUERUQH VR LI OHIW XQGLVWXUEHG LW SRVHV QR WKUHDW

7KH XVH RI OHDG SDLQW RQ FDPSXV FHDVHG LQ WKH ¶V DV PDQXIDFWXUHUV EHJDQ HOLPLQDWLQJ OHDG IURP WKHLU IRUPXODV :KHQ FRPSOHWLQJ DOWHUDWLRQV RU UHQRYDWLRQV WR FDPSXV EXLOGLQJV GU\ SDLQW VDPSOHV DUH VHQW IRU WHVWLQJ WR GHWHUPLQH OHDG FRQWHQW 7KH UHVXOWV RI WKHVH WHVWV DUH JLYHQ WR FRQWUDFWRUV VR WKDW WKH\ PD\ WDNH WKH QHFHVVDU\ SUHFDXWLRQV GXULQJ UHQRYDWLRQV $GGLWLRQDOO\ WKH &DUSHQWU\ VWDII UHGXFHG LWV SDLQW KROGLQJV QRQ OHDGHG SDLQW E\ 7KLV ZLOO KHOS UHGXFH WKH YROXPH RI SDLQW ZDVWH IURP WKH 8QLYHUVLW\

0RXQW $OOLVRQ KDV PDGH D FRQFHUWHG HIIRUW WR UHPRYH 3RO\FKORULQDWHG %LSKHQ\OV 3&%V IURP FDPSXV 3&%V ZHUH SULPDULO\ IRXQG LQ OLJKWLQJ DW WKH 8QLYHUVLW\ DQG KDYH EHHQ UHPRYHG LQ DOO NQRZQ

[redacted]

HDW WR EXLOGLQJV DQG KXPDQ KEALTH
EHU RQH KD]DUG 0RXOG FDQ I
7 OtC 3`G@0%kPR0`RO pHaz@dDS+P@ @ D0ÀE0 0 À O8 O` 0O G 0 À O8 G`7 ð@ O ` Mwq`YÁ Defy càpdic P P 4 pP seÅPd H

Summary

'XH WR IHGHUDO DQG SURYLQFLDO WUHDWPHQW RI PHQWDO LOOQHVV DQG ZDVWH DUH GHDOW ZLWK UHVSRQVLEO\ RQ FDPSXV $OO G,HSDUWPHQWV HQVXUH WKDW GHDO KDQG KD]DUGRXV PDWHULDOV RQ D UHJXODU EDVLV PDNH QR UHIXVH RU GLVSRVH DQG GLVSRVH RI KD]DUGRXV ZDVWH LQ D PRUH HQYL‡URQPHQWDOO\ PHPEHUV $V LW LV UHTXLUHG E\ WKHVH GHSDUWPHQWV WR VXSSRUW DOO]DLQJ PRUH UH WKH\ FDQ DOZD\V SLORW DOWHUQDWLYHV DQG #FRQ&RQWXLQXHR WR OHDUQ UHKDELOLWDQW GH WKH PRQWKO\ VDIHW\ DXGLWV FRXOG EH RQ VFKHGXOH RU HQWHUHG LQWR 8QLYHUVLW\ KDV JRRG SUDFWLFHV ZKHQ LW FRPHV WR GHDOLQJ ZLWK KD]DUGRXV PDWHULDOV

Recommendations

Short Term

‡ ,PSURYH WKH HIILFLHQF\ RI WKH WUDQVLWLRQ

DUH GHDOW ZLWK UHVSRQVLEO\ RQ FDPSXV $OO G,HSDUWPHQWV KDQG KD]DUGRXV PDWHULDOV RQ D UHJXODU EDVLV PDNH QR UHIXVH RU GLVSRVH DQG

$V LW LV UHTXLUHG E\ WKHVH GHSDUWPHQWV WR VXSSRUW DOO]DLQJ PRUH UH

WKH PRQWKO\ VDIHW\ DXGLWV FRXOG EH RQ VFKHGXOH RU HQWHUHG LQWR

Long E3 <00520051004B>-1.005005-4 <005_>0.137 rg /TT0 12.9

(IIHFWLYH HQYLURQPHQW IULHQGO\ VXS XVHG	$ IHZ QYLURQP IULHQGO\ FOH VXSSOLHV DU SXUFKDVHG E RI WKHVH SUR QRW HQIRUFH SURGXFWV DU SXUFKDVHG ZI IRUHPRVW LQ	6RPH RI RXU F VXSSOLHV DU *UHHQ 6HDO FHUWLILFDWL LV SLORW WH EDVHG FOHDQ UHSODFH 9DU	5RXJKO\ RI FOHDQLQJ SU SXUFKDVHG D E\ D UHJXODW)LQH $UWV LV VRE EDVHG FOH	&RQWLQXH H[HQYLURQPHQW IULHQGO\ RSW	8VH HQYLURQPH VXVWDLQXSSO FRQVLVWHQW FDPSXV
$OO KD]DUGR DUH SURSHUO PRQLWRUHG D GLVSRVHG RI 6XE,QGLFDWRU , +RXVHKROG KD]DUGRXV ZD ++: LV HIIHF FDSWXUHG	7KHUH LV FXU GDWDEDVH WK DOO KD]DUGR XVHG RQ FDPS ,Q D ++: E ZDV DGGHG W UHVLGHQFH	)XOO PRQLWR KD]DUGRXV PD RQ FDPSXV ZL JRYHUQPHQW DQG GDWRU ++: ELQV VXR QHJOHFW DQG ++: LV FRQWD RWKHU VWUHD	(QIRUFHG WKH PDQGDWRU\ D PRQWKO\ EDVI ++: ELQV DUH VRPH ORFDWL FDPSXV WKRX DOZD\V FOHDU	&RQVLVWHQW &RQGXFW RQ W LPSRUWDQFH VHSDUDWLQJ SURYLGH PRU 7KHVH ELQV V SODFHG LQ HD EXLOGLQJ	&UHDWH D ZHI GHWDLOV DOO PDWHULDOV X FDPSXV DQG W 06'6V 5HGXFH XVH R SURGXFWV ZL KD]DUGRXV FR
(QYLURQPHQW 3URWHFWLRQ	1R 5HFRPPHQ(	)DFLOLWLHV 0 LV FXUUHQWO D +D]DUGRXV 6SLOO 5HVSR(WR EHWWHU H VWDII WR UHV			

Grounds Keeping

³,Q WKH WZHQW\ ILUVW FHQWXU\ WKH FDPSXV ODQGVFDSH LV EHLQJ UH HYDOXDWHG DV D SHGDJRJLFDO UHVRXUFH IRU OHDUQLQJ DV±ZHOO DV LWV HQYLURQPHQWDO EHQHILWV´ -D\

Introduction

7KH JURXQGV DW 0RXQW $OOLVRQ DUH EHDXWLIXO DQG LQYLWLQJ)DFXOW\ VWDII VWXGHQWV DQG WKH VXUURXQGLQJ FRPPXQLW\ WDNH SULGH LQ WKH SK\VLFDO DSSHDUDQFH RI WKH FDPSXV 0RXQW $OOLVRQ¶V DWWUDFWLYH JURXQGV DQG GLVWLQFW FDPSXV DUH DQ LPSRUWDQW SDUW RI WKH 8QLYHUVLW\¶V LPDJH ,Q NHHSLQJ ZLWK 0RXQW $OOLVRQ¶V JRDO WR KDYH DQ DHVWKHWLFDOO\ SOHDVLQJ FDPSXV WKH *URXQGV 'HSDUWPHQW LV IDFHG ZLWK PDQ\ WDVNV LQFOXGLQJ KRZ WR GHDO ZLWK ZHHGV ZKDW WR SODQW KRZ WR XVH UHVRXUFHV PRVW HIIHFWLYHO\ DQG KRZ WR H[LVW KDUPRQLRXVO\ ZLWK WKH VXUURXQGLQJ QDWXUDO HQYLURQPHQW

In

Indicator 4: The landscape is designed to use minimal resources.

0RZLQJ DQG WULPPLQJ FRQWLQXHV WR RFFXU DURXQG FDPSXV ,W LV D VDIHW\ DQG DHVWKHWLF UHTXLUHPHQW ,W LV GLIILFXOW WR WUDFN WKH FDUERQ IRRWSULQW RI WKH PRZHUV DQG WULPPHUV EHFDXVH WKHLU HIILFLHQF\ LV PHDVXUHG E\ KRXUV SHU OLWUH UDWKHU WKDQ E\ NLORPHWUHV SHU OLWUH *URXQGV SRVVHVVHV SURSDQH ZDQGV IRU LQFLQHUDWLQJ ZHHGV DORQJ ZDON ZD\V 7KRXJK LW LV ORZ WR[LF ZD\ RI HOLPLQDWLQJ XQVLJKWO\ ZHHGV WKH\ GR QRW NLOO WKH URRW V\VWHP RI WKH ZHHG $GGLWLRQDOO\ ZKHQ WKHVH ZDQGV DUH XVHG WKH\ UHTXLUH ODUJH QRQ TÀQJ H WKI UPð0UZKWO€P àHGV % W Q0 PÐ-Z `ðPP Z0RZ ZKRX¶@ PÀW KH\ KDG@@PPPðO0UÐ DÀW3W KHIZÀ \V ð0

PLQLPL]H LWV XVH ZLWKRXW QHJDWLYHO\ LPSDFWLQJ WKH HQYLURQPHQW DQG VHQVLWLYH HFRORJLFDO DUHDV
FRPPLWWHG WR HQVXULQJ WKH HQYLURQPHQWDO VXVWDLQDELOLW\ RI RXU RSHUDWLRQV
$OOLVRQ ODQGVFDSH ZLWKRXW WKH JXLGDQFH RI DQ HQYLURQPHQWDO VSHFLDOLVW
LQ WKH (QYLURQPHQWDO 3ROLF\ 2YHUDOO *URXQGZDWHU ,QVWLWXWLRQDO &RQWURO
0RXQW $OOLVRQ ODQGVFDSH GHVLJQ VDIH ORZ FRVW SODQWV RFFDVLRQDOO\ $YRLGL
ORZ ULVN ZKLOH PDLQWDLQLQJ LWV SUDFWLFDOLW\ SURYLQFHV

Recommendations

Short Term

- (YDOXDWH WKH IHDVLELOLW\ RI FROOHFWLQJ UDLQ ZDWHU IRU ZDWHULQJ
- &RQWLQXH SRVWLQJ HGXFDWLRQDO VLJQDJH DQG SURPRWLQJ JUHHQ VSDFHV RQ FDPSXV IRU DOO PHPEHUV RI WKH 8QLYHUVLW\ FRPPXQLW\ WR HQMR\

Long Term

- &RQWLQXH WR H[SORUH ZD\V WR UHGXFH
- &RQWLQXH PRQLWRULQJ WKH HIIHFWLYHQHVV RI WKH 3ROLF\ WR KHO
WRROV DQG SURFHVVHV IRU ZDWHU FRQVHUYDWLRQ

*URXQGV HGXFDWL SXUSRVH	*URXQGV FRQVLVW RI VHYHUDO GHSDUWPH XVH JURXQGV DV D O VSDFH IRU DUW LQVWDOODWLRQV SH	7KH FROODEI VWLOO JRLQ VWXGHQWV D HQFRXUDJHG VLJQDJH WR JURXQGV IRU HGXFDWLRQD SXUSRVHV	&ROODERUDWL GHSDUWPHQWV RFFXUULQJ	&RQWLQXH W HQFRXUDJH IDFXOW\ DQG WR XVH WKH WR HQKDQFH (OLFLW WKH VWXGHQWV V D PDS RI WK JURXQGV DQ SODQW VSHF	1R 5HFRPPHQ

New Buildings and Renovations

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU XQGHU WKH VXSHUYLVLRQ RI)DFLOLWLHV 0DQDJHPHQW WR PLQLPL]H WKH HFRORJLFDO LPSDFW RI WKH FRQVWUXFWLRQ PDLQWHQDQFH DQG RSHUDWLRQ RI WKH EXLOGLQJV RQ FDPSXV 07$ 3ROLF\

Introduction

7KHUH DUH D VSHFWUXP RI EHQHILWV WR LQFRUSRUDWLQJ VXVWDLQDELOLW\ LQWR EXLOGLQJV DQG UHQRYDWLRQV 7KHVH LQFOXGH HQHUJ\ VDYLQJV UHGXFHG PDLQWHQDQFH QHHGV ORZHU LPSDFW RQ WKH VXUURXQGLQJ HQYLURQPHQW KHDOWKLHU LQGRRU VSDFHV DQG UHVRXUFH VDYLQJV %XLOGLQJ VXVWDLQDEO\ FDQ FRQVLVW RI VDOYDJLQJ PDWHULDOV PDNLQJ XVH RI SDVVLYH HQHUJ\ XVLQJ OHVV KD]DUGRXV PDWHULDOV VHOHFWLQJ WKH ULJKW PDWHULDOV IRU WKH ULJKW SURMHFW RU XVLQJ ORZ PDLQWHQDQFH PDWHULDOV &RQVLGHULQJ HQYLURQPHQWDO IDFWRUV LV FUXFLDO LQ WKH GHVLJQ VWDJH RI D QHZ SURMHFW EHFDXVH LQFOXGLQJ WKHP DV DQ DIWHUWKRXJKW FDQ EH FRVWO\ DQG GLIILFXOW %XLOGLQJ DQG UHQRYDWLQJ LQ DQ HQYLURQPHQWDOO\ VXVWDLQDEOH ZD\ LV SURFHVV WKDW VKRXOG EH JLYHQ FDUHIXO FRQVLGHUDWLRQ DQG SODQQLQJ DQG SRVW VHFRQGDU\ LQVWLWXWLRQV DUH QR H[FHSWLRQ

Indicator 1: Response time for major building maintenance and repair is monitored and minimized.

7KH 0RXQW $OOLVRQ FDPSXV KDV PDQ\ JHQHUDWLRQV RI EXLOGLQJV DQG NHHSLQJ XS ZLWK WKHLU PDLQWHQDQFH LV HVVHQWLDO WR HQVXUH WKDW HDFK EXLOGLQJ FDQ EH XVHG IRU WKHLU LQWHQGHG SXUSRVH $V WKH PDMRULW\ RI EXLOGLQJV ZHUH FRQVWUXFWHG LQ WKH ¶V DQG WKH DYHUDJH EXLOGLQJ

,QGLFDW	6WDWH RI $IID	6WDWH RI $IIDLU	6WDWH$HIDLUV	6KRUW 7 *RDOV	/RQJ 7HUP *
5HVSRQVH V IRU EXLOGL PDLQWHQDQ UHSDLUV LV PRQLWRUHG PLQLPL]HG	5HSDLUV DUH DFFRUGLQJ WR 7KH)&, R$ DW IURP ZKDW LW DQ LQGLFDWLR JUHDW GHDO R PDLQWHQDQFH RQ BåQ˜ÀHI HDW				

Energy

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU XQGHU WKH VXSHUYLVLRQ RI WKH 'HSDUWPHQW RI)DFLOLWLHV 0DQDJHPHQW WR PLQLPL]H HQHUJ\ FRQVXPSWLRQ UHGXFH HPLVVLRQV DQG UHGXFH WKH FRQVXPSWLRQ RI IRVVLO IXHOV DQG RWKHU QRQ UHQHZDEOH HQHUJ\ VRXUFHV 07$ 3ROLF\

Introduction

:LWK QHZ IDFHWV RI HQHUJ\ SURGXFWLRQ DQG FRQVXPSWLRQ EHLQJ EURXJKW WR WKH IRUHIURQW RI WHFKQRORJLFDO VRFLDO DQG HFRQRPLF GHFLVLRQV LW LV FOHDU WKDW HQHUJ\ LV D KRW WRSLF LQ WKH HQYLUR VSKHUH DV ZHOO DV E\ WKH DYHUDJH RIILFH EXLOGLQJ ZDWHU FRROHU &RDO RLO

7DEOH IRU HQHUJ\ DQG IXHO FRQVXPSWLRQ E\ 0RXQW $OOLVRQ IRU WKH SDVW VHYHUDO \HDUV

)DFLOLWLHV 0DQDJHPHQW KDV GHFLGHG WR XVH)LVFDO \HDU DV WKH EDVHOLQH IRU WKH *UHHQ (YROYLQJ)XQG 7KLV GHFLVLRQ ZDV PDGH EHFDXVH LW LV WKH ODVW \HDU LQ ZKLFK WKH 8QLYHUVLW\¶V HQHUJ\ FRQVXPSWLRQ ILJXUHV DUH QRW DIIHFWHG E\ SURMHFWV UHVXOWLQJ IURP WKH)XQG

,W ZDV QRWHG WKDW DOWKRXJK GDWD H[LVWV IURP HOHFWULFLW\ DQG VWHDP PHWHULQJ V\VWHPV IRU LQGLYLGXDO EXLOGLQJV D ODFN RI UHVRXUFHV KDV OHIW WKLV LQIRUPDWLRQ UHODWLYHO\ XQWRXFKHG

7DEOH 0RXQW $OOLVRQ V IXHO DQG HOHFWULFLW\ FRQVXPSWLRQ E\ ILVFDO \HDU 'DWD SURYLGHG E\ )LQDQFLDO 6HUYLFH

Fiscal Year	Electricity (KWH)	No. 5 Heavy Oil (Litres)	No. 2 Light Oil (Litres)	Low Sulfur Diesel (Litres)	Propane (Litres)

LPSOHPHQW WKHVH WHFKQRORJLHV ,W ZDV DOVR PHQWLRQHG WKDW 0RXQW $OOLVRQ LV ILUVW DQG IRUHPRVW D XQLYHUVLW\ VR UHVRXUFHV DUH GLUHFWHG WRZDUGV DFDGHPLFV EHIRUH RWKHU SURMHFWV OLNH UHQHZDEOH HQHUJ\ FDQ EH FRQVLGHUHG ,W ZDV DOVR PHQWLRQHG WKDW WKH HVWDEOLVKPHQW RI WKH *UHHQ (YROXWLRQ VHHQ DV DQ RSSRUWXQLW\ IRU LQYHVWPHQW LQ UHQHZDEOH HQHUJ\ SURGXFWLRQ DV W

Indicator 3: Government initiatives are monitored to ensure participation

*RYHUQPHQW LQLWLDWLYHV DUH EHLQJ PHDVXUHG RQ D GHSDUWPHQWDO EDVLV 6SHFLILFDOO\ 8QLYHUVLW\ $GYDQFHPHQW DQG)DFLOLWLHV 0DQDJHPHQW KLJKOLJKWHG WDNLQJ DGYDQWDJH RI WKHVH SURJUDPV WR KHOS PDNH SURMHFWV HFRQRPLFDOO\ YLDEOH &HQWUH UHQRYDWLRQV UHFHLYHG VXSSRUW IURP 5HFUHDWLRQDO ,QIUDVWUXFWXUH &DQDGD DQG UHSODFHG RXW GDWHG WHFKQRORJ\ ZLWK QHZHU PRUH HIILFLHQW V\VWHPV

Summary

,W LV FOHDU WKDW DW WKH WLPH RI WKLV $XGLW 0RXQW $OOLVRQ LV LQ D SRVLWLRQ WR QDWLRQDO JUHDW SURJUHVV IRU HQHUJ\ VWHZDUGVKLS 0DQ\ PHPEHUV RI WKH FDPSXV FRPPXQLW\ KLJKOLJKWHG WKH *UHHQ (YROYLQJ)XQG DV D VRXUFH RI LQQRYDWLRQ DQG SRVVLELOLW\ IRU WKH LQVWLWXWLRQ WR PRYH IRUZDUG $V WKH VHFRQG \HDU\RI WKLV)XQG EHJLQV LW LV FOHDUO KDYLQJ D SRVLWLYH LPSDFW RQ ERWK LQIUDVWUXFWXUH DQG GHPRQVWUDWLQJ FRPPLWPHQW RQ WKH SDUW RI WKH 8QLYHUVLW\ ,Q WHUPV RI DZDUHQHVV WKHUH KDV EHHQ OLWWOH SURJUHVV LQ UHFHQW \HDUV DVLGH IURP VPDOOHU FDPSDLJQV IRU HQHUJ\ FRQVFLRXV EHKDYLRXU LPSOHPHQWHG E\ DGPLQLVWUDWLRQ LQGLYLGXDOV DQG VWXGHQW JURXSV (YHQ WKH *()² ZKLFK KDV VWDII DQG IDFXOW\ H[FLWHG²KDV QRW \HW EHHQ ZHOO DGYHUWLVHG WR WKH JUHDWHU FDPSXV FRPPXQLW\ €ÀE$`À

Indicator	State of Affairs 2005	State of Affairs 2008	State of Affairs 2011	Short Term Recommendation	Long Term Recommendation
Total Energy Consumption has de					

Alternative energy sources are used.	1 RQH XVHG GXH WR FRV	1 R FKDQJH 6 KRUWWHUP JRDO XVH RQH DOWHUQDWLYH HQHUJ\ VRXUFH / RQJ WHUP JRDO KDORI HQHUJ\ IURP DOWHUQDWLYH VRXUFH\	1 R FKDQJH	&RQWLQXH WR H[SORUH SRVVLELOLWLHV ZLWKLQ * UHHQ (YROYLQJ) XQG ([SORUH WKH RSWRQ RI SXUFKDVLQJ SRZHU IURP DQ DOWHUQDWLYH HQHUJ\ VXSSOLHU WKDW JHQHUDWHV HQHFWULFLW XVLQJ UHQHZDEOH VRXUFHV LH %XOOURJ 3RZHU	&RPPLWWHQWWR DFWLYH H[SORUH WKH YLDELOLWV RI UHQHZDEOH HQHUJ\ RSWLRQV DQG LP S HP HQWWKHP DV GHFLGHG LQ WKH 3ODX
Government initiatives are monitored to ensure participation in relevant programs in the areas of pollution reduction and energy efficiency	* F\ HUQP HQ LQFHQWLYHV DUH P RQLWRUHG RQ DQ LQGLYLGXDO RU GHSDUWP HQWDO EDVL\	1 R FKDQJH	1 R FKDQJH $ XGL\ VKR[Â I „ HëÂ		

Water

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU XQGHU WKH VXSHUYLVLRQ RI WKH 'HSDUWPHQW RI)DFLOLWLHV 0DQDJHPHQW WR PLQLPL]H ZDWHU FRQVXPSWLRQ 07$ 3RLF\

Introduction

%HWZHHQ WKH *UHDW ODNHV DQG WKH PLJKW\ 7DQWUDPDU 5LYHU LW LV RIWHQ HDV\ WR WDNH DFFHVV WR ZDWHU IRU JUDQWHG 8QGHUVWDQGLQJ KRZ ZDWHU HEEV DQG IORZV WKURXJKRXW 0RQW $OLVRQ KHOSV LGHQWLI\ DUHDV IRU FRQVHUYDWLRQ DQG DGMXVWPHQW WR EHVW XVH WKLV SUHFLRXV UHVRXUFH

:KLOH 0RXQW $OLVRQ LV VRPHZKDW LQGHSHQGHQW IURP WKH 7RZQ RI 6DFNYLOOH LQ WHUPV RI RSHUDWLRQV IRU KHDWLQJ ZDVWH DQG JURXQGV NHHSLQJ WKH 6HQLRU *RYHUQPHQW ZRUNV WKHUH LV IRFXV IRU ZDWHU 7KH FDPSXV LV D GHPDQGLQJ FXVWRPHU IRU ZDWHU WUHDWPHQW DQG GLVSRVDO DFFRXQWV IRU DSSUR[LPDWHO\ RI WKH 7RZQ RI 6DFNYLOOH¶V ZDWHU GHPDQG 7KH ZDWHU WUHDWPHQW SODQW DORQJ ZLWK LWV WZR DUWHVLDQ ZHOOV LV ORFDWHG VHYHUDO NLORPHWUHV QRUWK ZHVW IURP GRZQWRZQ 7KH VLWH LV RSHUDWHG XQGHU FRQWUDFW E\ 9HROLD D FRPSDQ\ WKDW PDQDJHV LW YLUWXDOO\ IURP WKHLU FHQWUDO RIILFH LQ 0RQFWRQ :DWHU LV WUHDWHG RQ VLWH XVLQJ JUHHQ VDQG ILOWHUV WR UHPRYH H[FHVV PLQHUDO FRQWHQW FKORULQH WR GLVLQIHFW FDXVWLF VRGD WR PDLQWDLQ S+ DQG SKRVSKDWH WR NHHS SLSHVXSU HXH IWRPPLQHUDO EXLOG SODQW EHLQJ DW D KLJKHU HOHYDWLRQ WKDQ WKH DUHD LW VHUYHV ZDWHU IORZV QDWXUDOO\ GRZQ WR FDPSXV DQG UHVLGHQWLDO 6DFNYLOOH

6HYHUDO UHFHQW GHYHORSPHQWV LQ UHODWLRQ WR ZDWHU WKDW DUH QRW GLUHFWO\ SRVW LQGLFDWRUV EXW VKRXOG EH QRWHG DUH DV IROORZV QHZ VLQFH LV WKH XVH RI WKH ZDWHU WUHDWPHQW VLWH WR KRXVH D VXUSOXV RI EDFN XS FKORULQH WDQNV DV SDUW RI DQ LQIOXHQ]D HPHUJHQF\ SUHSDUHGQHVV VWUDWHJ\ IRU 6DFNYLOOH LQ -XQH WKH FRQVWUXFWLRQ RI WKH ZDWHU WRZHU ZDV FRPSOHWHG LWV SULPDU\ SXUSRVH LV WR EH DQ HPHUJHQF\ VRXUFH RI ZDWHU LQ FDVH RI UHJXODU VXSSO\ GHSOHWLRQ GXH WR ILUH

Recommendations

Short Term

- LPSOHPHQW D FRRUGLQDWHG FDPSXV ZLGH HGXFDWLRQ FDPSDLJQ DERXW ZDWHU XVH WR LQFOXGH
  - LPSRUWDQFH RI UHSRUWLQJ OHDN\ IL[WXUHV SURPSWO\
  - ORZ IORZ WHFKQRORJ\ WKDW LV LQ SODFH HVSHFLDOO\ 5HVLGHQFHV
  - SODQQHG SURMHFWV WR LQFUHDVH ZDWHU HIILFLHQF\
  - WKLV FRXOG EH GRQH E\ )DFLOLWLHV 0DQDJHPHQW LQ FROODERUDWLRQ ZLWK LQGLYLGXDO VWXGHQW SURMHFWV DQG RU FDPSXV JURXSV
- LQYHQWRU\ DOO ZDWHU IL[WXUHV LQ DFDGHPLF EXLOGLQJV WR IRUPDOL]H ³NQRZLQJ ZKDW LV WKHUH´ DQG WR SODQ IRU IXWXUH SURMHFWV
- LW LV UHFRPPHQGHG WKDW DFDGHPLF EXLOGLQJV KDYH ORZ IORZ WRLOHWV DQG DHUDWRUV LQVWDOOHG
- LQFOXGH SOXPELQJ VWDII RQ PDLQWHQDQFH EOLW]HV LQ DOO EXLOGLQJV WR WKRUXJKO\ FKHFN IRU OHDNV DQG LQHIILFLHQFLHV
- ORRN LQWR LPSURYLQJ HIILFLHQF\ RI DO QHZ ZD\V WR GHFUHDVH ZDWHU FRQVXPS LQ RU HVWDEOLVKLQJ D IXQG VLPLODU W VDYH ZDWHU DQG FUHDWH VDYLQJV IRU EXLOGLQJV RQ FDPSXV

Long Term

- FRQVLGHU UDLQZDWHU FROOHFWLRQ V\VWHPV VLPLODU WR :DOODFH 0F&DLQ 6WXGHQW &HQWUH IRU IXWXUH UHQRYDWLRQV DQG QHZ EXLOGLQJV RQ FDPSXV

,QGLFDW	6WDWH RI $IID	6WDWH RI $II	6WDWH RI $IID	6KRUW 7H 5HFRPPHQGI

0 R W L R Q
' H W H F W R U

%DFNIORZ SUHYHQWL	%DFNIORZ SUHY LQVHWDOO ODERU UHQRYDWLRQV ZHUH VWLOO PD ZLWKRXW EDFNI SUHYHQWLRQ	1R FKDQJH 6KRUW WHUP UHWURILW DV RI FDPSXV ZL EDFNIORZ SUH /RQJ WHUP JR UHWURILV	3URJUV LV EHLC 0DLQ SLSLQJ V PDLQ V\VWHP IH KDG EDFNIORZ LQVWDOOHG % SUHYHQWLRQ L RQJRLQJ IRU QI H[LVWLQJ IL[WX	1R UHFRPPHC	1R UHFRPPHQG

Transportation

7KH 8QLYHUVLW\ ZLOO HQGHDYRXU XQGHU WKH VXSHUYLVLRQ RI)DFLOLWLHV 0DQDJHPHQW WR PLQLPL]H HQHUJ\ FRQVXPSWLRQ DQG WR UHGXFH HPLVVLRQV DQG WKH FRQVXPSWLRQ RI IRVVLO IXHOV 07$ 3ROLF\

Introduction

/LYLQJ LQ 6DFNYLOOH LW LV HDV\ WR WDNH IRU JUDQWHG WKH DPHQLWLHV RI D UXUDO OLIH DPSOH SDUNLQJ OLWWOH WUDIILF DQG KLJKHU DLU TXDOLW\ DV ZHOO DV WKH DELOLW\ WR HDVLO\ ZDON RU ELF\FOH YLUWXDOO\ DQ\ZKHUH LQ WRZQ ,W FDQ EH HDV\ WR MXVWLI\ D FDU ULGH WR VFKRRO RQ D FROG ZLQWHU GD\ RU D FDE ULGH KRPH IURP WKH JURFHU\ VWRUH +RZHYHU LW LV LPSRUWDQW WR UHPHPEHU WKDW DOO RI RXU WUDQVSRUWDWLRQ GHFLVLRQV KDYH DQ LPSDFW RQ WKH HQYLURQPHQW DQG XOWLPDWHO\ LQIOXHQFH JOREDO ZDUPLQJ SURFHVVHV

$OWKRXJK 0RXQW $OOLVRQ KDV D VPDOOHU SRSXODWLRQ WKDQ PDQ\ RWKHU XQLYHUVLWLHV RXU FROOHFWLYH LPSDFW LV VWLOO VLJQLILFDQW $SSUR[LPDWHO\ ILIW\ HLJKW SHUFHQW RI WKH VWXGHQW ERG\ FRPHV IURP RXWVLGH RI 1HZ %UXQVZLFN WZHQW\ RQH SHUFHQW IURP RXWVLGH RI WKH 0DULWLPHV 1LQH SHUFHQW RI RXU VWXGHQW ERG\ LV LQWHUQDWLRQDO WUDYHOOLQJ WR 0RXQW $OOLVRQ IURP RYHU FRXQWULHV DURXQG WKH ZRUOG)XUWKHUPRUH VWXGHQWV IURP WKH 8QLYHUVLW\ SDUWLFLSDWH LQ H[FKDQJHV WR RYHU FRXQWULHV DV ZHOO DV D YDULHW\ RI DGGLWLRQDO VWXG\ DEURDG SURJUDPV

&XUUHQWO\ WKH 8QLYHUVLW\ IOHHW ± LQFOXGLQJ DFDGHPLF YHKLFOHV ± LV FRPSULVHG RI YHKLFOHV LQFOXGLQJ WUXFNV YDQV PRZHUV VZHHSHUV DQG WUDFWRUV VHH $SSHQGL[IRU D FRPSOHWH EUHDNGRZQ

PDQ\ RI WKH YHKLFOHV ZKLFK ZRXOG KDYH EHHQ LGHDO IRU XVH DW 0RXQW $OOLVRQ VXFK DV WKH &DQDGLDQ RZQHG DQG PDQXIDFWXUHG HOHFWULFDOO\ UXQ 0LJKW (WUXFN DUH LQHOLJLEOH IRU SXUFKDVH LQ 1HZ %UXQVZLFN 0RXQW $OOLVRQ LV IXUWKHU OLPLWHG EHFDXVH LWV IOHHW YHKLFOHV PXVW EH DEOH WR WUDYHO RQ GHVLJQDWHG SURYLQFLDO URDGV VXFK DV 0DLQ 6WUHHW DQG <RUN 6WUHHW DQG WKH SURYLQFH FXUUHQWO\ KDV QR OHJLVODWLRQ SHUPLWWLQJ WKH XVH RI /RZ 6SHHG 9HKLFOHV 7KLV ZDV WKH SULPDU\ UHDVRQ IRU ZKLFK DQ HOHFWULF YHKLFOH ZDV XOWLPDWHO\ QRW SXUFKDVHG

,Q WKH VHDUFK IRU D UHSODFHPHQW PDLO YHKLFOH WKH 8QLYHUVLW\ EULHIO\ H[SHULPHQWHG ZLWK WKH &OXE &DU D JROI FDU VW\OH ORZ HPLVVLRQ YHKLFOH +RZHYHU LWV LQDELOLW\ WR PHHW SHUIRUPDQFH H[SHFWDWLRQV LQ D UDQJH RI ZHDWKHU FRQGLWLRQV XOWLPDWHO\ UHQGHUHG LW DQ LPSUDFWLFDO RSWLRQ IRU WKH 8QLYHUVLW\ ,Q WKH HQG WKH 8QLYHUVLW\ SXUFKDVHG WKH)RUG 7UDQVLW &RQQHFW WR UHSODFH WKH PDLO WUXFN WKRXJK QRW HOHFWULF LW KDV GHFUHDVHG IXHO FRQVXPSWLRQ VXEVWDQWLDOO\ FRPSDUHG WR WKH SUHYLRXV YHKLFOH 7KLV PRGHO KDV D VLPLODU HOHFWULF YHUVLRQ ZKLFK LV FXUUHQWO\ QRW DYDLODEOH LQ &DQDGD KRZHYHU ZKHQ WKH HOHFWULF YHUVLRQ LV PDGH DYDLODEOH IRU SXUFKDVH WKH 8QLYHUVLW\ SODQV WR WUDGH LQ WKH D 0pRXVTFH WU@N

2YHU WKH \HDU SUHFHGLQJ WKLV DXGLW WKH 7DQWUDPDU 3ODQQLQJ

6WDWXV RI &RPPXWHU 3URJUDP

$Q LQIRUPDO ERDUG LQ WK &HQWUH ZDV PLQLPDOO\ IF SHULRG RI W WKH ERDUG V LV QR ORQJH

0W $¶V &DUSRROL 6\VWHP ZD\ ODXQFKHG

0RXQW $OOLV ORQJHU KDV SURJUDP

7KH (QYLUR &RPPLWWHH LQ I ZLWK &RPSXWLQJ D &RPSXWHU 6FLI VKRXOG UHGHVLJ ODXQFK WKH &DU ZHEVLWH DFFRPS VXIILFLHQW DGYH

WKH $XGLW IRU7KH IROORZLQJ \HDU VKRZHG D
GHFUHDVH WR PHWULF WRQQHV 7KH PDMRULW\ RI WKLV GLIIHUHQFH ZDV
UHSRUWHG WR EH DWWULEXWHG WR WKH FRQYHUVLRQ RI WKUHH ERLOHUV LQ WKH
SK\VLFDO SODQW WR QDWXUDO HPJLDWV LZRQLF WKDQ ORZHU &2
%XQNHU $ ZKHQ XVHG IRU WKH VDPH SXUSRVHV +RZHYHU WKH YHU\ ORZ
ILJXUH IRU QDWXUDO JDV HPLVVLRQV ZDV QRWHG E\ WKH DXGLWRUV DQG LV
FXUUHQWO\ EHLQJ UHYLHZHG IRU DFFXUDF\ E\ WKH 8QLYHUVLW\ 1R
FRQFOXVLRQ ZDV UHDFKHG DW WKH WLPH WKDW WKLV $XGLW ZDV SXEOLVKHG

Indicator 2: Emission levels resulting from transportation

7UDQVSRUWDWLRQ HPLVVLRQV LQFOXGHG LQ WKH LQVWLWXWLRQ¶V
FDOFXODWLRQV DPRXQWHG WR PHWULF WRQQHV RI FDUERQ GLR[LGH IRU
WKH ILVFDO \HDU 7KH IROORZLQJ \HDU VKRZHG DQ LQFUHDVH WR
PHWULF WRQQHV 1R WUDQVSRUWDWLRQ HPLVVLRQ DPRXQWV ZHUH LQFOXGHG LQ
WKH DXGLW IRU FRPSDULVRQ :KLOH FDOFXODWLQJ WUDQVSRUWDWLRQ
HPLVVLRQV FDQ SURYH XVHIXO IRU FRPSDULQJ WUHQGV RYHU VHYHUDO \HDUV
LW LV LPSRUWDQW WR QRWH WKDW YHKLFOH W\SH IXHO TXDOLW\ VSHHG DQG PDQ\
RWKHU YDULDEOHV ZLOO DIIHFW WKH TXDQWLW\ RI HPLVVLRQV DQG FDQQRW EH
PHDVXUHG ZLWK SHUIHFW SUHFLVLRQ

Indicator 3: Emission levels resultingff0.102 2EA47>12 <0003>-4 <005A0-4 <4T>6 <004 2EA47>12 6gds rwasts rX @O

WKH FDUERQ IRRWSULQW D EDVHOLQH DQG WDUJHWV KDYH QRW EHHQ VHW DW WKH WLPH RI WKH $XGLW ,W ZDV PHQWLRQHG WKDW WKHUH LV KHVLWDWLRQ GXH WR QRW ZDQWLQJ WR DUELWUDULO\ SLFN WKHVH QXPEHUV EXW UDWKHU XVH D UHVHDUFKHG PHWKRGRORJ\ 7KHUHIRUH WKH SURFHVV DSSHDUV WR EH KDOWHG XQWLO D GHFLVLRQ LV PDGH

Summary

6LQFH WKH SUHYLRXV DXGLW WKHUH KDV EHHQ JUHDW LPSURYHPHQW RQ WKH SDUW RI WKH LQVWLWXWLRQ LQ WHUPV RI UHFRUGLQJ DQG FDOFXODWLQJ JUHHQKRXVH JDV HPLVVLRQV 0DQ\ ILJXUHV GR QRW DSSHDU WR EH FRPSDUDEOH ZLWK WKRVH LQ SUHYLRXV DXGLWV GXH WR ZKDW VHHPV OLNH D ODFN RI FRQVLVWHQF\ LQ PHWKRGRORJ\ KRZHYHU)LQDQFLDO 6HUYLFHV DSSHDUV WR EH FRPPLWWHG WR FRQWLQXDOO\ LPSURYLQJ WKH SURFHVV ZKLFK VKRXOG PDNH IRU PRUH VROLG DQG UHOLDEOH GDWD LQ WKH FRPLQJ \HDUV 7KH ODFN RI HVWDEOLVKHG WDUJHWV DQG EDVHOLQHV YLRODWHV FRPPLWPHQWV PDGH LQ WKH (PLVVLRQV 5HGXFWLRQV 3ROLF\ E\ 0RXQW $OOLVRQ 7KLV PXVW EH DGKHUHG WR LQ RUGHU IRU SURJUHVV WR EH PDGH GHFLVLRQV WR EH XQGHUVWRRG DQG VXFFHVVIXO WR EH FHOHEUDWHG E\ WKH HQWLUH FDPSXV FRPPXQLW\ DV ZHOO DV H[WHUQDOO\

Recommendations

Short Term

- 5DLVH DZDUHQHVV WKURXJKRXW FDPSXV FRPPXQLW\ DERXW 0RXQW $OOLVRQ¶V HQHUJ\ VRXUFHV DQG UHODWHG HPLVVLRQV VSHFLILFDOO\ WKH FRQYHUVLRQ WR QDWXUDO JDV LQ RUGHU WR IRVWHU D VHQVH RI

,QGLFDWL	6WDWH RI $	6WDWH RI $	6WDWH RI	6KRUW 7HUP 5HFRPPHQGDW

WKLV PLJKW PDUN WKH EHJLQQLQJ RI D WUHQG WRZDUGV SODFLQJ JUHDWHU HPSKDVLV WKDQ LQ WKH SDVW XSRQ WKH HQYLURQPHQWDO DVSHFWV RI D SURGXFW UDWKHU WKDQ PHUHO\ SULFH

0RXQW $OOLVRQ LV DOVR H[SORULQJ RSSRUWXQLWLHV WR FRQGXFW WUDQVDFWLRQV WKURXJK H3URFXUHPHQW 2XWOLQHG LQ 5),V DQG 5)3V WKLV SURFHVV LQFOXGHV WR LGHQWLI\ DQG SURPRWH RSSRUWXQLWLHV IRU PHPEHUV WR DFTXLUH JRRGV DQG VHUYLFHV ZLWK HQKDQFHG YDOXH DQG UHGXFHG FRVWV

- H6RXUFLQJ ± YLHZLQJ FDWDORJXHV RQ OLQH 5HTXHVW IRU 4XRWDWLRQ 5)4 HWF
- H3URFXUHPHQW ± XVH RI UHTXLVLWLRQV IURP PXOWLSOH VLWHV DSSURYDO RI RUGHUHG DJDLQVW HVWDEOLVKHG DJUHHPHQWV RUGHULQJ RQOLQH
- H3D\PHQW ± HOHFWURQLF LQYRLFH DQG IXQGV WUDQVIHU

1RW RQO\ LV WKH SURFXUHPHQW RIILFH ORRNLQJ WR SXUFKDVH PRUH HQYLURQPHQWDOO\ IULHQGO\ SURGXFWV EXW WKH\ DUH IXUWKHU FRQFHUQHG ZLWK ˜ 'µLRQ ±
˜6RÐ˜6UL0S FQPUp@ RI D\LU€DU ± 0P±R@0p ˜ @À0 LaH € KH•POX

0SURFX0PHÀ'KU W0 R˜ H•D U@°„@` 0AEP ñE pp WH U™…UDKH@ K FH O\€P€W H GF`1RÀ€\@°€ ™€U˜

$V GLVFXVVHG LQ WKH +D]DUGRXV 0DWHULDOV VHFWLRQ RI WKH FOHDQLQJ SURGXFWV XVHG E\ FXVWRGLDO VWDII DUH WKLUG SDUW\ FHUWLILHG *UHHQ VHH +D]DUGRXV 0DWHULDOV)XUWKHUPRUH FXVWRGLDO VHUYLFHV KDV SXUFKDVHG DQG H[SHULPHQWHG ZLWK ZDWHU LRQL]HUV DV DQ DOWHUQDWLYH WR SXUFKDVLQJ FKHPLFDO FOHDQHUV

7KH 8QLYHUVLW\ ERRNVWRUH FRQWLQXHV WR VHOO FORWKLQJ ZLWK EDPERR DQG VR\ EDVHG ILEUHV DV SDUW RI WKHLU ³*R *UHHQ´ FORWKLQJ OLQH 7 KDYH DOVR FRQWLQXHG WR VHOO UHXVDEOH FORWK EDJV SULQWHG ZLWK WKH 6XVWDLQDELOLW\ 0RXQW $ ORJR $V ZDV HPSKDVL]HG LQ WKH DXGLW LQ FRQVLGHULQJ WKH HQYLURQPHQWDO LPSDFW RI D SURGXFW LW LV DOVR HVVHQWLDO WR FRQVLGHU WKH HWKLFDO IRRWSULQW 7KRXJK QR IRUPDO HWKLFDO SXUFKDVLQJ SROLF\ ± RU VHFWLRQ RI WKH 3URFXUHPHQW 3ROLF\ ± H[LVWV WKH ERRNVWRUH WULHV WR HQVXUH WKDW DOO FORWKLQJ FRPSDQLHV PHHW HWKLFDO VWDQGDUGV EHIRUH GHDOLQJ ZLWK WKHP 7KHVH FRPSDQLHV DUH UHTXLUHG WR JR WKURXJK DQ LQWHUYLHZ SURFHVV DQG PXVW SURYLGH LQIRUPDWLRQ RQ ZKHUH DQG KRZ D SURGXFW LV SURGXFHG 7KH ERRNVWRUH DOVR ZRUNV ZLWK &DPSXV 6WRUHV &DQDGD WR PRQLWRU WKHVH FRPSDQLHV

Summary

3URFXUHPHQW DW 0RXQW $OOLVRQ KDV XQGHUJRQH SRVLWLYH FKDQJHV VLQFH WKH SUHYLRXV DXGLW 7KH QHZ FODXVH RI WKH 3URFXUHPHQW 3ROLF\ SDLUHG ZLWK WKH ULVH LQ FRUSRUDWH VRFLDO DQG HQYLURQPHQWDO UHVSRQVLELOLW\ LQ WKH EXVLQHVV ZRUOG ZLOO KRSHIXOO\ EULQJ IXUWKHU FKDQJHV WR WKH W\SHV RI SURGXFWV DQG VHUYLFHV XWLOL]HG DW WKH 8QLYHUVLW\ $V LQ PDQ\ DUHDV RI WKH 8QLYHUVLW\ WKH FKDQJH LQ SROLF\ LV HDV\ LQ FRPSDULVRQ WR LPSOHPHQWLQJ D FKDQJH LQ EHKDYLRXU 7KH NH\ QRZ LV WR HQVXUH WKDW DOO FDPSXV PHPEHUV DUH DGHTXDWHO\ HGXFDWHG DERXW WKH LPSDFWV RI SURGXFWV WKH\ ± DQG WKH LQVWLWXWLRQ ± DUH XVLQJ DQG WKDW WKH\ DUH SURSHUO\ LQIRUPHG RI WKHLU SURGXFW RSWLRQV XSRQ SXUFKDVH ,Q D XQLYHUVLW\ VHWWLQJ WKHUH VKRXOG EH QR GRXEW WKDW HGXFDWLRQ LV WKH NH\ WR WUXO\ FUHDWLQJ FKDQJH DQG ZLWKRXW DGHTXDWH SURGXFW NQRZOHGJH WKHUH FDQ EH QR JUHHQLQJ RI WKH VXSSO\ FKDLQ D R X RÐŒ °fL ìu(

,QGLFDWR	6WDWH RI $II	6WDWH RI $II	6WDWH RI $II	6KRUW 7HUP	/RQJ 7HUP *
(QYLURQPHQW IDFWRUV DUH LQWR FRQVLG SXUFKDVLQJ	0RUH FRQVLG JLYHQ WR WKI PDLQO\ DV D I FXVWRPHUV D VKDUHKROGHI GHPDQGLQJ K HQYLURQPHQV VWDQGDUGV D DFFRXQWDELC VXSSOLHUV	:KHQ GUDIWLQJ HQYLURQPHQV VSHFLILFDWLI RIWHQ LQFOX UHFHLYH D ZH 7KLV KDV IDFLOLWDWHG LQFUHDVH LQ JUHHQ SURGX WKH NQRZOHG FRQVXOWDQW	:LWK WKH QHZ (QYLURQPHQW $ZDUH 3URFXI VHFWLRQ RI W 3UFRXUHPHQW HQYLURQPHQV DUH FRQVLGH SXUFKDVLQJ C (QYLURQPHQW LPSDFWV DUH FRQVLGHUHG DQG 5)3V		

DRAFT

Conclusion

0DQ\ QHZ HQYLURQPHQWDOO\ IRFXVHG LQLWLDWLYHV KDYH EHJXQ DW

Sustainability Action Plan

³'R RU GR QRW WKHUH LV QR WU\´ ± <RGD

7KH (QYLURQPHQWDO $XGLW LV WKH UHVXOW RI PDQ\ KRXUV TXHVWLRQV DQG FR
FRPPXQLW\ 7KH $XGLW LQ LWV HQWLUHW\ FRQWDLQV D ZHDOWK RI LQIRUPDWLRQ DQG UH
WRZDUGV EHLQJ HQYLURQPHQWDOO\ VXVWDLQDEOH 7KLV 6XVWDLQDELOLW\ $FWLRQ 3OD
UHDOLVWLFDOO\ WKH PRVW LPSRUWDQW ZKHQ LW FRPHV WR WKH LQVWLWXWLRQ¶V UROH
D KHDOWKLHU WRPRUURZ

7KH WRS UHFRPPHQGDWLRQV

- x 8SGDWH WKH (QYLURQPHQWDO 3ROLF\ WR UHIOHFW SUHVHQW GD\ LVVXHV DQG QHH
- x 5HHVWDEOLVK D YLVLRQ DQG XSGDWH WKH PDQGDWH DQG PHPEHUVKLS IRU WKH (Q
- x (VWDEOLVK 8QLYHUVLW\ ZLGH 3DSHU *URXQGV DQG 9HKLFOH SROLFLHV
- x 'HWHUPLQH WDUJHWV WR IXOILOO WKH UHTXLUHPHQWV RI WKH (PLVVLRQV 5HGXFWL
- x ([SDQG WKH &DUERQ)RRWSULQW &DOFXODWLRQV WR LQFOXGH VWXGHQW WUDYHO
- x &ODUL\ WKH)DUP¶V PLVVLRQ PDQGDWH
- x
- x

x

x

Sources

&OLS DUW IRU HDFK $XGLW &KDSWHU FRXUWHV\ RI *RRJOH ,PDJHV

Title Page

,PDJH RI &XWKEHUWVRQ DQG (QYLURQPHQWDO 6WXGLHV FODVV FRXUWHV\ RI WKH 0RXQW S
,PDJH RI +HLGL *RRGLQH DQG $YHU\ :KHHOHU DW WKH 8QLYHUVLW\ IDUP FRXUWHV\ RI WKH

1. Stewardship

Persons Interviewed

5RQ %\UQH 93 6WXGHQW DQG ,QWHUQDWLRQDO $IIDLUV -XO\
'U 5REHUW &DPSEHOO 8QLYHUVLW\ 3UHVLGHQW -XQH DQG -XO\
'U 0LFKDHO)R[*HRJUDSK\ DQG (QYLURQPHQW 'HSDUWPHQW +HDG -XQH
(ULN)UDVHU 93 $FDGHPLF &KDLU RI 6$& (QYLURQPHQWDO $IIDLUV &RPPLWWHH
7RQ\ )URVW 'LUHFWRU RI 0DUNHWLQJ DQG &RPPXQLFDWLRQ -XO\
5REHUW ,QJOLV 8QLYHUVLW\ &RQWURROHU -XQH
*ORULD -RO\PRUH 93 ([WHUQDO 5HODWLRQV -XQH
5RE 0DF&RUPDFN 'LUHFWRU RI)DFLOLWLHV 0DQDEpDLQ PÀ DR J 0•J P• HPQLF @À QV R Ñp*RQ\€
'UÀLU€6 Q`0 083 (FL

PÀ0€`0 @ ™L€ UH ñ ‚ÂD 0•P0@@

2. Curriculum

Persons Interviewed

'U %HUNOH\ )OHPPLQJ ,QWHULP 9LFH 3UHVLGHQW $FDGHPLF DQG 5HVHDUFK -XO\
'U 0LFKDHO)R[+HDG RI WKH 'HSDUWPHQW RI *HRJUDSK\ DQG (QYLURQPHQW -XQH
'U -HII 2OOHUKHDG 'HDQ RI 6FLHQFH DQG *UDGXDWH 6WXGLHV -XO\
6XUYH\ 0RQNH\ 'HSDUWPHQW +HDG 6XUYH\ (QYLURQPHQWDO $XGLW 0D\ ± $XJX
'U +DQV YDQGHU/HHVW 'HQ RI $UWV -XQH
'U %UDG :DOWHUV (QYLURQPHQWDO 6WXGLHV &R RUGLQDWRU -XQH

Works Cited

'HSDUWPHQW RI *HRJUDSK\ (QYLURQPHQW 6HOI 6WXG\ 'RFXPHQW 0DUFK
'HYHORSPHQW RI DQ ,QWHJUDWHG &°00LU@W(

Works Cited

6HD &KRLFH UHWULHYHG RQ WXHVGD\ VHDFKRIIHP RUJ

1DWLRQDO 0LFUR VFDOH &KHPLVWU\ &HQWHU KWWSV ZZZ QFUF QFDOH RUJ DERXW DVS

Images

&KORULQH FRQWDLQHUV SKRWRJUDSK WDNHQ E\ $XGLWRUV

7. Grounds Keeping

Persons Interviewed

$QGUHD :DUG *URXQGV 6XSHULQWHQGHQW -XQH

Works Cited

Works cited

0LJKW (7UXFN -U &DQDGLDQ (OHFWULF 9HKLFOHV /WG :HE $FFHVVHG -XQH
KWWS ZZZ FDQHY FRP &RPPHUFLDO &(9 0LJKW7UXFN -XQLRU KWPO
0RXQW $OOLVRQ 8QLYHUVLW\ 0DQDJHPHQW 3ROLF\ 9HKLFOH)XHO &RQVHUYDWLRQ
0RXQW $OOLVRQ 8QLYHUVLW\ 3URFXUHPHQW 3ROLF\ 9HKLFOH 2SHUDWLRQV 3ROLF\

Images

3KRWRJUDSK RI +DOLID[DQWL LGOLQJ VLJQ WDNHQ E\ $XGLWRUV

12. Emissions

Persons Interviewed

3HUV\ (OGULGJH 7HFKQLFDO 6HUYLFHV 0DQDJHU RQJRLQJ 0D\ $XJXVW
*HRUJH ,UYLQJ 6LHPHQV &DQDGD /LPLWHG -XQH
5REHUW ,QJOLV &RQWUROOHU)LQDQFLDO 6HUYLFHV -XQH RQJRLQJ HPDLO FRUUH
5RE 0DF&RUPDFN 'LUHFWRU RI)DFLOLWLHV 0DQDJHPHQW RQJRLQJ FRPPXQLFDWLRQ
&DURO\Q 5LFKDUGV $FFRXQWV 3D\DEOH 7HFKQLFLDQ)LQDQFLDO 6HUYLFHV $XJXVW
0LFKHOOH %LOODUG)LQDQFLDO 6HUYLFHV ,QWHUQ $XJXVW

13. Procurement

Persons Interviewed

%DUW 0XVJUDYH 3URFXUHPHQW 0DQDJHU -XO\
-XG\ 9DQ 5RR\HQ 6XSSO\ 6HUYLFHV 0DQDJHU -XQH

Works cited

,QWHUQDWLRQDO 6HFXULW\ ,QGXVWULHV, QF ,QWHUQDWLRQDO 5HWDLO 6HUYLFHV IURP KWWS ZZZ LQWHUQ
/\RQV . %X\LQJ IRU WKH IXWXUH &RQWUDFW PDQDJHPHQW GDQG 8WK3HOXQLYRUHQVHQWDO F
0RXQW $OOLVRQ 8QLYHUVLW\ 3URFXUHPHQW 3ROLF\

Appendices

$SSHQGL[7KH 7DOORLUHV 'HFODUDWLRQ

$SSHQGL[$VVRFLDWLRQ RI $WODQWLF 8QLYHUVLWLHV 3UHVLGHQW¶V 6WDWHPHQW RQ

$SSHQGL[&RXUVHV ZLWHQG€

$SSHQGL[d@ O ... _ C ! \ Dh T W L [Q °@ WX G L SR W(P C x I ¨P ôH F C & R X U V€ GÀ Dh TP Q R I U ôH @ C Q

%URDGHQ 6HUYLFH DQG 2XWUHDFK 1DWLRQDOO\ DQG ,QWHUQDWLRQDOO\
:RUN ZLWK QDWLRQDO DQG LQWHUQDWLRQDO RUJDQL]DWLRQV WR SURPRWH D ZRUOGZLGH
0DLQWDLQ WKH 0RYHPHQW
(VWDEOLVK D 6HFUHWDULDW DQG D VWHHULQJ FRPPLWWHH WR FRQWLQXH WKLV PRPHQWX
GHFODUDWLRQ

Appendix 2.1: Courses with Environmental Content

&RXUVHV ZLWK (QYLURQPHQWDO &RQWHQW			
$UWV DQG /HWWHU	+XPDQLWLHV	6RFLDO 6FLHQFHV	6FLHQFH
)L1$	+,67 3+,/ 5(/*	$17+ $17+ &200 (&21 (&21 (&21 *(19 *(19 *(19 *(19 *(19 *(19 *(19 *(19 *(19 *(19 ,1/5 32/6	%,2/ %,2/ %,2/ %,2/ %,2/ %,2/ %,2/ %,2/ %,2/ %,2/ %,2/ %,2/ &+(0 &+(0 &+(0 *(16 *(16 *(16 *(16 *(16 *(16 0$7+

1RWH WKLV OLVW ZDV FUHDWHG E\ VHDUFKLQJ WKH ZRUG ³HQYLURQPHQW´ LQ WKH HOHFW
FRXUVH GHVFULSWLRQ WR GHWHUPLQH LI WKH XVH RI WKH ZRUG ³HQYLURQPHQW´ ILW KRZ
VXEVWDQWLDO HQYLURQPHQWDO FRQWHQW DUH OLVWHG KHUH

Appendix 2.2 Local and Regional Resources

7KH 1DWXUH &RQVHUYDQF\ RI &DQDGD
'XFNV 8QOLPLWHG
%LUG 6WXGLHV &DQDGD
7KH &DQDGLDQ $VVRFLDWLRQ RI *HRJUDSKHUV
7KH $PHULFDQ $VVRFLDWLRQ RI *HRJUDSKHUV
7KH &DQDGLDQ 3ODQQHUV ,QVWLWXWH
5HQDLVVDQFH 6DFNYLOOH
7DQWUDPDU 'LVWULFW 3ODQQLQJ &RPPLVVLRQ
&DSH -RXUQDO 1DWXUH &HQWUH
&DQDGLDQ 5HJLRQDO 6FLHQFH $VVRFLDWLRQ
%UHDNLQJ WKH 6LOHQFH 1HWZRUN
7KH ,QWHUQDWLRQDO 7RZQ DQG *RZQ $VVRFLDWLRQ
+XQWVPDQ 0DULQH 6FLHQFH &HQWUH
7KH &RDVWDO :HWODQGV ,QVWLWXWH
DQG PDQ\ PRUH

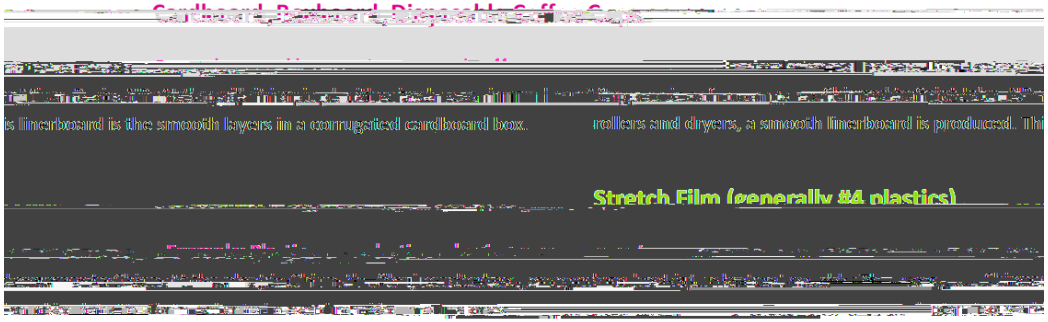
Appendix 4.1: Canada Seafood Guide

6RXUFH 6HDFKRLFH RUJ

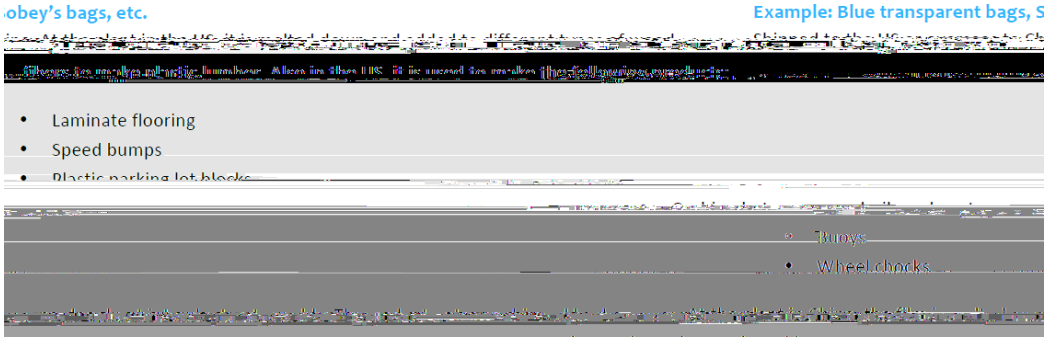
Appendix 5.2: Westmorland-Albert Wet/Dry

$SSHQGL[:HW 'U\ 6RUWLQJ FKDUW 6RXUFH KWWS ZZZ ZHVWPRUODQGDOEHUW FRP

Appendix 5.3

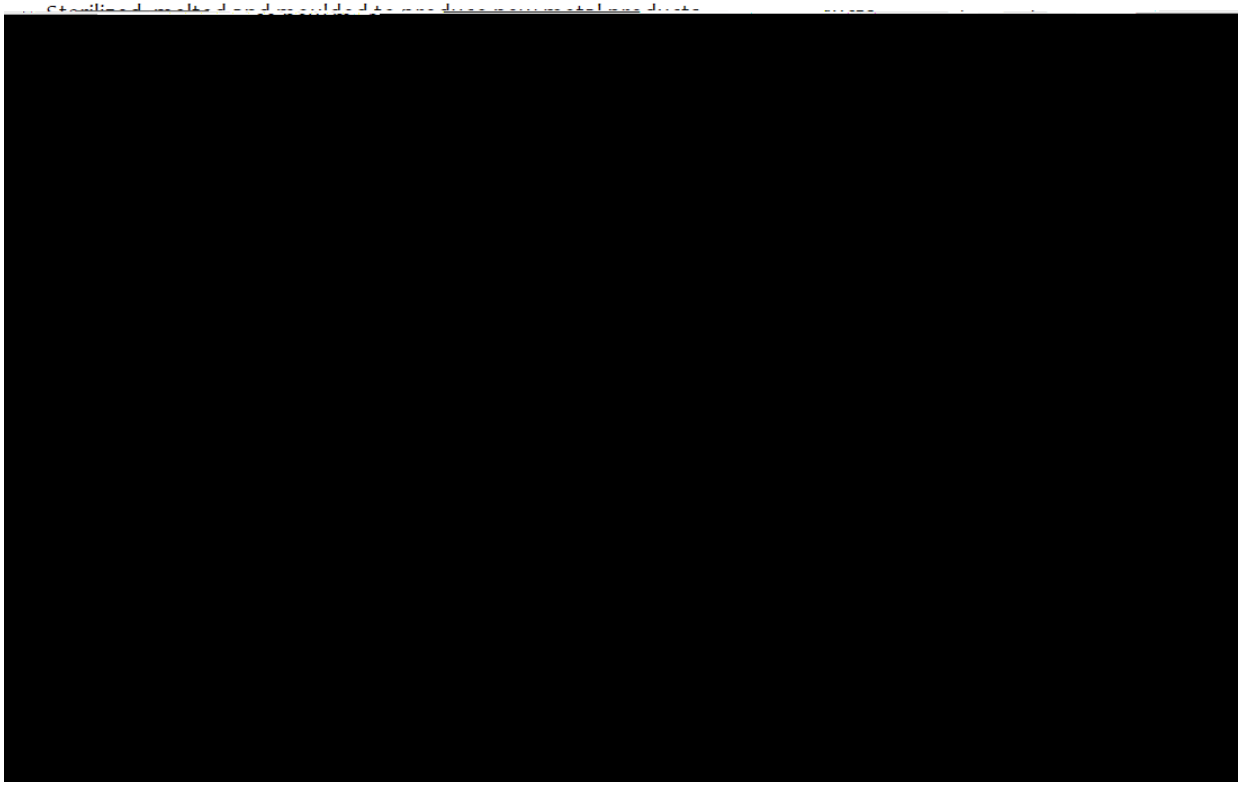


Filler Plastic (grocery bags)



Aluminum

Metals



Appendix 5.4: Waste type by weight for 2009/10 from Mount Allison

7KLV FKDUW GLVSOD\V WKH VDPH GDWD DV)LJXUH LQ WKH &KDSWHU 6ROLG :DV
EHVW FRPSDUH WUHQGV E\ ZDVWH W\SH 7KH KLJK UHDGLQJ IRU 'HFHPEHU ODQGILOO ZDV

Appendix 6.1: Facilities Management Safety Policy

)DFLOLWLHV 0DQDJHPHQW +D]DUGRXV 6SLOO 5HVSRQVH ZLWKRXW $QQH[HV

$LP

7KH DLP RI WKLV SROLF\ LV WR SURYLGH WKH RYHUDOO UHTXLUHPHQWV IRU WKH PDQDJHPHQW RI K

&ODVVLILFDWLRQ RI 6SLOOV

6SLOOV RI KD]DUGRXV PDWHULDOV ZLOO EH FODVVLILHG DV HLWKHU D 0LQRU VSLOO RU D 0DMRU VS

$ 0LQRU 6SLOO LV RQH LQ ZKLFK WKH IROORZLQJ FRQGLWLRQV DUH PHW

- WKH UHVSRQVLEOH SDUW\ LV DW WKH VFHQH
- WKH PDWHULDO VSLOOHG LV NQRZQ
- WKH PDWHULDO VSLOOHG LV QRW KLJKO\ WR[LF
- WKH TXDQWLW\ VSLOOHG LV VPDOO XQGHU OLWHUV
- WKHUH LV QR ILUH KD]DUG SUHVHQW
- WKH VSLOO LV FRPSOHWHO\ FRQWDLQHG LQVLGH D EXLOGLQJ DUHD DQG WKH PDWHULDO K

$ 0DMRU 6SLOO LV RQH LQ ZKLFK WKH DERYH FRQGLWLRQV DUH PHW ,I WKH UHVSRQGHU LV XQVXUH RI WKH FO
0LQRU VSLOOV ZLOO EH FOHDQHG XS XVLQJ WKH SURFHGXUH LQ $QQH[$ DQG DOO 0DMRU VSLOOV Z

6SLOO .LWV

$ VSLOO NLW ZLWK DEVRUEHQW FDSDFLW\ RI DW OHDVW OLWUHV FDSDFLW\ ZLOO VWRUHG LQ WK

$ OLWUHV FDSDFLW\ VSLOO NLW ZLWK GUDLQ FRYHU ZLOO EH VWRUHG LQ WKH *URXQGV JDUEDJH

7KHVH NLWV ZLOO EH VWRFNHG DV RXWOLQHG LQ $QQH[&

5HVSRQVLELOLWLHV

$OO)DFLOLWLHV 0DQDJHPHQW VWDII LV UHTXLUHG WR XQGHUVWDQG DQG FRPSO\ ZLWK WKLV SROI

*URXQGV 6XSHULQWHQGHQW

7KH *URXQGV 6XSHULQWHQGHQW KDV RYHUDOO UHVSRQVLELOLW\ IRU FRRUGLQDWLQJ VSLOO UHVSR
HQVXUH WKDW VSLOO NLWV ORFDWHG LQ WKH *URXQGV 6KRS 7UXFN DUH LQVSHFWHG RQ D UHJXOD
IRU KD]DUGRXV ZDVWH DQG FRRUGLQDWH WKH SURPSW GLVSRVDO RI WKLV ZDVWH LQ D VDIH DQG H

W K

Appendix 7.1 0 R X Q W $ O O L V R Pest Management (IPM) Procedure*

DV GHWHUPLQHG E\ JURXQGV NHHSLQJ PDQDJHU $QGUHD :DUG

Appendix 11.1 University Fleet

Appendix 11.2² Criteria for Consideration in the Purchase of New Mail Vehicle

5HWULHYHGIURPZZZ PWD FD DGPLQLVWUDWLRQ ILQDQFLDO WHQGHUV *RRGV 6HSW UILE

'HVFULSWLRQ	3RLQ
(QYLURQPHQWDO IRRWSU HFRQRP\ &2 HPLVVLRQV	
'HVLJRU HUJRQRPLFV	
%HVW ILW WR 6SHFLILFD\	
3ULFH	
:DUUDQW\ OLIH F\FOH FR	
2SHUDWLQJ &RVWV	
7RW	

G (OLPLQDWLQJ XQQHFHVVDU\ ZHLJKW LQ YHKLFOHV
H &DU SRROLQJ ZKHQHYHU SRVVLEOH
I (QVXULQJ WKDW YHKLFOH WLUHV DUH SURSHUO\ LQIODWHG
J (QVXULQJ WKDW WKH YHKLFOH HPLVVLRQ FRQWURO V\VWHPV DUH QRW DOWHUH

,GOLQJ 5HGXFWLRQ

7KH IROORZLQJ JXLGHOLQHV DUH WR EH IROORZHG LQ WKH RSHUDWLRQ RI DQ\ )DFLO

D 9HKLFOHV VKDOO QHYHU EH OHIW XQDWWHQGHG ZKHQ LGOLQJ
E (QJLQH ZDUP XS SHULRGV VKRXOG QRW H[FHHG WKLUW\ VHFRQGV
9 H(ÌRQ@RR\ U, F ™h™P ` P H ™`€ P RÐ P K Hy˜ V •