Stantec

SUNCOR ENERGY CEDAR POINT WIND POWER PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix D

Field Notes



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

Miller Bonnie Doon Crock

| Station # 27 3 Project # 160960 70 9 Project | Dre | int CD |
|--|-------------|---|
| Photos Taken | | |
| GPS Coordinates 17 17 17 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19 | Die | |
| Water Quality Dissolved Oxygen (mg/L) 3 19 Water Temperature (°C) 5 5 2 Water Course Dimensions & Morphology Weather conditions in previous 24 hrs Cald SALMAY Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Water Depth (cm) Mean Water Depth (cm) Mean Water Pepth (cm) Swiffle Evidence of eroding banks, Comments on bank stability with Indian Mari Flat Substrate - Upstream (% cover) Bedrock Silt Boulder Clay Cobble Muck 5 5 Gravel Mari Sand Detritus Substrate - Downstream (% cover) Bedrock Silt Boulder Clay Cobble Muck 5 0 Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overnanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 10 10 10 10 10 10 10 10 10 10 10 10 10 | PIIC | Date (A) |
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| Water Quality Dissolved Oxygen (mg/L) 3 19 pH 8 6 Conductivity (µS/cm) 1/2 Water Temperature (*C) 5 5 2 Air Temperature (*C) 6 Water Course Width (m) Maximum Pool Depth (cm) Water Bankull Width (m) Mean Bankull Width (m) Mean Water Depth (cm) A Riffle (m) Mean Water Depth (cm) Substrate - Upstream (% cover) Bedrock Silt Boulder Clay Cobble Detritus Muck To Gravel Marl Sand Detritus Substrate - Downstream (% cover) Bedrock Silt Woody Debris Course Pool Pool Potential In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Course Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Course Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Course Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Course Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Course Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Course Types Plants Overhanging Vegetation Woody Debris Course Types Plants Overhanging Vegetation Woody Debris Course Types Plants Overhanging Vegetation Debrisher Debri | Des | scriptive Location Fare noon L |
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| Mean Bankful Width (m) Mean Water Depth (cm) 20 % Riffle | Wate | ercourse Dimensions & Morpholoma |
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| Downstream Note any fish observations Other Habitat Notes, Incidental Wildlife Observations, etc. - Mad wide + meandering Field Notes Authored by VE | Migrator | y Obstructions (seasonal, permanent) |
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| Page of | | Field Notes OA/OCed by 1 C |

| The state of the s | or Energy- Cedar Point | Wind Project | Station Number | 27-3 | |
|--|------------------------|-----------------|--|---|-------------------------|
| Project Number | 160960709 | AND WALLS OF | Pass No. (if applicable | metroenative in the base | |
| Photos Sal | e back | | Date (yyyymmdd): | NAME OF TAXABLE PARTY OF TAXABLE PARTY. | 09 |
| Descriptive Location | | of intersect | non of Egren | onto Fis | sher Line. |
| |)408271 | | 764653 | | zone 17 |
| Fishing Method (circle one) |): Bac | kpack Boa | | ake LA | 200 |
| Sampling Method (circle on | | habitat | transect | spot | |
| Effort (Electrofishing Secon | nds): 320 | Number of Nette | rs: | Number of Anode | es: _/ |
| Settings Frequency (Hz) 30 | Voltage (volt | s) 600 Cur | rent (Amps) | Power (Watts) | |
| Station information | | | ront (ranps) | Ower (Walls) | |
| Length of Stream Surveyed | 1 (m) 2 7 | 5m | | | |
| Station Characteristics: | Width (m): | Range 2.5 | 3.5 Average: | 3.0 | |
| | Depth (m): | | - 0.40 Average: | 0.30 | |
| Water Clarity/Colour: | brown Hurbia | / Water V | /elocity if Measured (m/s): | N/A | Time 14:03 |
| Temperature (°C) | 14,10 | | Conductivity (uS/cm) | 672 | 11110 |
| pH Catch Data | 8.35 | 2.24 | Dissolved Oxygen (mg/L) | 8.42 | |
| Species Species | Number | of Fieh | | Comments a | Le. age, disease, etc): |
| akchub | | 44-44-44 | HH 14+ 14+ [(36) | | Le. age, disease, etc): |
| WASC | | | | <u> </u> | |
| BRST | | N. G. W. | Ğ | | |
| Paris Prosect B. | vesil 11 | | (a) | | |
| | 1) | | (2 | | |
| NRBO | | | The state of the s | | |
| NRBO | | | | | |
| NRBO John. Dt. | 1) | | (2) | | |
| NRBO John. Dt. Conn. Shn Fathead Mn. | 11 | | <u> </u> | | |
| NRBO John. Dt. Conn. Shn Fattead Mn. | 11 | | | | |
| NRBO John. Dt. Cmn. Shn | | | 3 | | |
| NRBO John. Dt. Cmn. Shn Fattead Mn. | | + evening (air | <u>(6)</u> | | |
| NRBO John. Dt. John. Shn Fattead Mn. BJK. Side Dt. | fast from lass | evening (a) | <u>(6)</u> | | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

WB

| Project Project # 1/0 | 0960709 |
|--|------------------------------|
| Station # 2)-4 Field Staff X | |
| Photos Taken 382 - 386 Date PQV | |
| GPS Coordinates 17 4765616 408120 Time 8:10 | |
| Descriptive Location Farement, 1.2 km were | Act of Upstain |
| - 13 km north in helds to o | ld rail tracks. |
| Water Quality | |
| Dissolved Oxygen (mg/L) 13.22 pH 7.96 Condu | uctivity (μS/cm) <u>815</u> |
| | re (°C) |
| Veather conditions in previous 24 hrs cold & overcar | at |
| Vatercourse Dimensions & Morphology | |
| | Depth 7 75 (cm) |
| Mean Bankfull Width 13 (m) Mean Water D | epth >50 (cm) |
| WO O WITH | % Flat |
| sight under cut | e enosion + |
| Substrate – Upstream (% cover) | |
| BedrockSilt Boulder | 60 Clay Cobble |
| Muck Gravel Marl | Sand 10 Detritus |
| ubstrate – Downstream (% cover) | |
| Bedrock30 Silt Boulder | Cobble Cobble |
| Muck Gravel Marl | Sand O Detritus |
| n-water Cover Manage (deep | areas) |
| | |
| Cover Types Present (circle): Undercut Banks Deep P Overhanging Vegetation Woody Debris Boulder | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, dominant vegetation, m | atura or carly avecasional) |
| Upstream 70°/0 wooded, non an area | ature or early successional) |
| Downstream (20 12 unoded compan aug | |
| diacent Land Use | |
| Upstream () 601 d 0 | |
| Downstream | |
| ish Habitat Potential | |
| critical Habitat (spawning or nursery areas, groundwater upwelling | (2 |
| Upstream | 3) |
| Downstream | |
| ligratory Obstructions (seasonal, permanent) | |
| Upstream 00/000 nd n | |
| Downstream POTTION TO THE PROPERTY OF THE PROP | |
| ote any fish observations now | |
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| ther Habitat Notes Incidental Wildlife Observations at | |
| ther Habitat Notes, Incidental Wildlife Observations, etc. | |
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| I would a sound of Mile Color of Mile | O IN SOLVE |
| wich, slow run turbid appears quite deep clay bunto while reach , fined with decidious apara | is ul some silt depa |

Bonne Doon 27-4
Page Lot [

| Project Name Suncor Energy- | Cedar Point Wind Project | Station Number | 27-4 | Control of the Control |
|--|--|--|---|------------------------|
| Project Number 160960 | 709 | Pass No. (if applicable |) / | emali stanti |
| Photos Sce bau | ck | Date (yyyymmdd): | THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY. | |
| Descriptive Location ~ / Kn | north Egremo | nt Rd + wiki | n west. | of Oil |
| Herita | | | | |
| UTM coordinates <u>9403</u> | 111 easting <u>4</u> | 1765761 | | zone <u>/7</u> |
| Fishing Method (circle one): | Backpack Bo | at Unit Model/Ma | ake LR-12 | |
| Sampling Method (circle one): | even habitat | transect | spot | |
| Effort (Electrofishing Seconds): | Number of Nette | ers: / | Number of Anodes: | 1 |
| | Voltage (volts) 600 Cu | rrent (Amps) F | Power (Watts) | / |
| Station information | | | | |
| Length of Stream Surveyed (m) | 20m of Shoreline | | | |
| 그리아 그리 기타 그러나 무슨 사이 있다면서 하는 그리지 않는데 뭐 그리지 않는데 없었다. | | 14 m Average: | 12m | |
| | Depth (m): Range O. 10 | | >1.0 | |
| | | | | |
| Nater Clarity/Colour | Water | Valenthy if Management (or (a) | WIA . | - 17.10 |
| Water Clarity/Colour: \(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\ | | Velocity if Measured (m/s): | N/A | Time 17:15 |
| Water Clarity/Colour: Temperature (°C) pH Acous 8:15 | n tuibid Water | Conductivity (uS/cm) | 559 | Time <u>17:15</u> |
| Temperature (°C) pH 8.40 | n tuibid Water | | | Time <u>17:15</u> |
| Temperature (°C) | Number of Fish | Conductivity (uS/cm) | 559 | |
| Temperature (°C) pH 8.40 Catch Data Species Calc chub | 36 | Conductivity (uS/cm) | <u>\$59</u> <u>9.25</u> | |
| Temperature (°C) pH 8.40 Catch Data Species Colc chub | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>\$59</u> <u>9.25</u> | |
| Temperature (°C) pH 8.40 Catch Data Species Colc chub WHSC | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>\$59</u> <u>9.25</u> | |
| Temperature (°C) pH 8.46 Catch Data Species Colc chub WHSC Can · Sho. | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>\$59</u> <u>9.25</u> | |
| Temperature (°C) pH 8.46 Catch Data Species Colc chub WHSC Can · Sho. | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>\$59</u> <u>9.25</u> | |
| Temperature (°C) pH 8.40 Catch Data Species Colochub WHSC Cmn.Shn. Jln.Qt | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (/3) (2) (2) | SS9 9.25 Comments (La. s | ige, disease, etc): |
| Temperature (°C) pH 8.40 Catch Data Species Cak chub WHSC Can Sha. Jin Qt Nater 15 very high | Number of Fish HH+HH | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) | S S 9 9.2 S Comments (La. s | ige, disease, etc): |
| Temperature (°C) pH 8.40 Catch Data Species Cak chub WHSC Can Sha. Jin Qt Nater 15 very high | Number of Fish HH+HH | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) | S S 9 9.2 S Comments (La. s | ige, disease, etc): |
| Temperature (°C) pH 8.46 Species Colochub WHSC Cmn.Shn. Jlin. Qt | Number of Fish HH+HH | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) | S S 9 9.2 S Comments (La. s | ige, disease, etc): |
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| Temperature (°C) pH 8.40 Catch Data Species Colc chub WHSC Conn. Shn. Jhn. Ot Noter 15 very high Ungafe to entr h | Number of Fish HH+HH II II II II Carol tu(bid. Flocked s. | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) Oded Wyery haeline anly | Comments (La. s | ige, disease, etc) |
| Temperature (°C) pH 8.40 Catch Data Species Colc chub WHSC Conn. Shn. Jhn. Dt Water 15 very high Unsafe to entr h | Number of Fish HH+HH II II II II Carol tu(bid. Flocked s. | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) Oded Wyery haeline anly | Comments (La. s | ige, disease, etc): |
| Temperature (°C) pH 8.40 Catch Data Species Calc chub WHSC Conn. Shn. Jhn. Rt Water 15 very high Unsafe to entr h | Number of Fish HH+HH II II II II Carol tu(bid. Flocked s. | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) Oded Wyery haeline anly | Comments (La. s | ige, disease, etc): |
| Temperature (°C) pH 8.40 Catch Data Species Colc chub WHSC Conn. Shn. Jhn. Qt Water 15 very high Unsafe to entr h | Number of Fish HH+HH II II II II Carol tu(bid. Flocked s. | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) Oded Wyery haeline anly | Comments (La. s | ige, disease, etc): |
| Temperature (°C) pH 8.40 Catch Data Species Colc chub WHSC Conn. Shn. Jhn. Ot Noter 15 very high Ungafe to entr h | Number of Fish HH+HH II II II II Carol tu(bid. Flocked s. | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (13) (2) (2) (1) Oded Wyery haeline anly | Comments (La. s | ige, disease, etc) |



Field Notes Authored by

| Stantec | | | FOR AQUAT | IO HADITA | (|
|---|---|--------------------------------|--|----------------------------------|---------------------|
| Project(Station # Photos Taken GPS Coordina Descriptive Lo | ites 17 4765 89 | Fiel Date | ject # | ME | nent |
| Water Temper | rgen (mg/L) 12.6 ¹ rature (°C) 5.9 3 itions in previous 24 | Air | Conductivity Temperature (°C | y (μS/cm) <u>lo</u>) <u></u> | 82 |
| Mean Waterco Mean Bankfull % Riffl | Width 6 | (m) | / kimum Pool Deptan Water Depth_ ○_% Run S ta/blu | th_ 15 15 | (cm) (cm) lat |
| Substrate – U Bedroo Muck | pstream (% cover) kSiltGrave | thick w RCG Bou el Mar | ilder | <u> Clay</u> | Cobble |
| Substrate – D Bedroo Muck | ownstream (% cov kSilt Grav | Bou | | Clay Sand <u>%</u> | Cobble |
| | er Present (circle): anging vegetation | Undercut Banks Woody Debris | Deep Pool Boulder | Vascular Pl | ants cau |
| Upstre: Downs | r (% of watercourse : am0 % tream _< | shaded, dominant ve | getation, mature | or early succe | essional) |
| Adjacent Land Upstrea Downs | am A C | elds | | П п | |
| Fish Habitat F Critical Habitat Upstrea Downs | (spawning or nurse | ry areas, groundwate | r upwellings) | | |
| Migratory Obs Upstrea | tructions (seasonal, I | permanent) | 7 | | |

Page ___of__

Jordine Dran 27-1

| Project Name S | uncor Energy- C | Cedar Point Wind I | Project | Statio | n Number | 27-1 | |
|--|----------------------------|--------------------|----------------|-------------------|---------------------------------|------------------|------------------|
| Project Number | 1609607 | 709 | | Pass | No. (if applica | ble) | |
| Photos | Seebac | | | Date (| (yyyymmdd): | 2012-05 | 29 |
| Descriptive Location | Oil Hari | tage Rd - | 750n | north | nofE | gremont | |
| JTM coordinates | 4765 | 297 | easting . | 40902 | 7 | northing Easter | zone <u>17</u> - |
| Fishing Method (circle of Sampling Method (circle | | Backpack | habitat | Boat tra | Unit Model | /Make # - 13 | 2 |
| Effort (Electrofishing Se | econds): | 395 | Number of N | letters: / | | Number of Anodes | |
| Settings Frequency (Hz) 30 | | | | Current (Amps | | Power (Watts) | |
| Station information | | vollago (volla) | | Ourent (Amps | | Power (walls) | |
| ength of Stream Surve | eyed (m) | ~ 100m | | | | | |
| Station Characteristics: | | | Range 0.7 | - 1,1 | Average: | 0,85 | |
| | ı | Depth (m): F | Range 🙋, | 10-6,20 | Average: | 0.15 | |
| valer Ciarry/Colour. | <u>uello</u> | MIDIONN | Party of Burns | ter Velocity if M | occurred (1183) | · N// | |
| Temperature (°C) pH | 17.88 8.33 | w) brown | | Condu | octivity (uS/cm Oxygen (mg/L | 643 | |
| Temperature (°C) pH catch Data | 17.88 | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH Catch Data | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH atch Data pecies Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH catch Data species Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH atch Data pecies Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH atch Data pecies Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH atch Data pecies Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH catch Data species Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH catch Data species Cric chub | 17.88 | Number of FI | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH catch Data species Cric chub witsc Brst | <u>17.88</u> <u>833</u> | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH atch Data pecies Cric chub Witsc Brst | 17.88 833 | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH atch Data pecies Cric chub UNASC BRST | 17.88 833 | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH Catch Data Species Cric chub Witsc BRST | 17.88 833 | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| phatch Data Species Cric chub Witsc BrsT | 17.88 833 | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | |
| Temperature (°C) pH Catch Data Species Cric chub Witsc BRST | 17.88 833 | Number of Fi | | Condu | ictivity (uS/cm |) 643) 7.06 | Time 15:4 |



Sardire frain 35-2 RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

| | 211-25 17 4764218 410 on Hill boro R | Project #_ Field Staff Date _No Start Time 4: | v. 23 2011 | har w |
|---|--|--|-------------------------------------|----------------------|
| Water Quality Dissolved Oxygen Water Temperatur Weather condition | | pH 7:72 Co Air Temper Old + rawn | enductivity (μS/cm) _ ature (°C) | 592 |
| Mean Watercours Mean Bankfull Wid | And the second s | Maximum F Mean Wate | r Depth 40 | (cm) (cm) Flat |
| Substrate – Upst Bedrock Muck | ream (% cover) +wb Silt Gravel | nd lots of we | 29 20 Clay Sand | Cobble |
| Substrate – Dowi Bedrock Muck | nstream (% cover) +v Silt Gravel | which, lots aBoulderMarl | fve5 <u>20</u> Clay Sand _8 | Cobble Detritu |
| In-water Cover Cover Types Pres Overhangii | | ercut Banks Dee dy Debris & | | Plants cut |
| Riparian Zone Riparian Cover (% Upstream_ Downstrea Adjacent Land Use Upstream_ Downstrea | Ac Field | rging ves | hanying In | ccessional) |
| Upstream_ Downstream Migratory Obstruct Upstream_ | awning or nursery area m | | lings) | |
| Downstread Note any fish obse | | | | |
| | | Observations, etc. | | |

Jardine Drain 35-2

| Project Name Su | ncor Energy- Cedar | Point Wind Project | Station Number | 35-2 | |
|---|--|---|---|--|-------------------|
| Project Number | 160960709 | No. | Pass No. (if applicat | ble) | |
| Photos | See back | | Date (yyyymmdd): | 2012 05 0 | 9 |
| Descriptive Location | On Hillsboro | Rd ~400m | South of Fishe | 1 line | |
| JTM coordinates | 4764218 | 3 -easting | 410 864 | spertfling basis | zone 17 |
| Fishing Method (circle on | 1 | Backpack | Boat Unit Model | Make ER-12 | Yes, Line |
| Sampling Method (circle | | ven habitat | transect | (spot) | |
| Effort (Electrofishing Sec Settings | conds): $\sqrt{390}$ | Number of N | letters: | Number of Anodes | : <u>/</u> |
| Frequency (Hz) 30 | Voltaç | ge (volts) 600 | Current (Amps) | Power (Watts) | / |
| Station Information ength of Stream Survey | red (m) | Son Son | | | |
| Station Characteristics: | Width | REPORTED BY BUT THE RESIDENCE | - 2.0 Average: | 15 | |
| | Depth | · 1000年中市的经济设施的。例如4分页。 | 20 - 0.40 Average: | 0,30 | |
| Vater Clarity/Colour: | yello-lbr | ou n Wat | ter Velocity if Measured (m/s) | : u/k. | Time V: m |
| Temperature (°C) | 9.84 | | Conductivity (uS/cm | The state of the s | Time <u> </u> |
| pH | 8.14 | | Dissolved Oxygen (mg/L | TENTON TO THE REAL PROPERTY OF THE PERTY OF | |
| Catch Data | | | CALCON TO THE PROPERTY OF THE | | |
| pecies | | umber of Fish | | Comments (L | age, disease, etc |
| BRST WHSC | | 0 | | | |
| Cicek chub | | The second second | | | |
| NRBD | Especialistica (Especialistica de la companyo de l | 111 (3) 11t 1 (3) | | | |
| | | | | | |
| | | | | | |
| | of changel | is chaked | w cattail. | many production and the | |
| Note: most | - Section Profession was properly to the 15 cm processing from a finite pro- | THE REPORT OF THE PARTY OF THE | its weggs obse | rued in cat | fails. |
| | I ILEN WINGS | | 00 | | |
| | 1750000 | | | | |
| | . Izenwinga | | | | |
| | . Izenwinga | | | | ende |



WIND FARM WATERBODY RAPID ASSESSMENT FORM

25-5

| Stanted | |
|---------|--|

| Station # <u>36-5</u> | Project Name | | |
|---|----------------------------|---------------------|--|
| Watercourse Name 6 renders Drain | Project #_ \((0 9 \)(| 0709 | |
| Photos , 9702 € 9703 | Field Staff | -UK | |
| Date July 25 2012 | Time 3:20 pm |) | |
| Weather conditions in previous 24 hrs | + dry | | 1110 00 |
| GPS Coordinates (Zone) TE 408: | 245 N 4 | 167358 Da | tum 1/4,0 83 |
| Descriptive Location I medially South of Albert | wider Line 1500 - W | astor Oil Heritz | l Roal |
| | | | |
| Water Quality | 1 AM | | |
| Dissolved Oxygen (mg/L) pH | Conductivity | (μS/cm) | |
| Water Temperature (°C) | XAir Temperature (°C) | | |
| Time in situ measurements taken | / Temperature (e) | | |
| Time III situ measurements taken | | 1 0 | , |
| Watercourse Dimensions & Morphology | | ON I | |
| Mean Watercourse Width (m) | Maximum Pool Nepth | (¢n | n) |
| Mean Bankfull Width 5 (m) | Mean Water Depth | (cn | THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER. |
| | Pool | <i>‰</i> Run | % Flat |
| Evidence of eroding banks, Comments on bank | stability | | |
| | | | |
| Cubatrata (% cover) | | | |
| Substrate (% cover) Bedrock Cobble | 40 Sand | Silt | Muck |
| Boulder Gravel | Clay | Marl | Detritus |
| Boulderaraver | <u> </u> | | ck catalo |
| In-water Cover | | | |
| Cover Types Present (circle): Undercut I | Banks Deep Pool | Watercress | Aquatic Veg |
| Overhanging Vegetation Woody Debris | Boulder Other_ | | |
| | | | |
| Riparian Zone | singet vagatation, matura | or oarly cuspossion | nol) |
| Riparian Cover (% of watercourse shaded, dom | inant vegetation, mature t | or early succession | iaij |
| Adjacent Local | | | |
| Adjacent Land Use | | | |
| Ha | | | |
| Fish Habitat Potential | | | |
| | undwater unwellings) | | |
| Critical Habitat (spawning or nursery areas, gro | uliuwatei upweiiiligs) | | |
| Migratory Obstructions (seasonal, permanent) | | | |
| Migratory Obstructions (seasonal, permanent) | | | |
| Note any fish observations | | | |
| MAL | | | |
| - TVPC | | | |
| Waterbody Notes | | | |
| Natural Watercourse Trapezoidal Chan | nnel Grassed Sv | wale Bur | ied Tile |
| Surficial Drainage (i.e. furrows) Dugout I | Pond Dominated by | y Aquatic Veg | Dry |
| | | | |
| Other Habitat Notes, Incidental Wildlife Obs | | | |
| Other Habitat Notes, incluental wilding Obse | ervations, etc | | |
| -prict no crossive | ervations, etc. | | |
| 26일 전에 가장 [18] 그리고 아내는 사람들은 마음이라고 하게 되었다면 하는데 | ervations, etc. | | |
| 26일 전에 가장 [18] 그리고 아내는 사람들은 마음이라고 하게 되었다면 하는데 | ervations, etc. | | |
| -existing crossing | Notes QA/QCed by | | |



Field Notes Authored by KE

RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

25-2

Page 1 of

| Project | Ρ | Project # _ | 16096070 | 09 |
|--|--|--|---|--------------|
| Station # 35-3 | Fa-2103 | Field Staff | | |
| Photos Taken & GPS Coordinates | 7 4767390 4 | 07882 Time 1 | 0: 24 201 | |
| Descriptive Location | | | rest of Di | 1 Her |
| Water Quality | 12.22 | 200 | | // |
| Dissolved Oxygen (r | | | onductivity (µS/cm) _ | 734 |
| Water Temperature Weather conditions i | | COLD + SUN | rature (°C) <u>(</u> / ° | |
| | | The state of the s | 7 | |
| Mean Watercourse \ | nsions & Morpholog Width | | Pool Donth | (0.00) |
| Mean Bankfull Width | | Mean Wat | Pool Depth S | (cm) (cm) |
| % Riffle | 100 % Pc | | | Flat |
| Evidence of eroding | banks, Comments on | bank stability | table a ma | |
| | | | | |
| Substrate - Upstrea | The latest and the la | | (100 | |
| Bedrock Muck | _ <u>2 0</u> Silt Gravel | Boulder Mari | 90 Clay Sand | Cobl |
| | | WidiT | Oand | -10 Dell |
| Substrate – Downs Bedrock | tream (% cover) | Boulder | 40 Clay | Coh |
| Bedrock | Gravel | Marl | Sand | Cob Detr |
| | | | | |
| In-water Cover Cover Types Presen | t (circle): Linds | ercut Banks Dee | ep Pool Vascular | Dante C |
| Overhanging | The second of th | WIND A STREET WATER TO STREET WITH THE STREET WATER TO STREET WITH THE STREET WATER TO STREET | ulder Other | Janes C |
| Riparian Zone | | | | |
| | f watercourse shaded | , dominant vegetatio | n, mature or early suc | cessiona |
| Upstream | | prs alone | | |
| Downstream_ | 5% | <u> </u> | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| Adjacent Land Use Upstream | 1- 501 | | | |
| Downstream_ | AS NEW |)() | | |
| Fish Habitat Potent | ial _ | | | |
| | vning or nursery areas | s, groundwater upwe | llings) | |
| Upstream | nnne | | | |
| Downstream_ | 1010 | | | |
| | ns (seasonal, perman | ent) | | |
| Upstream Downstream | dry in st | mner | | |
| Download Carn_ | ations 00400 | | | |
| Note any fish observa | | | | |

Field Notes QA/QCed by

Grenders 25-2 brain Page 1 of 1

| BOALD P.F. |
|------------|
| |
| |
| |
| |

| Stantec | Stantec Co | nsulting Ltd - Electro | fishing Record a | nd Catch Results |
|---|------------------------|--|---|--|
| Project Name | Suncor Energy- Ced | dar Point Wind Project | Station Number | 25-2 |
| Project Number | 160960709 | Night Hart | Pass No. (if applicable) | La de la companya de |
| Photos | See bac | | Date (yyyymmdd): | 2012/05/10 |
| Descriptive Location | On Act | serorber alkm | west of 6: | 1 Haitage Rd on |
| | South | Iside of Row | | |
| UTM coordinates | 4767. | 390 -easting 4 | 07882 | northing zone / + T |
| Fishing Method (circl | e one): | Backpack Boat | Unit Model/Ma | ke - 12 |
| Sampling Method (cit | rcle one): | even habitat | transect | (Spot |
| Effort (Electrofishing Settings Frequency (Hz) | | Number of Netter | | lumber of Anodes: |
| Station Information | | illage (voils) 600 Cutt | ent (Amps) P | ower (watts) |
| Length of Stream Sur | | | | |
| Station Characteristic | De | pth (m): Range <u>6.05</u> | /. 7 Average: | |
| Water Clarity/Colour: Temperature (°C) pH Catch Data | 4ellow 9.85 8.15 | | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 586 4.85 |
| Species | | Number of Fish | | Comments (Le. age, disease, etc): |
| No cate | ·h | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | CANA CHANG SI | great a North Adams | |
| Note: th | rick with | cattail. Spot | Pishini where | possible. |
| Muir | ily stano | ing water | 0 | |
| No Asi | n obsurce | O | | Land to the second |
| | | | | |
| Fish Measurements of | on Separate Sheet? | AND AND THE PROPERTY OF THE PARTY OF THE PAR | N_ 16/5 (red 2/5/1) 6286 | enacie ned enti (bonco sinat |
| | Burnett, M. Faiella | 0 | Notes By: | ME |
| | | | | (Station Diagram on Back) |



Field Notes Authored by

RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

| Stantec Project | Project # (009 60 709 |
|--|--|
| Project Station # 23 \ | Project # 1009 60 707 |
| Photos Taken 304 - 301 | Date Nov. 2-4 2-01 |
| GPS Coordinates 17 47 68 68 63 | |
| Descriptive Location Approved | er I km uset of bil Hentage |
| of 1.8 km north | to woodlet |
| Water Quality | |
| Dissolved Oxygen (mg/L) 485 | pH / Conductivity (μS/cm) 724 |
| Water Temperature (°C) 7.99 | Air Temperature (°C) |
| Weather conditions in previous 24 hr | s cold, sunny + for |
| Watercourse Dimensions & Morph | [20] [20] [20] [20] [20] [20] [20] [20] |
| Mean Watercourse Width | (OIII) |
| Mean Bankfull Width 5 | (m) Mean Water Depth / (cm) % Pool % Run / 00 % Flat |
| Evidence of eroding banks, Commer | |
| | |
| Substrate - Upstream (% cover) | |
| BedrockSilt | BoulderCobble |
| MuckGravel | MarlSandDetritus |
| Substrate - Downstream (% cover) | |
| BedrockSilt | BoulderSDClayCobble |
| MuckGravel | MarlSandDetritus |
| In-water Cover | |
| | Undercut Banks Deep Pool Vascular Plants |
| | Woody Debris Boulder Other |
| Riparian Zone | |
| | aded, dominant vegetation, mature or early successional) |
| Upstream O | used lat |
| Downstream \(\rightarrow \land \rightarrow \rightarrow \rightarrow \land \rightarrow \rig | all a later and a later a late |
| Adjacent Land Use | |
| Upstream | whom I at |
| Downstream / / | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery | areas, groundwater upwellings) |
| Upstream none | |
| Downstream_/ | 301 |
| Migratory Obstructions (seasonal, pe | rmanent) |
| Upstream | Cumply? |
| Downstream 9 9 | source . |
| Note any fish observations my | |
| n and the second of the second | |
| Other Habitat Notes, Incidental Wil | dife Observations, etc. |
| incused thanks nech | (see How) clay a loss of leaf little) |
| Sustrate dalas | |
| (al) al monda and ? | |

Field Notes QA/QCed by

30 creek 23-1 Drain Page Lot L

| Project Name | Suncor Energy- Cedar Point Wind Project | Station Number | 23-1 |
|--------------------------------------|--|--|------------------------------------|
| Project Number | 160960709 | Pass No. (if applicable | e) / / company |
| Photos | See back | Date (yyyymmdd): | 2012 05 10 |
| Descriptive Location | | | Hvitax + 1.8 Km |
| | north of woodlot | | |
| UTM coordinates | 4768863 easing | 408220 | nerthing zone 177 |
| Fishing Method (circle | one): Backpack | Boat Unit Model/N | lake 4R-12 |
| Sampling Method (cir | | transect | spot |
| Effort (Electrofishing | Seconds): 200 Number of N | Netters: | Number of Anodes: |
| Settings Frequency (Hz) | O Voltage (volts) 600 | Current (Amps) | Dawar (Matta) |
| Station information | voilage (voils) | Current (Amps) | Power (Watts) |
| Length of Stream Sur | veyed (m) ~ 70 | | |
| Station Characteristic | A 11 March 18 Company of the Company | 9.8 - 1.0 Average: | 0 4 |
| | | 02 - 0.08 Average: | 0.9 |
| Temperature (°C) pH Catch Data | 18.17 8.72 | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 727 00R (out of 1am |
| Species | Number of Fish | | Comments (i.e. age, disease, etc): |
| No cato | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Channel | has been highly only | ed from cleaning | s, Nothshabitat. |
| | | | |
| | | | |
| Nab. In | 20000 (25 00 00 150) | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | v 1 Tilai |
| | owner gave permission | n | |
| | | 2 months exp | |
| | | | |
| | | | |
| | | | |
| Fish Measurements or | Separate Sheet? Y/N) | WENT WARRENT FOR | Name of the Association of the |
| | . Copulate Citable (in) | | |
| | urnett, M. Faiella | Notes By: | ME |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 33-1
Aberarder Creek WB

| Project C.P. | Project # 160960709 |
|--|--|
| Station # 33-(| Field Staff Jest - MF |
| Photos Taken 273-277 | Date Nov 24 2011 |
| GPS Coordinates 17 4707270 411134 | Time 10 |
| Descriptive Location Abera (cler 10) | on east of Hillsboro Rd. |
| | ZIV TABLET TUTISTOOTO |
| Water Quality | |
| Dissolved Oxygen (mg/L) 13.4 pH | L_S. Conductivity (μS/cm) <u>699</u> |
| Water Temperature (°C) 5.56 | Air Temperature (°C) 4º |
| Weather conditions in previous 24 hrs | Isunny & Fog |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 3 (m) | Maximum Pool Depth 40 (cm) |
| Mean Bankfull Width (m) | Mean Water Depth 30 (cm) |
| % Riffle | 90 % Run |
| Evidence of eroding banks, Comments on bank | |
| | |
| Substrate - Upstream (% cover) +wbid | assured day |
| BedrockSilt | BoulderCobble |
| MuckGravel | MarlSand <u>40</u> Detritus |
| Substrate - Downstream (% cover) | id assured clay |
| Bedrock Silt | Boulder TO Clay Cobble |
| MuckGravel | Marl Sand 30 Detritus |
| In-water Cover | |
| Cover Types Present (circle): Undercut E | Banks Deep Pool Vascular Plants RCC |
| Overhanging Vegetation Woody De | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, dom | inant vegetation, mature or early successional) |
| Upstream 30% Cupman | -lels |
| Downstream 40% Openan for | een |
| Adjacent Land Use | |
| Upstream As held (| |
| Downstream / () | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, grown | undwater upwellings) |
| Upstream | |
| Downstream 7107-C | |
| Migratory Obstructions (seasonal, permanent) | |
| Upstream 000 | |
| Downstream 1101 | |
| Note any fish observations | |
| | |
| Other Habitat Notes, Incidental Wildlife Obse | ervations etc - tite draway was to |
| sortunativide Fact May na , st | 18ht III was ordering crapic in |
| shallow valley | The state of the s |
| 7.000 | |
| | MV. |
| Field Notes Authored by KC Field N | lotes QA/QCed by Page of |

Aherorder 33-1 creek page 4 of 4

(Station Diagram on Back)

| | Consulting Ltd - Elect Cedar Point Wind Project | Station Number | 33-/ |
|---|---|--|--|
| Project Number 16096 | 0709 | Pass No. (if applicable) |) / |
| Photos <u>Sec ba</u> | ··ck | Date (yyyymmdd): | |
| | | n east of Hill | s boro Rd with |
| UTM coordinates 476 | | 411134 | northing zone 197 |
| Fishing Method (circle one): | | Boat Unit Model/Ma | ike LA-12 |
| Sampling Method (circle one): | even habitat | transect | spot |
| Effort (Electrofishing Seconds): | 60 Number of N | etters: / | lumber of Anodes: / |
| Settings | W.B. (B) (00 | | |
| Fréquency (Hz) 60 | Voltage (volts) 600 | Current (Amps) P | Power (Watts) |
| Station Information | Mar. 4. | d. 430 m | |
| Length of Stream Surveyed (m) Station Characteristics: | Width (m): Range 2 | | 15 |
| | Tricuit (III). Italiyo 2 | Average. | 2,5 |
| Water Clarity/Colour: yell Temperature (°C) 14-6 | owlbrown Wat | Average: er Velocity if Measured (m/s): Conductivity (uS/cm) | N/A Time /0:2 |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data | 000 brown Wat 03 75 | er Velocity if Measured (m/s): | N/A Time 10:2 786 10.74 |
| Water Clarity/Colour: Temperature (°C) PH 8.5 Catch Data Species | Number of Fish | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 10:2 786 10.74 Comments (Le. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y Lhub | Number of Fish | er Velocity if Measured (m/s): Conductivity (uS/cm) | N/A Time 10:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo | Number of Fish | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 10:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y Lhub | Number of Fish | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 10:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) pH 8 Catch Data Species C(Y chub Bluntner Mo mn Shn WHSC Fathead Mn. | Ow brown Wat 3 75 | rer Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 10:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) pH 8 Catch Data Species C(Y chub Bluntner Mo mn Shn WHSC Fathead Mn. | Ow brown Wall 03 75 | rer Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |
| Water Clarity/Colour: Temperature (°C) PH 8 Catch Data Species C(Y chub Bluntnex Mo CMN Sho WHSC Fathead Mn. Raighbullot. | Ow brown Wall 03 75 | er Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time /0:2 786 10.74 Comments (Ls. age, disease, etc): |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 32-1
Aberarder week UB

| Project | Project # 100960709 |
|---|---|
| Station # 32-1 | Field Staff ICE + M F |
| Photos Taken 278-282 | Date Nov 24 2011 |
| GPS Coordinates 17 4767660 410975 | Time U.O. |
| Descriptive Location Hills boro Rd | 300 m north of Alberrain |
| Water Quality | |
| Dissolved Oxygen (mg/L) 13.45 pH | S.09 Conductivity (μS/cm) 702 |
| Water Temperature (°C) 5.67 | Air Temperature (°C) |
| Weather conditions in previous 24 hrs | l, sunny + fog |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 3 (m) | Maximum Pool Depth <u>40</u> (cm) |
| Mean Bankfull Width (m) | Mean Water Depth 20 (cm) |
| 20 % Riffle % Pool | 80 % Run%,Flat |
| Evidence of eroding banks, Comments on bank | stability <u>stable</u> , vegetated |
| some boulders | |
| Substrate – Upstream (% cover) | |
| Bedrock Silt | Boulder 60 Clay Cobbl |
| MuckGravel | MarlSand <u>ඨට</u> Detrito |
| Substrate - Downstream (% cover) | 10 |
| BedrockSilt | D Boulder 50 Clay Cobbl |
| MuckGravel | MarlSand _(_O Detritu |
| In-water Cover | |
| Cover Types Present (circle): Undercut B | Banks Deep Pool Vascular Plants |
| Overhanging vegetation Woody Del | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domi | inant vegetation, mature or early successional) |
| Upstream 20% remain to | Reco |
| | rees |
| Adiacent Land Use | |
| Upstream Aa Colol G | |
| Downstream | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, grou | undwater upwellings) |
| Upstream MAND | |
| Downstream | |
| Migratory Obstructions (seasonal, permanent) | |
| Upstream \(\int \(\int \) \(\int \) | |
| Downstream 100 | |
| | |
| | |
| Note any fish observations <u>Nore</u> | |
| Other Habitat Notes, Incidental Wildlife Obse | rvations, etctile drainage inp |
| | Explicit in Stream |
| Other Habitat Notes, Incidental Wildlife Obse | Explicit in Stream |
| Other Habitat Notes, Incidental Wildlife Obse | syland in stream |

Aperarde 321 creek Page 1 of 1

(Station Diagram on Back)

| | Consulting Ltd - Elec | | |
|--|---------------------------------------|--|---------------------------------------|
| Project Name Suncor Energ | y- Cedar Point Wind Project | Station Number | 32-1 |
| A STATE OF THE PARTY OF THE PAR | 60709 | Pass No. (if applicab | le) (|
| | back | | 2012 05 10 |
| Descriptive Location \mathcal{D}_n | Hillsboro Rd - | 300m north | of A Destarder |
| UTM coordinates 476 | 7660 easting - | 410975 | nerthing zone 177 |
| Fishing Method (circle one): | Backpack | Boat Unit Model/N | Make LR-12 |
| Sampling Method (circle one): | even habitat | transect | spot |
| Effort (Electrofishing Seconds): | 395 Number of Ne | etters:// | Number of Anodes: |
| Settings | | | |
| Frequency (Hz) 60 | Voltage (volts) 600 | Current (Amps) | Power (Watts) |
| Station Information | | | |
| Length of Stream Surveyed (m) Station Characteristics: | <u>~ 75 m</u> Width (m): Range 3.0→ | — 4.⊅ Average: | 3.5 |
| | Depth (m): Range 0.3 | | 0.40 |
| Water Clarity/Colour: +e | | | |
| Temperature (°C) /3.5 | a colour Wate | er Velocity if Measured (m/s): Conductivity (uS/cm) | |
| pH Q | 58 | Dissolved Oxygen (mg/L) | |
| Catch Data | | | |
| Species | Number of Fish | 00/2017 | Comments (Le. age, disease, etc): |
| CKChub | 30+##### | | unia colouis) |
| WHSC | 20+111 | (3) (c) | |
| CMn Shn | +#++ H++ I | (3) (some spawning | (6(0071) |
| Rainb. Dt. | 4111 1111 | (P) | |
| John. Nt. | H++++H+++++ | (F) | |
| | | * | |
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| | arania are 2000 aring ethic are areas | | |
| | 为其。这个特别和"A"的 | | |
| | | | seria, ili cidi alto Alacia y Balifaa |
| | | | |
| | | | |
| | | | |
| Fish Measurements on Separate She Field Staff: N. Burnett, M. Faiel | | Notes By: | ME |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 22

| | Stantec |
|---|--|
| | Project # 100760 707 |
| | Station # <u>A2-1</u> Field Staff <u>KE+MF</u> Photos Taken <u>292-297</u> Date Nov. 24 2011 |
| | Photos Taken 292-297 GPS Coordinates 17 4169428 409187 Time /// |
| | Descriptive Location Dil Hentay 200 m south of bourdes |
| | Description of Secretary of Secretary |
| | Water Quality |
| | Dissolved Oxygen (mg/L) 12.85 pH 8.1 Conductivity (μS/cm) 675 |
| | Water Temperature (°C) Air Temperature (°C) Supply Roc |
| | Weather conditions in previous 24 hrs cold, sunny - Rog |
| | Watercourse Dimensions & Morphology |
| | Mean Watercourse Width 5 (m) Maximum Pool Depth 40 (cm) Mean Bankfull Width 6 (m) Mean Water Depth 30 (cm) |
| | Mean Bankfull Width 6 (m) Mean Water Depth 30 (cm) 80 % Run 6 Flat 4 (m) |
| | Evidence of eroding banks, Comments on bank stability ensure to high |
| | Morris Minimal unlerget |
| 1 | |
| - | Substrate - Upstream (% cover) Bedrock Silt Boulder & Clay 2 Cobble |
| | |
| | |
| | Substrate - Downstream (% cover) |
| | BedrockSiltBoulderClayC Cobble |
| | MuckGravelMarlSandDetritus |
| | In-water Cover |
| | Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants |
| | Overhanging Vegetation Woody Debris Boulder Other |
| | Riparian Zone |
| | Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) |
| | Upstream 15 10 uppollot |
| | Downstream 80% weodlet |
| | Adjacent Land Use |
| | UpstreamACC |
| | Downstream Wew Coll P 713 17 800 1 |
| | Fish Habitat Potential |
| | Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| | Upstream / dell pour oles / Inuting? |
| | Downstream 100.9c Doctor at 11700 |
| | Migratory Obstructions (seasonal, permanent) |
| | Upstream |
| | Downstream // O |
| | Note any fish observations |
| | |
| | |
| | Other Habitat Notes, Incidental Wildlife Observations, etc. |
| | Other Habitat Notes, Incidental Wildlife Observations, etc. Island under bridge constricts flows creating ciffle 5 m ds up hobit |
| | Other Habitat Notes, Incidental Wildlife Observations, etc. island under langle constricts flows creating ciffle 5 mds up too be lots of large boulders placed in strains along bounds als |
| | island under bridge constricts flows creating riffle 5 mds up bob |

Aberarder 221

(Station Diagram on Back)

| Project Name Suncor Energy | gy- Cedar Point Wind Project | Station Number | 22-1 |
|--|--|--|-----------------------------------|
| Project Number 160 | 960709 | Pass No. (if applicable |) The I was a supply to the same |
| Photos See Vo | rct | Date (yyyymmdd): | 2012 05 10 |
| Descriptive Location $\mathcal{D}_{\mathcal{N}}$ | Oil Heritage ~ 700 | om south or | Douzlas on |
| Eas | + side | | |
| UTM coordinates 476 | 9428 sasting | 409187 | northing zone 177 |
| Fishing Method (circle one): | Backpack Bo | oat Unit Model/Ma | ake LR 12 |
| Sampling Method (circle one): | even habitat | transect | spot |
| Effort (Electrofishing Seconds): | 400 Number of Nett | ers: <u>/</u> i | Number of Anodes: |
| Settings | | | |
| Frequency (Hz) 60 | Voltage (volts) 600 Cu | urrent (Amps) | Power (Watts) |
| Station Information | | | |
| Length of Stream Surveyed (m) | ~ 80 m - 0/5 | | |
| Station Characteristics: | [2004]: [10] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] [2004] | Average: | 5.0 |
| | Depth (m): Range 💍 3 | 0 - 0,60 Average: | 0.50 |
| | | | |
| Water Clarity/Colour: | | Velocity if Measured (m/s): | □ D/A Time / 5 · 3 ° |
| Temperature (°C) | lecr Water | | D/A Time / 5.3 4 |
| Temperature (°C) 14 | lec Water | Velocity if Measured (m/s): | D/A Time 15:39 |
| Temperature (°C) | lecr Water | Velocity if Measured (m/s): Conductivity (uS/cm) | 655 |
| Temperature (°C) <u>1년</u> pH 국 | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) | 11.04 |
| Temperature (°C) pH Catch Data Species | lecr Water .48 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 11.04 |
| Temperature (°C) pH R Catch Data Species Crychub | Number of Fish 16 + 11+ 1++ 1++ 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 11.04 |
| Temperature (°C) pH Received Crychub WHSC | Number of Fish 16 + 11+ 1++ 1++ 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH Rectangle Species Crychub WHSC Buntney Min | Number of Fish 16 + 11+ 1++ 1++ 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 11.04 |
| Temperature (°C) pH R Catch Data Species Crkchub WHSC Buntner Min Cmn Shn. | Number of Fish 16 + 11 + 11 + 11 1 1 1 1 1 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crkchub WHSC Buntnow Min Cmn Shn. Rainb. Dt. | Number of Fish 16 + 11 + 11 + 11 1 1 1 1 1 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH R Catch Data Species Crychub WHSC Buntney Min Cmn Shn. Rainb. Nt. BRST | Number of Fish 16 + 11 + 1+ + 1 | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Comments (Le. age, disease, etc): |



| | | WB |
|--|---|-------------|
| WIND FARM WATERBODY | RAPID ASSESSMENT FORM | 1 22-5 |
| Stantec | Aberard | _000 |
| Station # 22-5 | Project Name Col | |
| Watercourse Name Arevard | Project # 160960709 | |
| Photos . 1/39 -1/41 | Field Staff CE4PB | |
| Date Dec 3 20 | Time 4:05 | |
| Weather conditions in previous 24 hrs 100 | 12 12 12 12 12 12 12 12 12 12 12 12 12 1 | 5 |
| GPS Coordinates (Zone) TE 409 4 | 12 N 4769168 | Datum |
| Descriptive Location ni Henry , So | wan of Bought | |
| Water Quality | . 211 | \ A |
| | Conductivity (µS/cm) 5 | 27 |
| | Air Temperature (°C) 50 | |
| Time <i>in situ</i> measurements taken <u> 4:05 p </u> | | |
| Watercourse Dimensions & Morphology | | |
| | Maximum Pool Depth 60 | _(cm) |
| Mean Bankfull Width 15 (m) | Mean Water Depth | _(cm) |
| % Riffle% Poo | Afficial South Fig. 12 (S. C. | % Fla |
| Evidence of eroding banks, Comments on bank sta | Dility | |
| Substrate (% cover) | | |
| Bedrock 30 Cobble | SandSilt | Muck |
| Boulder <u> </u> | 3o Clay Marl | Detritus |
| In-water Cover Cover Types Present (circle): Undercut Banl Overhanging Vegetation Woody Debris | ks Deep Pool Watercress Boulder Other | Aquatic Veg |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominar | nt vegetation, mature or early succes | sional) |
| Adjacent Land Use | | |
| 0 | | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground | water upwellings) | |
| √/ | | |
| Migratory Obstructions (seasonal, permanent) | | |
| Note any fish observations | | |
| Waterbody Notes | | |
| Natural Watercourse Trapezoidal Channel | Grassed Swale | Buried Tile |
| Surficial Drainage (i.e. furrows) Dugout Pond | Dominated by Aquatic Veg_ | Dry |
| Other Habitat Notes, Incidental Wildlife Observa | tions, etc. | |
| | | |
| 12/ | | |
| Field Notes Authored by Field Notes | QA/QCed by | |



| 50 | watson brain | 1 |
|---------|---|---|
| | RAPID ASSESSMENT FORM FOR AQUATIC HABITAT | |
| Stantec | WB WAS I TO | |

| Project | Project # 160960709 |
|--|---|
| Station # 34-1 | Field Staff KE+ MF |
| Photos Taken 2 6 - 22 | Date Nov. 23 2011 |
| GPS Coordinates 17 476 490 / 41088 | 7 Time 4150 pm |
| Descriptive Location Hillsboro Rd | , 250 M North Fisher Line |
| Water Quality | |
| Dissolved Oxygen (mg/L) 1.66 p | pH <u>7ι72</u> Conductivity (μS/cm) <u>59/</u> |
| Water Temperature (°C), | Air Temperature (°C) (°C) |
| Weather conditions in previous 24 hrs | derain |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 2 (m) | Maximum Pool Depth (5 (cm) |
| Mean Bankfull Width 5 (m) | Mean Water Depth (cm) |
| % Riffle | 100 % Run % Flat |
| Evidence of eroding banks, Comments on bar | nk stability <u>stable</u> + well vegeta |
| Substrate - Upstream (% cover) +urb | 1 assumed |
| Bedrock Silt | |
| Muck Gravel | Boulder <u>(</u> |
| | |
| Substrate - Downstream (% cover) + w b | id assumed RCG + clay |
| BedrockSilt | BoulderCobb |
| MuckGravel | MarlSandDetrit |
| In-water Cover | |
| Cover Types Present (circle): Undercu Overhanding Vegetation Woody I | |
| Riparian Zone | |
| | ominant vegetation, mature or early successional) |
| Upstream 40°10 namow dec. | nponan trees north side |
| Downstream 60% woodlot | + overhanging veg |
| Adjacent Land Use | |
| Upstream HS NUOS | |
| Downstream As Ruld + W | podlot |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, gi | roundwater upwellings) |
| Upstream | |
| Downstream | |
| Migratory Obstructions (seasonal, permanent) | |
| Upstream and in summer | |
| Downstream | |
| Note any fish observations _// // / | |

Page 1 of 1

| Stantec | Stantec | Consulting Lta - Electr | otisning Record a | ind Catch Results |
|--|--------------------|----------------------------|--|------------------------------------|
| Project Name | Suncor Energy | - Cedar Point Wind Project | Station Number | 34-1 |
| Project Number | 16096 | 60709 | Pass No. (if applicable | |
| Photos | See ba | ck | Date (yyyymmdd): | 2012 05 10 |
| Descriptive Location | 001 | tillsboro Rd - 250 n | n Northauf F | Fisher Line - ROW |
| UTM coordinates | 476 | 4901 easting | 410887 | northing zone 177 |
| Fishing Method (circ | ele one): | Backpack Boo | at Unit Model/M | ake LR-12 |
| Sampling Method (c | ircle one): | even habitat | transect | spot |
| Effort (Electrofishing | Seconds): | 80 Number of Nette | ers: | Number of Anodes: |
| Settings | | | | |
| Frequency (Hz) | PROBLEM CONTRACTOR | Voltage (volts) 600 Cui | rrent (Amps) | Power (Watts) |
| Station information | 1 | | | |
| Length of Stream Su | ırveyed (m) | Row ~2.5 0/5+d/ | 5. 2 2 | |
| Station Characteristi | ics: | Width (m): Range 1.5- | | 1.70 |
| | | Depth (m): Range 0.05 | O.15 Average: | 6.18 |
| Water Clarity/Colour Temperature (°C) pH Catch Data | | 16 | /elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 08:35 |
| Species | 1 | Number of Fish | | Comments (i.e. age, disease, etc): |
| No catch | | | | |
| 100 Case | | | | |
| | .6 | | | |
| | | | | |
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| Nole: P | OLL Gal |) | | |
| IVUE . KI | JW 7151 | ling only. No a | cless | |
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| | | | en er best best in en en en en en en | |
| | | | | |
| Fish Measurements | on Separate She | et? YN | | |
| Field Staff: N. E | Burnett, M. Faiell | | Notes By: | MF |
| | | | | (Station Diagram on Back) |



Field Notes Authored by 4E

RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 26-1

| Project | 63-267 4767332 40 Durander | Project # 1 Field Staff Date 10 Time 10 | | 7 1 - 0,1 4 |
|---|--|---|---|----------------------|
| Water Quality Dissolved Oxygen (m Water Temperature (Weather conditions in | | Air Tempera | nductivity (μS/cm) _ ature (°C) _ <i>b</i> ° | 066 |
| Mean Watercourse W Mean Bankfull Width % Riffle | sions & Morphology /idth 9 (m) | | Depth 15 | (cm) (cm) Flat |
| Substrate – UpstreaBedrockMuck | m (% cover) _ <u>ൿ〇</u> Silt Gravel | Boulder Marl | φο ClaySand _3 | Cobble |
| Substrate – DownstBedrockMuck | ream (% cover) Silt Gravel | Boulder Marl | LO ClaySand | Cobble Detritus |
| In-water Cover Cover Types Present Overhanging | | cut Banks Dee Debris Boul | Pool Vascular Other | Plants RCC |
| | watercourse shaded, of a scattered Ag fields | | mature or early such | |
| Upstream Downstream_ | al ning or nursery areas, name s (seasonal, permane | | ings) | |
| Downstream_ Note any fish observa | | | | |

Field Notes QA/QCed by _____

Page of

Watson brain 267

Stantec Consulting Ltd - Electrofishing Record and Catch Results Suncor Energy- Cedar Point Wind Project **Project Name** Station Number 26-/ Pass No. (if applicable) **Project Number** 160960709 **Photos** Seeback Date (yyyymmdd): 2012 0510 On Arberarder Line ~ 250m east of Oil Heritage **Descriptive Location** on Southside 4767332 **UTM** coordinates 409368 Backpack Fishing Method (circle one): **Boat** Unit Model/Make Sampling Method (circle one): habitat transect 310 Effort (Electrofishing Seconds): Number of Netters: Number of Anodes: Settings Frequency (Hz) 60 Voltage (volts) 600 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) ~ 75 m Range 1.5 - 2.5 Station Characteristics: Width (m): 2.0 Average: Depth (m): Range 0.10 - 0.30 Average: Water Clarity/Colour: tea colour. NIA Water Velocity if Measured (m/s): Time 09:31 Temperature (°C) Conductivity (uS/cm) 682 pH Dissolved Oxygen (mg/L) 8.16 **Catch Data Species Number of Fish** Comments (Le. age, disease, etc): NASC 13 Knocked on door of Landown answer.

Fish Measurements on Separate Sheet? Y/N

Field Staff: N. Burnett, M. Faiella

Notes By: MF



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 34-2

| Project | Project # (60960709 |
|--|--|
| Station # 34 > | Field Staff VE + MF |
| Photos Taken 222 225 | Date NOV 23 2011 |
| GPS Coordinates 17 4765883 410921 | Time Sem |
| Descriptive Location Hulls borg Rol | as m south of wright line |
| Water Quality | |
| | 7185 Conductivity (µS/cm) 568 |
| Water Temperature (°C) 7,72 | Air Temperature (°C) 5 |
| Weather conditions in previous 24 hrs | 4 rain |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 1.5 € (m) | Maximum Pool Depth / 5 (cm) |
| Mean Bankfull Width 3,5 (m) | Mean Water Depth(cm) |
| % Riffle 30 % Pool | 70 % Run % Flat |
| Evidence of eroding banks, Comments on bank | |
| some boulder new up | culvert. |
| Substrate - Upstream (% cover) + which | assumed |
| Bedrock Silt 2 | Description Boulder Boulder Cobble Cobble |
| MuckGravel | MarlSandSO Detritus |
| Substrate – Downstream (% cover) +wwo | d exumed |
| Substitute - Downstiedin (/o Cover) 2/1/1/2/ 1/1/ | |
| | |
| Bedrock Silt | D Boulder |
| | |
| Bedrock Silt 1/2 Muck Gravel | Description Boulder Clay Cobble Marl Sand Detritus |
| Bedrock Silt 1/2 Muck Gravel In-water Cover Cover Types Present (circle): Undercut B | D Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants Abul |
| Bedrock Silt 1/2 Muck Gravel | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants About |
| Bedrock Silt Description Silt Silt Silt Silt Silt Silt Silt Silt | D Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants Abul |
| Bedrock Silt Degraved In-water Cover Cover Types Present (circle): Undercut Bedrock Undercut Bedrock Woody Debrication Woody Debrication Undercut Bedrock Unde | Boulder Clay Cobble Sand So Detritus anks Deep Pool Vascular Plants at Soris Other |
| Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Boundary Vegetation Woody Debartiparian Zone Riparian Cover (% of watercourse shaded, domin Upstream () | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants at all Other Other Detritus nant vegetation, mature or early successional) |
| Bedrock Silt Demonstrated Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Bedrock Undercut Bedrock Woody Debender Bedrock Bedrock Silt Gravel Riparian Zone Riparian Cover (% of watercourse shaded, dominate Bedrock Silt Gravel | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants at all Other Other Detritus nant vegetation, mature or early successional) |
| Bedrock Silt Muck Gravel In-water Cover Cover Types Present (circle): Undercut Be Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, domin Upstream () Downstream Selo wer hand | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants at all Other Other Detritus nant vegetation, mature or early successional) |
| Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Bedrock Woody Debender Siparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, doming Upstream Of the Downstream Sels over hand Adjacent Land Use Upstream A S Light Selection Woody Debender Land Use Upstream A | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants at all Other Other Detritus nant vegetation, mature or early successional) |
| Bedrock Silt Muck Gravel In-water Cover Cover Types Present (circle): Undercut Be Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, domin Upstream () Downstream Selo wer hand | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants at all Other Other Detritus nant vegetation, mature or early successional) |
| Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Bedrock Woody Debender Vegetation Woody Debende | Boulder Clay Cobble Sand 50 Detritus anks Deep Pool Vascular Plants at all Other Other Detritus nant vegetation, mature or early successional) |
| Bedrock Silt Muck Gravel In-water Cover Cover Types Present (circle): Undercut Be Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, domin Upstream () Downstream Some Manne Adjacent Land Use Upstream As held Some Downstream As held | Boulder Clay Cobble Sand SD Detritus anks Deep Pool Vascular Plants about Other Other Detritus mant vegetation, mature or early successional) |
| Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Bedrock Woody Debender Vegetation Woody Debende | Boulder Clay Cobble Sand SD Detritus anks Deep Pool Vascular Plants about Other Other Detritus mant vegetation, mature or early successional) |
| Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Bed Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, doming Upstream Of Company Adjacent Land Use Upstream As held resident Downstream As held resident Cirtical Habitat Potential Critical Habitat (spawning or nursery areas, ground in the control of t | Boulder Clay Cobble Sand SD Detritus anks Deep Pool Vascular Plants about Other Other Detritus mant vegetation, mature or early successional) |
| Bedrock Silt Muck Gravel In-water Cover Cover Types Present (circle): Undercut Be Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, domin Upstream O O O Downstream Solo wer hand Adjacent Land Use Upstream As held Color Downstream As held Color Downstream As held Color Critical Habitat Potential Critical Habitat (spawning or nursery areas, ground Upstream Agency Color Upstream | Boulder Clay Cobble Sand SD Detritus anks Deep Pool Vascular Plants about Other Other Detritus mant vegetation, mature or early successional) |
| Bedrock Silt Muck Gravel In-water Cover Cover Types Present (circle): Undercut Bed Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, doming Upstream Order over two many Adjacent Land Use Upstream As field Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground Upstream Downstream Over Overhand Over Over Overhand Over Over Over Over Over Over Over Over | Boulder Clay Cobble Sand SD Detritus anks Deep Pool Vascular Plants about Other Other Detritus mant vegetation, mature or early successional) |
| Bedrock Silt Gravel In-water Cover Cover Types Present (circle): Undercut Bed Overhanging Vegetation Woody Deb Riparian Zone Riparian Cover (% of watercourse shaded, doming Upstream Overhanging Vegetation Woody Deb Adjacent Land Use Upstream As held Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground Upstream Overhanging Vegetation Woody Deb Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground Upstream Overhanging Vegetation Woody Deb Migratory Obstructions (seasonal, permanent) | Boulder Clay Cobble Sand SD Detritus anks Deep Pool Vascular Plants about Other Other Detritus mant vegetation, mature or early successional) |

Barnister brain 34-2

| Project Name Sunce | or Energy- Cedar Point Wind Project | Station Number 34-2 | 101= |
|---|---|--|-----------|
| Project Number | 160960709 | Pass No. (if applicable) | |
| Photos Se | e back. | Date (yyyymmdd): 2012 05 10 | |
| Descriptive Location | > Hillsboro Rd -250 | s of wright Line. | |
| UTM coordinates | 4765883 easting | 410 921 nerthing zone | 17 |
| Fishing Method (circle one): | Backpack E | oat Unit Model/Make | |
| Sampling Method (circle on | e): even habitat | transect spot | |
| Effort (Electrofishing Second Settings | is): 490 Number of Ne | tters: / Number of Anodes: / | |
| Frequency (Hz) 30 | Voltage (volts) 600 C | current (Amps) Power (Watts) | |
| Station Information | | | |
| Length of Stream Surveyed Station Characteristics: | (m) $\sim 70 \text{ m}$ Width (m): Range $1.0 \cdot 2$ Depth (m): Range 0.2 | | |
| | | | |
| Vater Clarity/Colour: Temperature (°C) | | r Velocity if Measured (m/s): $\frac{N/A}{593}$ Time $\frac{O}{100}$ | 8:01 |
| pH | 8.18 | Conductivity (uS/cm) 593 Dissolved Oxygen (mg/L) 7,79 | |
| Catch Data | | Disserved Caygon (mg/L) | • |
| Species | Number of Fish | Comments (Le. age, dise | ase, etc) |
| Forthead Min Cop | awn colous) 11 @ | | |
| BRST | 11 3 | | |
| Crkchub | +++ (C | 银石铁、 1000000000000000000000000000000000000 | |
| | | | |
| | | | |
| | | | |
| | 经验证证据 2世紀 第5世紀 1000 1000 1000 1000 1000 1000 1000 10 | | |
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| | | The all the first of the August of the State | |
| | | | 1319 |
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| | | | K |
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| | | | |
| | | | |
| ish Measurements on Sepa | | | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM Banniste braun 22-6

| Station # 82-6 | Project Name |
|--|--|
| Watercourse Name Ranmoth Kraun | Project # 1009100709 |
| Photos 1(42-144 | Field Staff KE + NB |
| Date 180 3 2012 | Time 4:25 |
| Weather conditions in previous 24 hrs Pain last | ek. |
| GPS Coordinates (Zone) 11 E . 409 14 | 4 N 4705 110 Datum |
| Descriptive Location Oil Wontoge - South for Dave | alas, |
| | |
| Water Quality | 100 |
| Dissolved Oxygen (mg/L) 12.14 pH 1 | Conductivity (µS/cm) 605 |
| Water Temperature (°C) 1.5\ | Air Temperature (°C) 1\(\lambda\) |
| Time in situ measurements taken \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 3.0 (m) | Maximum Pool Depth (cm) |
| Mean Bankfull Width 6.0 (m) | Mean valer Depth No (Citi) |
| | ol shum-lan % Run % Flat |
| Evidence of eroding banks, Comments on bank st | |
| | |
| Substrate (% cover) | |
| BedrockCobble | Sand Silt_₹Muck |
| Boulder@_Gravel | 40 Clay Marl 10 Detritus |
| In-water Cover | 10.0 |
| Cover Types Present (circle): Undercut Ba | |
| PLEASE : BEST TO THE STATE OF | |
| Overhanging vegetation vvoody bebis | Dodice Ctrief |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domination | ant vegetation, mature or early successional) |
| rest and y alacs as benon bassissed, Howthas | 2 40, V. Skaded |
| Adjacent Land Use | |
| No. | |
| | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, groun | dwater upwellings) |
| M/Pe | i kan ningisan kila mengangan pada pada dan dan pengangan dan pengangan baharan pengangan. Angangan pada dan pengangan pengangan pengangan pengangan pengangan pengangan pengangan pengangan pengangan pe |
| Migratory Obstructions (seasonal, permanent) | |
| Al-l- C-L-LAl-s- | |
| | |
| Waterbody Notes | |
| | el Grassed Swale Buried Tile |
| Tractical Fractional Country Tractical Country | nd Dominated by Aquatic Veg Dry |
| Surficial Drainage (Le furrows) Diligolif Pol | |
| Surficial Drainage (i.e. furrows) Dugout Pol | |
| | rations, etc. |
| | ations, etc. |
| Other Habitat Notes, Incidental Wildlife Observ | rations, etc. |
| | rations, etc. |
| Other Habitat Notes, Incidental Wildlife Observ | vations, etc. |



Field Notes Authored by K

| Stantec Project | Project # 160960709 |
|-----------------------------------|--|
| Station # 20 | Field Staff KE + MF |
| Photos Taken GPS Coordinates | Date Nov. 24 2011 17 47 673 18 409693 Time 10140 |
| | ion Aberarder we soon east of oil Her |
| Water Quality | 12.02 203 |
| Dissolved Oxyger Water Temperatur | |
| | ns in previous 24 hrs cold summy + fog |
| Watercourse Dir | nensions & Morphology |
| Mean Watercours | |
| Mean Bankfull Wi | |
| % Riffle Evidence of erodi | mg banks, Comments on bank stability Jegetated + stable |
| | U A TOOL OF THE STATE OF THE ST |
| Substrate – Upst | tream (% cover) |
| Bedrock | SiltBoulder <u>40</u> ClayCobble |
| Muck | MarlSand _50 Detritus |
| Substrate - Dow | nstream (% cover) |
| Bedrock | 20 Silt Boulder 40 Clay Cobble |
| Muck | |
| In-water Cover | in that |
| Cover Types Pres Overhangi | sent (circle): Undercut Banks Deep Pool Vascular Plants attacking Vegetation Woody Debris Boulder Other |
| Riparian Zone | |
| Riparian Cover (% Upstream | 6 of watercourse shaded, dominant vegetation, mature or early successional) |
| Downstrea | |
| Adjacent Land Us | |
| Upstream_ Downstrea | m Ha fields |
| | |
| Fish Habitat Pote | |
| Upstream | pawning or nursery areas, groundwater upwellings) |
| Downstrea | |
| | tions (seasonal, permanent) |
| Upstream_ Downstrea | |
| | ervations |
| Note any fish obse | |

Field Notes QA/QCed by ______

Banniste Frain 26-2

| Project Name Si | uncor Energy- Cedar P | oint Wind Project | Station Number | 26-2 |
|---|-----------------------|-------------------|--|--|
| Project Number | 160960709 | Name of Street | Pass No. (if applicat | |
| Photos | See back | | | 2012 05 10 |
| Descriptive Location | | rder Line | n Span east of | Oil Heritage on |
| | South sid | 10 | | |
| UTM coordinates | 4767318 | | 409693 | northing zone 17 |
| | | Northy | | Pasiw) |
| Fishing Method (circle o | | Backpack | Boat Unit Model/ | Make ER-12 |
| Sampling Method (circle | one): ev | en habitat | t transect | spot |
| Effort (Electrofishing Se | conds): 305 | Number of | Netters: / | Number of Anodes: / |
| Settings | | | | |
| Frequency (Hz) 60 | Voltage | (volts) 600 | Current (Amps) | Power (Watts) |
| Station Information | | | | The transfer of a second |
| Length of Stream Surve | yed (m) ~~ | 70m | | |
| Station Characteristics: | Width (| m): Range |) 5 - 3.5 Average: | 3,0 |
| | Depth (| | .15 - 6.30 Average: | 0.25 |
| Mates Clerity/Colours | tea / ello | | | |
| Water Clarity/Colour: Temperature (°C) | <u>tea / yello</u> | <u>ν</u> w | ater Velocity if Measured (m/s): | |
| pH pH | 8.48 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | |
| Catch Data | | | Discourse Oxygon (mgc) | |
| Species | Nu | mber of Fish | | Comments (i.e. age, disease, etc) |
| Crk chub | C | | | minor black upot an |
| | | B | | |
| BRST | (| 9 | | |
| | | | | |
| | (| | | |
| | | | | |
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| BRST | ced ab owner | | no an | Sww |
| BRST | | | :212 127) ,no ar | \Sw.✓· |
| BRST | | | estation) "no ar | Suver |
| BRST | | | no ar | Surch |
| BRST | | | ,no ar | 15w/c/. |
| BRST Note: Knock | ced ab owner | | no ar | |
| Note: Knock | ced ab owner | | CIAD (**) telogal & (*) 12 | Succession of the Sun West Annual Sun West Sun |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

| Project C P | | Project # 1609 | 60 709 |
|--|--|-------------------------|--------------------------|
| Station # 24-1 | | Field Staff KE | +ME |
| Photos Taken 28 | 7-291 | Date Nov. 3 | W 2011 |
| GPS Coordinates 17 | 4768596 40915 | 3Time 1/30 | 9 800 |
| Descriptive Location | Dil Hentail | 1110 1150 | south of |
| DOLL CLOS | 1.00 |) 1.3 Un | auth of |
| 0 | 470 | | |
| Water Quality | | 0.01 | 1.00 |
| Dissolved Oxygen (mg | | | |
| Water Temperature (°C | | Air Temperature (°C | |
| Weather conditions in | previous 24 hrs | , sunny + f | -09 |
| Watercourse Dimens | ons & Mornhology | | J |
| Mean Watercourse Wie | | Maximum Pool Dep | oth 20 (cm) |
| Mean Bankfull Width | 7 (m) | Mean Water Depth | |
| 20 % Riffle | % Pool | 80 % Run , | <u>30</u> (cm) |
| | nks, Comments on bank s | | % riat |
| | | stability <u>Slight</u> | underan |
| out regul | aneer 1 | | |
| Substrate - Upstream | (% cover) twoid | | |
| Bedrock | 20 Silt | Boulder | Clay Cobbl |
| Muck | 20 Gravel | Marl | Sand Detritu |
| Outstands Downston | 101 | 1 | |
| Substrate - Downstre | A | 0.5 | |
| Bedrock _ | | D Boulder | Clay <u>10</u> Cobbl |
| Muck | <u> </u> | Marl | SandDetrit |
| In-water Cover | slight | | |
| Cover Types Present (| | anks Deep Pool | Vasoular Plants R |
| Overhanging Ve | The second secon | | Other |
| Discolar 7-11 | | | |
| Riparian Zone | | | |
| Riparian Cover (% of w | atercourse shaded, domir | nant vegetation, mature | e or early successional) |
| | lo riponian tre | 1 0/1 | orth side |
| Downstream_[| o's treed now | nan buffer | |
| Adjacent Land Use | . 11 | | |
| Upstream | AG FORDS & | Moderat | |
| Downstream | 1) | | |
| Fish Habitat Potential | | | |
| | ng or nursery areas, groui | ndwater unwellings) | |
| I landan and | | nawater apwellings) | |
| Downstream | none | | |
| | (coccent normalist) | | |
| Migratory Obstructions | | | |
| | none | | |
| Downstream | | | |
| Note any fish observati | ons <u>nove</u> | | |
| | | | |
| Other Hebitet Netse I | noidontal Wildlife Obser | | |
| Other Habitat Notes, I | ncidental Wildlife Obser | | office. |
| -copple/boulds | 1/15 TRUITI LE | 2 m of 12 charte | OTHE |
| - mod. Fast H | on - treed. | nparan but | |
| -incised | -tubid | | |
| | / | NI | |
| Field Notes Authored by | Field Not | es QA/QCed by | Page of_ |
| The state of the s | | | rayeU |

Bannister brain 241

| Project Name Suncor Energy | - Cedar Point Wind Project | Station Number | 24-1 |
|---|--|---|------------------------------------|
| Project Number16096 | 60709 | Pass No. (if applicable |) / |
| Photos See ha | cK_ | Date (yyyymmdd): | 2012 05 10 |
| Descriptive Location On D | vil Heritage Rd ~ | -1.5 km Sout | h of Douglas |
| 1 Line | on west side | | 0 |
| JTM coordinates <u>U76</u> | 8596 easting | 409153 | anthing zone 17-T |
| Fishing Method (circle one): | Backpack Box | at Unit Model/Ma | ake ER-12 |
| Sampling Method (circle one): | even habitat | transect | spot |
| Effort (Electrofishing Seconds): | 400 Number of Nette | ors: | Number of Anodes: |
| 경험하다는 보통하다는 열하다면 함께 이 아이들은 사람들은 사람들이 살아 다 했다. | Voltage (volts) 600 Cur | rrent (Amps) | Power (Watts) |
| Station Information | | | |
| Length of Stream Surveyed (m) | ~ 80 m | | |
| Station Characteristics: | The transfer of the second sec | - 4.0 Average: | 3. 5 |
| | Depth (m): Range 0.25. | <u>4.0</u> Average: | .0.35 |
| | | | |
| Notes Olash (Oalass | , 19 19 19 19 2 基 2 A T A X E | | |
| Water Clarity/Colour: | A STATE OF THE PARTY OF THE PAR | /elocity if Measured (m/s): | N/A Time /3:50 |
| Water Clarity/Colour: C\co Temperature (°C) /5.5 pH | A STATE OF THE PARTY OF THE PAR | Conductivity (uS/cm) | 596 |
| Temperature (°C) | A STATE OF THE PARTY OF THE PAR | | N/A Time 13:50 596 11.97 |
| Temperature (°C) /5.5 | A STATE OF THE PARTY OF THE PAR | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 596 |
| Temperature (°C) pH Catch Data Species CCK Chob | Number of Fish 18 + +++++++++ | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>596</u> <u>11.97</u> |
| Temperature (°C) pH Catch Data Species Cok Chub WHSC | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>596</u> <u>11.97</u> |
| Temperature (°C) pH Catch Data Species Cck chub (w HSC Cmn Shm | Number of Fish 18 + +++++++++++++++++++++++++++++++++ | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | <u>596</u> <u>11.97</u> |
| Temperature (°C) pH 8.0 Catch Data Species Crk chub WHSC CMn Shn BRST | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) (S) (S) (S) (S) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Roth Data Species Crk Chub WHSC CMn Shm BRST Rainb, D4. | Number of Fish 18 + +++++++++++++++++++++++++++++++++ | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 3 3 \$\mathbb{S}\$ | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Roth Data Species Crk Chub WHSC CMn Shm BRST Rainb, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 3 3 \$\mathbb{S}\$ | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Ratch Data Species Cok Chub WHSC CMn Shm BRST. Rainb, D4. Jhn, D4. | Number of Fish 18 + ## ## ## +#+ 7 + ## | Conductivity (uS/cm) Dissolved Oxygen (mg/L) HH 39 (3) (3) (5) | Comments (i.e. age, disease, etc): |



Barnister Brain 62-2
WIND FARM WATERBODY RAPID ASSESSMENT FORM

Barnister WB

| Stailtet | | | 0 | Drawn | |
|--|--------------------------|--------------------------------------|-----------------------|-----------------|--------------|
| Station # 62-7 | | Project Name (| P. | | |
| Watercourse Name Bannist | | Project # WO | 960709 | | |
| Photos 802 - 805 | | Field Staff | ニャンド | | |
| Date Oct 3 2012 | | Time 12:44 | , | | |
| Weather conditions in previous 24 | hrs | | | | |
| GPS Coordinates (Zone) 17 T | E 4/209 | 59 1 | 147656 | 47 Datum | 1 |
| Descriptive Location | | | | | |
| Water Quality | | _ d | M | | |
| Dissolved Oxygen (mg/L) | pH_ | Conduc | ctivity (µS/cm) | | |
| Water Temperature (°C) | | Air Temperature | | | |
| Time in situ measurements taken | | | | Exemplified the | |
| Watercourse Dimensions & Mo | mbology | | | | |
| To compare the Charles and the Charles of Compared Market Alexander 122 (Alexander 122 Alexander 122 | (m) | Maximum Pool | Denth \ | (cm) | |
| Mean Bankfull Width | (m) | Mean Water De | COCCUS PRODUCTION CO. | (cm) | |
| % Riffle | (''') % Pool | | % Run | (0111) | % Flat |
| Evidence of eroding banks, Comm | | | 11 | recetat | ed |
| | | | | 0 | |
| Substrate (% cover) | | en e de la companya en en | | | |
| Bedrock | Cobble | Sand | | Silt | _Muck |
| Boulder | Gravel | OClay | | Marl | _Detritus |
| In-water Cover | | | | June | W, RCE |
| Cover Types Present (circle): | Undercut Bank | ks Deep Po | ool Waterc | | atic Veg |
| Overhanging Vegetation Woo | dy Debris | Boulder C | Other | (1) | |
| | | | | | |
| Riparian Zone | | | | | |
| Riparian Cover (% of watercourse | snaged, dominar | it vegetation, ma | col of early s | successional) | ma ele |
| Adjacent land las | A MODS, U | arcoco y | oge, | TAIVI, I | rage ~ |
| Adjacent Land Use | | | | | |
| | | | | | |
| Fish Habitat Potential | | | | | |
| Critical Habitat (spawning or nurs | ery areas, ground | water upwellings | | | |
| 1000 | sry arous, ground | | | | |
| Migratory Obstructions (seasonal | permanent) | | | | |
| nove | | | | | |
| Note any fish observations | | | | | |
| | Kalife Salutah (Serring) | | | ues Maillanda e | |
| Waterbody Notes | | | | | |
| Natural Watercourse Trap | pezoidal Channel | Grass | ed Swale | Buried | Tile |
| Surficial Drainage (i.e. furrows) | Dugout Pond | d Domina | ited by Aquation | c Veg | Dry V |
| | | | | | |
| Other Habitat Notes, Incidental | Wildlife Observa | tions, etc | | | |
| | | | | | PIS UNIVERSE |
| | | | | | |
| Elold Alabas Authored by KC | Field Notes | | | | |



Bonnister brain-1 wind farm waterbody rapid assessment form 62-3 WB

| Janet. | | | | | 0 0 |
|--|-------------------|--------------------------|---------------------|----------------|----------|
| Station # 62-3 | | Project Name CF | | | |
| Watercourse Name Banniste | D/a10 -1 | Project # 6090 | 20709 | | |
| Photos 900 - 809 | | Field Staff Ct + c |) K | | |
| Date Oct 3 2012 | | Time 12:55 | 联队员的通图199 39 | | |
| Weather conditions in previous 24 l | hrs wan | + rain | 是国"加克"的重整。 | | |
| GPS Coordinates (Zone) 17 T | | 29. N4 | 76558 | Datum | |
| Descriptive Location 1100 / 1 | Live | Post et Hil | 150000 | | |
| line of the second seco | | | 計畫等產品層量 | | |
| Water Quality | | | dol | | |
| Dissolved Oxygen (mg/L) | / pH_ | Conductivity | (uS/cm) | | |
| Water Temperature (°C) | / \\\- | Air Temperature (°C) | (μοιοιιι) | | |
| Time in situ measurements taken_ | | All Telliperature (V) | | we said in Ear | |
| | | | | | |
| Watercourse Dimensions & Morp | phology | | | | |
| Mean Watercourse Width | | Maximum Pool Depth | | _(cm) | |
| Mean Bankfull Width 3 | (m) | Mean Water Depth | | _(cm) | |
| % Riffle | | 0 | % Run | | % Flat |
| Evidence of eroding banks, Commo | ents on bank st | ability | | | |
| Substrate (% cover) | | | | | |
| Bedrock | Cobble | 20 Sand | Silt_ | | _Muck |
| Boulder | Gravel | ∂ Clay | Mari | 60 | Detritus |
| | dy Debris | Boulder Other_ | | | |
| Riparian Zone Riparian Cover (% of watercourse: | shaded, domina | ant vegetation, mature o | or early succes | ssional) | |
| Adjacent Land Use | | | | | |
| Ag | | | | | |
| Fish Habitat Potential | | | | | |
| Critical Habitat (spawning or nurse | | dwater upwellings) | | | |
| Migratory Obstructions (seasonal, | permanent) | | | i post | |
| Note any fish observations | | | | | |
| Waterbody Notes | | | | | |
| Natural Watercourse Trape | ezoidal Channe | Grassed Sv | vale | Buried ' | Tile_ |
| Surficial Drainage (i.e. furrows) | | | Aquatic Veg | | Dry |
| | | | | | |
| Other Habitat Notes, Incidental V | VIIdlife Observ | ations, etc. | | | |
| traveroidal chan | nel star | him to nate | ralize 1 | NIN | |
| tree in | | J | | | |
| | | | | | |
| | | | | | |
| Field Notes Authored by | Field Note | as QA/QCed by | | | |



Byrnes-Sutton 45-2
Braun
WIND FARM WATERBODY RAPID ASSESSMENT FORM
WATERBODY RAPID ASSESSMENT FORM

| Station # 45-2 Project Name C.P. |
|---|
| Station # 45-2 Project Name C.P. |
| Watercourse Name on Known Byrnes Sutten Draw Project # 160960709 |
| Photos 647:18 648:15 649:15 Field Staff NB, MF Date 2010 06 07 Time 09:10 |
| Date 2013 06 07 Time 09:/0 |
| Weather conditions in previous 24 hrs Application (7000) |
| GPS Coordinates (Zone) 171 E 413853' N 4766200 Datum 17 TM |
| Descriptive Location 500m east of Blue Heron Rd n 500m 500th of |
| Water Quality |
| Dissolved Oxygen (mg/L) 9.73 pH 7.98 Conductivity (µS/cm) 101 |
| Water Temperature (°C) 14 41 Air Temperature (°C) 17°c |
| Time in situ measurements taken 09:00 |
| Watercourse Dimensions & Morphology Mean Watercourse Width / 5 (m) Mean Bankfull Width 3.0 (m) Maximum Pool Depth 0.65 (cm) Mean Water Depth 0.65 (cm) |
| % Riffle/ O % Pool & O % Run 5 O % Fla |
| Evidence of eroding banks, Comments on bank stability MINOT SCOUR + Slumping. |
| Substrate (% cover) Bedrock 5 Cobble Sand 50 Silt Muck |
| Bedrock 5 Cobble Sand 50 Silt Muck S Boulder /o Gravel 30 Clay Marl Detritus |
| S Boulder 78 Graves 90 Glay Mail Detritus |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Overhanging Vegetation Woody Debris Boulder Other Watercress Aquatic Veg |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 5º/b 5mall 5hrobs, grasses Adjacent Land Use 95 woodlot: |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) 5 pawn y nulserny for a sign |
| Migratory Obstructions (seasonal, permanent) |
| Note any fish observations many, captured fish. |
| Note any fish observations many, captured fish. |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry |
| Other Habitat Notes, incidental Wildlife Observations, etc. |
| |
| |
| Field Notes Authored by MF Field Notes QA/OCed by JE |

| | BUYON | Brown Page For 1 | | | |
|---|--|---|--|--|--|
| | | Draw Page Tof 1 | | | |
| Stantec C | onsulting Ltd - Electrofishing Re | cord and Catch Results | | | |
| Project Name C.P. | Station Numl | ber 457-Q | | | |
| Project Number 16096070 | Pass No. (if a | Pass No. (if applicable) | | | |
| Photos 647=id 648= | u)s 649=d/s Date (yyyymi | mdd): 2012 06 07 | | | |
| Descriptive Location ~ 500 m | east of Blue Heron + - 50 | | | | |
| | der in Field | Cartific that was particularly selected | | | |
| UTM coordinates 41.39 | | northing zone 17 | | | |
| Settings Frequency (Hz) 60 V Station Information Length of Stream Surveyed (m) Station Characteristics: | Backpack Boat Unit transect S | | | | |
| Water Clarity/Colour: +ea 14.4 Temperature (°C) 14.4 pH 7.9 8 Catch Data | Water Velocity if Measured Conductivity (Dissolved Oxygen | us/cm) 701 | | | |
| Species | Number of Fish | Comments (i.e. age, disease, etc): | | | |
| Crkchub | JY+JHY+9+20+90 (98 | | | | |

| Species | Number of Fish | Comments (i.e. age, disease, etc): | | |
|------------------|---------------------|------------------------------------|------|--|
| Crkchub | 11+111+9+26+9+20+20 | (92) | | |
| Fathiad Mn | 1111-1 | 0 | | |
| John Dt. | <u> </u> | 9 | | |
| WHSC | 44+4 | (12) | | |
| Cmn Shn | HH-HH | (Po) | | |
| Blunthose Mn | | 0 | | |
| | | | | |
| Majority of fish | captured @ d/s cu | lucit po | D1's | |
| construction i | FF6 | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | | | • | | |
|---|-------------------------|--------------|--------|--|-----------------------------------|--|--|
| Fish Measurements on Separate Sheet? Y/N Field Staff: | | Not | es By: | | tima maga sa Ngga sa katayan n | | |
| | NO GOOD BROKEN GOVERNOR | | | | (Station Diagram on Back) | | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Byrnes- Sutton Fraun-1 PID ASSESSMENT FORM | 45-3 |
|--|------|
| braun-1 | WB |
| PID ASSESSMENT FORM | |

| Station # 45-3 | Project Name C.P. |
|---|---|
| Watercourse Name waknes | Was Byrnes Sullon Dran Project # 160960709 |
| Photos 654212 6552013 6562013 | 657+658=instrum Field Staff NB,mF |
| Date 2017-06 07 | Time 09 30 |
| vveainer conditions in previous | 74 DIS OF OCCUPATION |
| Properties Leasting (2016) 17 | E 4765979 N 0413986 Datum NAD 83 |
| Descriptive Location ************************************ | east of proposed access rd Fir CP46. |
| | |
| Water Quality | 11 827 0 1 11 1 6 1 6 2 4 |
| Dissolved Oxygen (mg/L) 10 | |
| Water Temperature (°C) 14 | Air Temperature (°C) // C |
| Time in situ measurements take | en 09:35 |
| Watercourse Dimensions & M | lorphology |
| | <u> (m) Maximum Pool Depth 0.10 (cm)</u> |
| Mean Bankfull Width 1.75 | (m) Mean Water Depth 0.05 (cm) |
| % Riffle | 80 % Pool % Run 20 % Flat |
| Evidence of eroding banks, Cor | mments on bank stability MINDE Scoul. |
| | |
| Substrate (% cover) | 40 |
| Bedrock | Cobble Sand 40 Silt 30 Muck |
| Boulder | Gravel 30 Clay Marl Detritus |
| Riparian Zone | rse shaded, dominant vegetation, mature or early successional) |
| Adjacent Land Lice | 보면 하는 것이다. 그런 보면 보면 보면 보면 되었다면 되었다는 것이다. 그런 보면 보면 보면 보면 보면 보면 보면 되었다면 보면 보면 보면 보면 보면 보면 보면 보면 보면 보다. 그런 보면 보다 보다 보다 보다 보다 보다. 그런 보다 |
| ag. | : Channel is diedged periodically |
| | |
| Fish Habitat Potential Critical Habitat (spawning or num Spawni | rsery areas, groundwater upwellings) |
| Migratory Obstructions (seasons | al, permanent) |
| | |
| Note any fish observations 6 | Creek chub captured. |
| | |
| Waterbody Notes | |
| Natural Watercourse Tr | rapezoidal Channel Grassed Swale Buried Tile |
| Surficial Drainage (i.e. furrows)_ | Dugout Pond Dominated by Aquatic Veg V Dry |
| Other Habitat Notes, Incidenta | al Wildlife Observations, etc. <u>Snapping</u> tu/tle |
| | |
| | |
| me me | TV |
| Field Notes Authored by | Field Notes QA/QCed by |
| 1011 | - Description of the control of the |

Byrnes-Sutton 48-3 Brain | Page 1 of 1 Stantec Consulting Ltd - Electrofishing Record and Catch Results CP. **Project Name** Station Number 160960709 Project Number Pass No. (if applicable) 654-658 = see Habitat Steet **Photos** Date (yyyymmdd): 2012 06 07 ~ 80 m east of proposed access rd to CP46 **Descriptive Location** 4765979 **UTM** coordinates Fishing Method (circle one): Backpack **Boat** Unit Model/Make Sampling Method (circle one): habitat . transect ingen . . . spot **Number of Netters:** Effort (Electrofishing Seconds): **Number of Anodes: Settings** Voltage (volts): 700 Current (Amps) Frequency (Hz) 60 Power (Watts) Station Information Length of Stream Surveyed (m) - 70 Station Characteristics: Width (m): Range 0,5 - 1,0 Average: 0.75 Range 0.02 - 0.1 Depth (m): Average: teg Husbid Time 9:40 Water Clarity/Colour: Water Velocity if Measured (m/s): Temperature (°C) Conductivity (uS/cm) pH Dissolved Oxygen (mg/L) **Catch Data Number of Fish Species** Comments (i.e. age, disease, etc): 6 Cox chub

| Fish Measurem | ents on Separa | ate Sheet? | YAN |
|---------------|--------------------------|------------|-----|
| Field Staff: | N.B. | MF | |
| | CHICANO VIENEZANI III II | | |

Notes By:



WIND FARM WATERBODY RAPID ASSESSMENT FORM

PAPID ASSESSMENT FORM

Station # 33-**Project Name** Watercourse Name 1040 Project # Photos __ Field Staff Date _ Time 47 Weather conditions in previous 24 hrs GPS Coordinates (Zone) Descriptive Location Abender **Water Quality** Conductivity/(µS/cm) Dissolved Oxygen (mg/L) _____ Water Temperature (°C) __ Air Temperature (°C) Time in situ measurements taken__ Watercourse Dimensions & Morphology Mean Watercourse Width

Mean Bankfull Width Maximum Pool Depth Mean Water Depth___ % Flat % Riffle Evidence of eroding banks, Comments on bank stability Substrate (% cover) Cobble Bedrock Gravel Boulder **Detritus In-water Cover** Cover Types Present (circle): Undercut Banks Deep Pool Watercress Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 2010 trees Adjacent Land Use **Fish Habitat Potential** Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations ______ **Waterbody Notes** Natural Watercourse ____ Trapezoidal Channel ___ _ Grassed Swale____ Buried Tile__ Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry L Other Habitat Notes, Incidental Wildlife Observations, etc. Field Notes Authored by Ke Field Notes QA/QCed by



| - | 11/4 | _ | | 101 |
|---|------|---|----|-----|
| | ۲. | ш | te | C |

| RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 32-3 |
|---|
| Project Project Project # 100960 709 Station # 32-3 Photos Taken 707-713 GPS Coordinates 17 4107340 410967 Descriptive Location 19 10 10 10 10 10 10 10 10 10 10 10 10 10 |
| Water Quality Dissolved Oxygen (mg/L) 10 10 8 pH 7, 77 Conductivity (μS/cm) 325 Water Temperature (°C) 10 10 4 Air Temperature (°C) 1 Weather conditions in previous 24 hrs 1015 of cause |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Water Depth (cm) Mean Bankfull Width (m) Mean Water Depth (cm) Wean Water Depth (cm) Riffle (m) Mean Water Depth (cm) Wean Water Depth (cm) Flat Evidence of eroding banks, Comments on bank stability |
| Substrate – Upstream (% cover) BedrockSiltBoulderClayCobbleMuckGravelMarlSandO Detritus |
| Substrate - Downstream (% cover) BedrockSiltBoulderCobbleSandODetritus |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Boulder Other |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Upstream Downstream Downstream |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream |
| Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations |
| Other, Habitat Notes, Incidental Wildlife Observations, etc. - da rail re disch, but dominated by RCG & cattails - incident of the flow - flows from Aberoardle for Aberoardle creek (yest east) Field Notes Authored by #B Field Notes QA/QCed by Page 1 of 1 |

Aberarder-132:-3

| Project Name Su | ıncor Energy- Ce | dar Point Wind | <u>Proj</u> ect | SI | ation Number | 32-3 | |
|---|------------------|----------------|-----------------|--------------|--|----------------|-------------------------|
| Project Number | 16096070 | 9 | | Pa | ass No. (if applica | able) | |
| Photos | See bul | CNC | | SEC. 10.10 | No. Or part of the second state of the | 20,20 | 5 10 |
| Descriptive Location | On Hil | Usboro | Rd - | ~50r | n north | of Ab | erarder |
| UTM coordinates | 4767 | 340 | easting | 410 | 967 | northing Sest | zone 17 |
| Fishing Method (circle o | ne): | Backpac | k | Boat | Unit Model | | |
| Sampling Method (circle | | even | habitat | | transect | spot | |
| Effort (Electrofishing Sec | | | Number of N | | | Number of Anoc | les: |
| Frequency (Hz) | Vo | ltage (volts) | | Current (A | mps) | Power (Watts) | - |
| Station information Length of Stream Survey | ved (m) | | | | | | |
| Station Characteristics: | | dth (m): | Range 4 | _ / | Average: | | |
| | De | pth (m): | Range | | Average: | | |
| Mater Clark /Oslave | | | 14/0 | ter Velocity | if Measured (m/s | | Time |
| Water Clarity/Colour: Temperature (°C) pH | 7 | | We | Co | enductivity (uS/cm red Oxygen (mg/L | 1) | - 11116 |
| Temperature (°C) | 7 | Number of F | | Co | enductivity (uS/cm | | (Le. age, disease, etc |
| Temperature (°C) pH Catch Data | | Number of F | | Co | enductivity (uS/cm | | |
| Temperature (°C) pH Catch Data Species | | Number of F | | Dissolv | enductivity (uS/cm | | |
| Temperature (°C) pH Catch Data Species | (214 = : d | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |
| Temperature (°C) pH Catch Data Species | 1 214=id | No | ish F/S | Dissolv | enductivity (uS/cm | Comments | (i.e. age, disease, etc |

9



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

| FOR AQUATIC HAE | brun | 07- |
|-----------------|-------|------|
| FOR AQUATIC HAE | BITAT | dd - |
| | 9//5 | WB |

| Projec | CP. | Project # (60960709 |
|----------------|--|---|
| Station | | Field Staff ICE + MF |
| | Taken 308-312 | Date Nov- 24 2011 |
| | Coordinates 17 4769422 410417 | Time 1500 |
| Descri | otive Location Advadage Circle | Hertye Kd |
| Water | Quality | |
| | ved Oxygen (mg/L) pH | Conductivity (µS/cm) 724 |
| | Temperature (°C) 92 | Air Temperature (°C) |
| vveatn | er conditions in previous 24 hrs | suny hos |
| | course Dimensions & Morphology | |
| | | Maximum Pool Depth / (cm) |
| Mean I | | Mean Water Depth / O (cm) |
| Eviden | % Riffle <u></u> | % Run% Flat billity Stale & banks + |
| _ve | getated | |
| Substr | ate - Upstream (% cover) | eld, the diainage |
| | | BoulderClayCobble |
| 1 55: 50.0 | MuckGravel | MarlSandDetritu |
| Substr | ate - Downstream (% cover) | 01 |
| | | Boulder 80 Clay Cobble |
| - | MuckGravel | Marl Sand <u>20</u> Detritu |
| | er Cover | .4 |
| Cover | Types Present (circle): Undercut Bank Overhanging Vegetation Woody Debris | Deep Pool Vascular Plants Cath |
| Riparia | in Zone | |
| | n Cover (% of watercourse shaded, dominan | t vegetation, mature or early successional) |
| | Upstream | |
| Adiaco | Downstream 0 10 00000000000000000000000000000000 | |
| Aujace | Upstream Achelda | |
| | Downstream 1916 | |
| Fish H | abitat Potential | |
| 15 gm 0 3 bids | Habitat (spawning or nursery areas, groundy | vater upwellings) |
| | Upstream N) A 100 | |
| | Downstream / V V C | |
| Migrato | ry Obstructions (seasonal, permanent) | |
| | Upstream Sulmn | -0/ |
| Note a | ny fish observations And | |
| . 1010 di | The state of the s | |
| Oth | | |
| | dabitat Notes, Incidental Wildlife Observat | ions, etc. |

Field Notes Authored by

Fleld Notes QA/QCed by __

Page of

Unknown. Drawn

22-3

| Project Name S | | Consulting Ltc Cedar Point Wind Pro | oject | | Station Num | ber 2 | 22-3 | | |
|--|------------|---|------------------|--------------|---|--|---------------|----------------|------------|
| Project Number | 160960 | | | | Pass No. (if | Part Springer | 1 | | |
| Photos | | | | | Date (yyyym | | 2012 0 | 5 16 | |
| Descriptive Location | OFF | Hillshoro Re | d m | 100 | | MARKET AND A STATE OF THE STATE | owners | | |
| UTM coordinates | 4760 | 7422 eas | eting | 410 | 417 | | -northing | zone | 177 |
| Fishing Method (circle o | | Backpack | | Boat | Uni | Model/Mal | (e | | |
| Sampling Method (circle | e one): | even | habitat | | transect | | spot | | |
| Effort (Electrofishing Se | econds): | Nu | mber of N | letters: | | NI NI | umber of Anod | les: | |
| Settings Frequency (Hz) | | Voltage (volts) | | -eurrent | (Amne) | Da | ower (Watts) | | |
| Station information | | | / | Current | (runps) | | mei (Walls) | | |
| Length of Stream Surve | wod (m) | | | | | | | | |
| | | CALL CONTRACT TO CONTRACT THE PARTY. | | | | | | | |
| | syeu (III) | Width (m): Bar | nge | | Ave | rane: | | | |
| Station Characteristics: Water Clarity/Coleur: Temperature (°C) pH | | | nge Nge Wa | | Ave ity if Measure Conductivity | (uS/cm) | | - - Time | |
| Station Characteristics: Water Clarity/Colour: Temperature (°C) | | | wa | | Ave | rage: ed (m/s): (uS/cm) | Comments | | ate stri |
| Station Characteristics: Water Clarity/Coleur: Temperature (°C) pH Catch Data | | Depth (m): Rai | wa | | Ave ity if Measure Conductivity | rage: ed (m/s): (uS/cm) | Comments | | 150, etc): |
| Station Characteristics: Water Clarity/Coleur: Temperature (°C) pH Catch Data Species | | Depth (m): Rai | Wa | Diss | Ave ity if Measure Conductivity olved Oxyge | rage: d (m/s): (uS/cm) n (mg/L) | | (Le. age, dise | 150, etc): |
| Station Characteristics: Water Clarity/Coleur: Temperature (°C) pH Catch Data Species Owner h No Fish; | as play | Depth (m): Rai | Wa | Diss | Ave ity if Measure Conductivity olved Oxyger | rage: d (m/s): (uS/cm) n (mg/L) | le dra | (Le. age, dise | |
| Station Characteristics: Water Clarity/Coleur: Temperature (°C) pH Catch Data Species Owner h No Fish; | as play | Number of Fish | h a | Diss CCG. | Ave ity if Measure Conductivity olved Oxyger Poss/ | rage: d (m/s): (uS/cm) n (mg/L) | le dra | (Le. age, dise | |
| Station Characteristics: Water Clarity/Coleur: Temperature (°C) pH Catch Data Species Owner h No Fish; | as play | Number of Fish Number of Fish Standard Value Value | h a | Diss CCG. | Ave ity if Measure Conductivity olved Oxyger Poss/ | rage: d (m/s): (uS/cm) n (mg/L) | le dra | (Le. age, dise | |

Fish Measurements on Separate Sheet? Y/N)

Field Staff:

N. Burnett, M. Faiella

Notes By: MF

(Station Diagram on Back)



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 22-2

| Project | Project #_ 160960709 |
|---|--|
| Station # 22-2 | Field Staff KF + MF |
| Photos Taken 298-303 | Date Novi 24 2011 |
| GPS Coordinates 17 4770041 4098 26 | |
| Descriptive Location Douglas Line | ,700 m east of oil 41 |
| Water Quality | |
| Dissolved Oxygen (mg/L) 12.38 pH | 806 Conductivity (µS/cm) 816 |
| Water Temperature (°C) 7 5 4 | Air Temperature (°C) |
| Weather conditions in previous 24 hrscold | |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 30 (cm |
| Mean Bankfull Width (m) | Mean Water Depth 30 (cm |
| % Riffle % Pool | 40 % Run % Flat |
| Evidence of eroding banks, Comments on bank | stability <u>exposion mote of dis</u> |
| Substrate – Upstream (% cover) | |
| BedrockSilt | Boulder50 Clay Cob |
| Muck Gravel | Marl Sand S Det |
| Substrate – Downstream (% cover) | |
| Bedrock Silt | Boulder <u> </u> |
| Muck Gravel | MarlSand SD Det |
| | |
| n-water Cover | Jonko Boon Book W. |
| Cover Types Present (circle): Undercut B Overhanging Vegetation Woody Det | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domi | nant vegetation, mature or early successions |
| Upstream 30 % is iver man | |
| Downstream 5% open 4 | hour protie |
| Adjacent Land Use | |
| Upstream A R Ceside | entre |
| Downstream partner | - 11100 |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, grou | indwater upwellings) |
| Upstream | |
| Downstream 1011 | |
| Migratory Obstructions (seasonal, permanent) | |
| Upstream_ din 10 10000 | 2021 |
| Downstream | |
| Note any fish observations <u>rypnoids</u> | P. |
| | |
| Odbor Hobitad Notes - Inc. Land Marine Co. | |
| Other Habitat Notes, Incidental Wildlife Obser | rvations, etc. |
| Other Habitat Notes, Incidental Wildlife Obser | 1 incosed, rightible Mon |
| Other Habitat Notes, Incidental Wildlife Observations, Mandens , Slynth | 1 incosed, regligible Moi |

(Interowo)

22-2

| THE REAL PROPERTY OF THE PARTY | Cedar Point Wind Project | ectrofishing Record Station Number | | |
|---|--|--|--|------------------|
| Project Number 16096 | | Pass No. (if applicat | Committee of the second state of the second | |
| Photos See ba | K | Date (yyyymmdd): | 2012 05 10 | |
| Descriptive Location On (| Douglas Line r | - 700m east o | F. Heritage Line | |
| UTM coordinates 477 C | 0041 easting | 409822 | zonezone | 177 |
| Fishing Method (circle one): | Backpack | Boat Unit Model/ | produ) | |
| Sampling Method (circle one): | even habita | t transect | spot | |
| | Number of | Netters: / | Number of Anodes:/_ | |
| Settings | Maltage (solta) | 0 | | |
| Frequency (Hz) 60 | voltage (volts) (000 | Current (Amps) | Power (Watts) | |
| Station Information | . 20 | | | |
| Length of Stream Surveyed (m) | ~ 80 m | | | |
| Station Characteristics | Midth (m): Dance - | | 0.77 | |
| Temperature (°C) | Depth (m): Range \underline{o} $V/VelloV$ $\underline{S8}$ | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 648 | <u>ه د ۶</u> د |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH 8.5 Catch Data | Depth (m): Range <u>o</u> ✓ / yello ✓ W ≤ 8 9 | Average: /ater Velocity if Measured (m/s): | 0.08 Time 16 | ر 3 د |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH 8.5 | Depth (m): Range \underline{o} $V/VelloV$ $\underline{S8}$ | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 0.08 Time 16 | |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH 8.5 Catch Data | Depth (m): Range <u>o</u> ✓ / yello ✓ W ≤ 8 9 | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 0.08 P/N Time 16 648 9.77 | |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH <u>8.5</u> Catch Data Species | Depth (m): Range <u>o</u> ✓ / yello ✓ W ≤ 8 9 | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 0.08 P/N Time 16 648 9.77 | |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH <u>8.5</u> Catch Data Species | Depth (m): Range <u>o</u> ✓ / yello ✓ W ≤ 8 9 | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 0.08 P/N Time 16 648 9.77 | |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH <u>8.5</u> Catch Data Species | Depth (m): Range <u>o</u> ✓ / yello ✓ W ≤ 8 9 | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 0.08 P/N Time 16 648 9.77 | |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH <u>8.5</u> Catch Data Species | Depth (m): Range <u>o</u> ✓ / yello ✓ W ≤ 8 9 | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) | 0.08 P/N Time 16 648 9.77 | |
| Water Clarity/Colour: clear Temperature (°C) 16. pH 8.5 Catch Data Species No catch. | Depth (m): Range o | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.08 P/N Time 16 648 9.77 Comments (i.e. age, disease) | |
| Water Clarity/Colour: clear Temperature (°C) 16. pH 8.5 Catch Data Species No catch. | Depth (m): Range o | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.08 P/N Time 16 648 9.77 Comments (i.e. age, disease) | |
| Water Clarity/Colour: <u>clea</u> Temperature (°C) <u>lb.</u> pH <u>8.5</u> Catch Data Species | Depth (m): Range o | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.08 P/N Time 16 648 9.77 Comments (i.e. age, disease | |
| Water Clarity/Colour: clear Temperature (°C) 16. pH 8.5 Catch Data Species No catch. | Depth (m): Range o | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.08 P/N Time 16 648 9.77 Comments (i.e. age, disease | |
| Water Clarity/Colour: clear Temperature (°C) 16. pH 8.5 Catch Data Species No catch. | Depth (m): Range o | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.08 P/N Time 16 648 9.77 Comments (i.e. age, disease | |
| Water Clarity/Colour: clear Temperature (°C) 16. pH 8.5 Catch Data Species No catch. | Depth (m): Range o | Average: /ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.08 P/N Time 16 648 9.77 Comments (i.e. age, disease | |

Fish Measurements on Separate Sheet? Y/N

Field Staff:

N. Burnett, M. Faiella

Notes By:

(Station Diagram on Back)



WIND FARM WATERBODY RAPID ASSESSMENT FORM NWB

| Station # 3 2 - 4 | Project Name | P. | |
|---|-----------------------|-------------------------|-------------|
| Watercourse Name Operarder Railway Draw | Project # 1009 | 60709 | |
| Photos / | Field Staff | a NB | |
| Date ACC: 3 20/2 | Time | | |
| Weather conditions in previous 24 hrs | | | |
| GPS Coordinates (Zone) T E 41112 | 8 N | 4767448 | Datum |
| Descriptive Location | | | |
| | | | |
| Water Quality | | | |
| Dissolved Oxygen (mg/L) pH | Conductivit | N (USICHO) | |
| Water Temperature (°C) | Air Tomporeture (% | γ (μοτοπή) | |
| Time in situ measurements taken | All Temperature (*C | ·) | |
| Time in situ measurements taken | | | |
| Watercourse Dimensions & Morphology | | | |
| Mean Watercourse Width(m) | Maximum Pool Dep | th | (cm) |
| Mean Bankfull Width (m) | Mean Water Depth | | (cm) |
| % Riffle % Poo | | | % Flat |
| Evidence of eroding banks, Comments on bank sta | bility | | |
| | | | |
| | | | |
| Substrate (% cover) | | | |
| BedrockCobble | | Silt | |
| BoulderGravel | Clay | Marl | Detritus |
| In-water Cover | | | |
| Cover Types Present (circle): Undercut Ban | ke Deen Bool | Matercrees | Aquatic Veg |
| Overhanging Vegetation Woody Debris | Roulder Othe | r | Aqualic veg |
| Overhanging vegetation vvoidy Debns | Dodidei Ottie | I | |
| Riparian Zone | | | |
| Riparian Cover (% of watercourse shaded, dominal | nt vegetation, mature | or early succes | sional) |
| | | | |
| Adjacent Land Use | | | |
| | | | |
| | | | |
| Fish Habitat Potential | | | |
| Critical Habitat (spawning or nursery areas, ground | water upwellings) | | |
| | | | |
| Migratory Øbstructions (seasonal, permanent) | | | |
| | <u> </u> | | |
| Note any fish observations | | | |
| | | | |
| Waterback, Natao | | | \ |
| Waterbody Notes | 0 | Desired Title X | 10 |
| Natural Watercourse Trapezoidal Channel | _ Grassed Swale | Buried Tile_\(\bullet\) | Seep |
| Surficial Drainage (i.e. furrows) Dugout Pond | Dominated | by Aquatic Veg_ | Dry |
| Other Hebitet Notes Incidental Wildlife Observe | 41 | | |
| Other Habitat Notes, Incidental Wildlife Observa | itions, etc | | |
| | | | |
| | E | | |
| 2.800 | | | |
| Field Notes Authored by 45 Field Notes | 04/00ad by | | |
| rield Notes Authored by Field Notes | QA/QCed by | | |



Mighland Gr.
WIND FARM WATERBODY RAPID ASSESSMENT FORM 48-1

| Samec | | WB. |
|---|--|--------------|
| Station # 48-1 | Project Name CP. | |
| Watercourse Name High band Creek | Project # 160960709 | |
| Photos | Field Staff KE YJR. | |
| Date July 5 2012 | Time 101 20 | A The second |
| Weather conditions in previous 24 hrs | | |
| GPS Coordinates (Zone) 17 T E 9165 | 92. N 4769145 | Datum NAD 83 |
| Descriptive Location Brush Road | | ire |
| | 0 | |
| Motor Oveller | | |
| Water Quality | P.03 Conductivity (μS/cm) 29 | 77 |
| | | |
| Water Temperature (°C) 82.1 | Air Temperature (°C) 32 | |
| Time in situ measurements taken 10145 | | |
| Watercourse Dimensions & Morphology | | |
| Mean Watercourse Width 3 (m) | Maximum Pool Depth 0.9 | _(cm) |
| Mean Bankfull Width 5 (m) | Mean Water Depth 0, 2 | (cm) |
| % Riffle% Po | ool% Run | % Flat |
| Evidence of eroding banks, Comments on bank s | stability | |
| some ensuor on so | outh bunks. | |
| Substrate (% equar) | | |
| Substrate (% cover) Bedrock Cobble | 30 Sand Silt | Muck |
| Boulder 30 Gravel | 40 Clay Mari | Detritus |
| BoulderGraver | y o olay ivian | Detilius |
| Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Debris Riparian Zone | Boulder Other | |
| Riparian Cover (% of watercourse shaded, domin | nant vegetation, mature or early succes | sional) |
| 70% Crossing, open | unnough nelas | |
| Adjacent Land Use | | |
| Ag | | |
| Figh Mahitat Retential | | |
| Critical Habitat (spawning or nursery areas, grou | ndwater upwellings) | |
| more spawning of hursery areas, grounds | navater upweinings) | |
| Migratory Obstructions (seasonal, permanent) | | |
| Note any fish observations | The state of the s | |
| V.00 | | |
| | | |
| Waterbody Notes | | |
| | el Grassed Swale | |
| Surficial Drainage (i.e. furrows) Dugout Po | ond Dominated by Aquatic Veg_ | Dry |
| | | |
| | | |
| Other Habitat Notes, Incidental Wildlife Obser | rvations, etc. | 1, 1, 1 |
| - ard pool @ cultert, d | | culvert |
| | resup 50 west of | culvert |
| - ard pool @ cultert, d | resup 50 west of | culvert |
| - large pool & cultert, d | tes QAQCed by Th | culvert |

| Project Name | Consulting Ltd - Electrofishir Stat | tion Number <u>U</u> 8 | 1 |
|--|---|--|--|
| Project Number 100960 | | s No. (if applicable) | Appell speed speed speed |
| Photos | Date | e (yyyymmdd): | uly 5 2012. |
| Descriptive Location Brus | sh Kd, south o | F Lough | ad @ Highted Cred |
| Crossn |) //-/ - | | |
| UTM coordinates <u>466</u> | 92 easting 4769 | 145 | northing zone / 🏋 |
| Fishing Method (circle one): | Backpack Boat | Unit Model/Make | |
| Sampling Method (circle one): | 0 | transect | spot |
| Effort (Electrofishing Seconds): | Number of Netters: | Nu Nu | mber of Anodes: |
| Settings Frequency (Hz) <u>600</u> | Voltage (volts) 275 Current (Am) | os) Po | wer (Watts) |
| Station Information | [A PS | | |
| Length of Stream Surveyed (m) | 40 m | | |
| Station Characteristics: | Width (m): Range 2,5 -3 | 3. SAverage: 3 | > 2.5 |
| | Depth (m): Range O.SO. | 4 Average: C | 1.25 |
| Water Clarity/Colour: | hid Water Velocity if | Measured (m/s): | 500 Time 10:00 |
| | | | |
| Temperature (°C) | · | nductivity (uS/cm) | 897 |
| Temperature (°C) | · | nductivity (uS/cm) ad Oxygen (mg/L) | 255 |
| Temperature (°C) | · | | Comments (Le. age, disease, etc): |
| Temperature (°C) A A PH Catch Data | Number of Fish | | Comments (Le. age, disease, etc): |
| Temperature (°C) A A PH Catch Data | O 3 Dissolve | ed Oxygen (mg/L) | Comments (Le. age, disease, etc): |
| Temperature (°C) pH Catch Data | Number of Fish | | Comments (Le. age, disease, etc): |
| Temperature (°C) pH Catch Data | Number of Fish | ed Oxygen (mg/L) | Comments (Le. age, disease, etc): A + Jun 4 |
| Temperature (°C) pH Catch Data | Number of Fish | ed Oxygen (mg/L) | Comments (Le. age, disease, etc): A + Juny |
| Temperature (°C) A A PH Catch Data | Number of Fish | ed Oxygen (mg/L) | A + July |
| Temperature (°C) A A PH Catch Data | Number of Fish | od Oxygen (mg/L) | A + July |
| Temperature (°C) A A PH Catch Data | Number of Fish | od Oxygen (mg/L) | A y Jung |
| Temperature (°C) pH Catch Data | Number of Fish | od Oxygen (mg/L) | A y Jung |
| Temperature (°C) A A PH Catch Data | Number of Fish | od Oxygen (mg/L) | A y Jung |
| Temperature (°C) A A PH Catch Data | Number of Fish | od Oxygen (mg/L) | A y Jung |
| Temperature (°C) pH Catch Data Species White Sulter Jehnny Pater Kambaw Pater Creek Chub Satheag Minhaw Trag | Number of Fish Number of Fish $ 2 = 2 $ $ 3+6+1+2 = 4 $ $ 3+4+1+4 = 4 $ $ 3+5+1+4 = 4 $ | od Oxygen (mg/L) | A + Jung A - Jung A - Jung |
| Temperature (°C) A A PH Catch Data | Number of Fish Number of Fish $ 2 = 2 $ $ 3+6+1+2 = 4 $ $ 3+4+1+4 = 4 $ $ 3+5+1+4 = 4 $ | od Oxygen (mg/L) | A + Jung A - Jung A - Jung |
| Temperature (°C) pH Catch Data Species White Suffer Jehnny Pater Kaunhow Pater Creek Chub Gatheag Minhow Trag | Number of Fish Number of Fish $ 2 = 2 $ $ 3+6+1+2 = 4 $ $ 3+4+1+4 = 4 $ $ 3+5+1+4 = 4 $ | od Oxygen (mg/L) | A + Jung A - Jung A - Jung |
| Temperature (°C) pH Catch Data Species Whe Sulfer Jehnny Pater Kaunhow Pater Crosek Chub Gatheag Minhow Trag | Number of Fish Number of Fish $2 = 2$ $3+6+1+2=$ $3+5+1+4$ $2+1+1=($ $5) (possibly set by 100 entirely $ | od Oxygen (mg/L) | A + Jung A V. Junga + You A Ju |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 31-3

| Stantoc | |
|--|---|
| Project C.P. | Project # 160960709 |
| Station # 3 - 3 | Field Staff KE + MT |
| Photos Taken 324-328 | Date Nov. 21 2011 |
| GPS Coordinates 17 4769177 911766 | Time 2:45pm |
| Descriptive Location Douglas Line | 500 m Past of Hillsbor |
| Water Quality | |
| | 8.25 Conductivity (μS/cm) 736 |
| Water Temperature (°C) (0.3 b | Air Temperature (°C) |
| Weather conditions in previous 24 hrs /old/s | unny, overcast |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 3 (m) | Maximum Pool Depth 70 (cm) |
| Mean Bankfull Width (m) | Mean Water Depth (cm) |
| % Riffle% Pool | 100 % Run % Flat |
| Evidence of eroding banks, Comments on bank si | |
| but not really under | uit ! |
| Substrate - Upstream (% cover) tubid, a | ssime mostly clay. |
| Bedrock 20 Silt | Boulder Cobble |
| Muck Gravel | Marl Sand Detritus |
| | |
| Substrate - Downstream (% cover) fubid | assure clay + definas |
| BedrockSilt | BoulderCobbleCobble |
| MuckGravel | SandODetritus |
| In-water Cover | |
| Cover Types Present (circle): Undercut Bar | nks Deep Pool Vascular Plants RCS |
| Overhanging Vegetation Woody Debri | is Boulder Other |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domina | ant vegetation, mature or early successional) |
| Upstream 20% remain | |
| Downstream 5 1/0 thee | |
| Adjacent Land Use | |
| Upstream A Cold | |
| Downstream / 1) 10000 | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, groun | dwater upwellings) |
| | dwater upweilings) |
| Downstream | |
| Migratory Obstructions (seasonal, permanent) | |
| | |
| Downstream | |
| Note any fish observations | |
| | |
| Other Habitet Notes, Incidental Wildlife Observ | votions of |
| Other Habitat Notes, Incidental Wildlife Observ | ations, etc. |
| olls braided flow through 13 | Vands et RCH, constriction |
| flow velocity | whose et ref, construction |
| Field Notes Authored by XE | e ON/OCod by |

Highland er. 31-3

| Project Name Sur | ncor Energy- Ced | dar Point Win | d Project | Stati | ion Number | 31-3 | |
|---|-------------------------|--|---------------------|--------------|--|--------------------|----------------|
| Project Number | 160960709 | 9 | | Pass | No. (if applicat | ble) | mare displayed |
| Photos | See back | | | | | 2012 05 | 10 |
| Descriptive Location | On Doi | oglas L | ine m 5 | 00m | east of | Hellsboro. | |
| UTM coordinates | 476 | 9977 | - Na-Hing | 41171 | 66 | northing Fostry | zone 17 |
| Fishing Method (circle on | e): | Backpa | ack | Boat | Unit Model/ | Make LE | 12 |
| Sampling Method (circle | one): | even | habitat | 1 | transect | spot | |
| Effort (Electrofishing Sec Settings | onds): 7 | -D | Number of N | Netters:/ | | Number of Anode | es: / |
| requency (Hz) 60 | Vo | ltage (volts) | 600 | Current (Amp | (s) | Power (Watts) | |
| ength of Stream Survey | ed (m) O | D (A) 2 ~ | ا ماهـ | - und c | oad (10 m) | | |
| Station Characteristics: | | dth (m): | SEASON WALLSON SHOW | 0.0 - 4.0 | | 3. <i>O</i> | |
| | | epth (m): | | 5-0.8 | | 0.65 | |
| | | CANTO UNIVERSITY OF THE PARTY O | The second second | 0.0 | | | |
| | | | | | | | |
| | tealy | ellow | Wa | | Measured (m/s): | | Time 17:3 |
| Temperature (°C) | teal 4 | ellow_ | _ Wa | Conc | ductivity (uS/cm) | 626 | Time 17:3 |
| Temperature (°C) pH | tealy | ellow | Wa | Conc | The state of the s | 626 | Time 17 : 3 |
| Temperature (°C) pH Catch Data | teal 4 | ellow - Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data | teal 4 | 4.22 | | Conc | ductivity (uS/cm) | 11.83 | Time 17 : 3 |
| Temperature (°C) pH Catch Data | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The D+ | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The Dt. C/t Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species Thu Dt. C/k Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species Thu Dt. C/k Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species Thu Dt. C/k Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH catch Data species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The Dt. C/t Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Catch Data Species The Dt. Crk Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The Dt. C/k Chub | teal 4 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |
| Temperature (°C) pH Catch Data Species The Dt. C/t Chub | teal 4 17.20 8.81 | Number of | | Conc | ductivity (uS/cm) | 11.83 | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 21-1

| - | |
|------|------|
| | |
| - 34 | ntec |
| | |

| Station # <u>Q - </u> Photos Taken <u>333-</u> GPS Coordinates <u> 7 </u> Descriptive Location _ <u>- </u> | | Field Staff_ Date | 16096070° KE + MF W. 24 201 : 20pm h of Don | 1 Islan |
|---|---|--|---|---------|
| Water Quality Dissolved Oxygen (mg/l Water Temperature (°C) Weather conditions in pro- | (.2 | Air Tempera | nductivity (µS/cm) _ ature (°C) | |
| Watercourse Dimension Mean Watercourse Width Mean Bankfull Width / S % Riffle Evidence of eroding ban @Wolker | th 3 (m) (m) (m) Pool | Maximum F Mean Wate _&S% R nk stability _//// | Depth 70 | (c |
| Substrate – Upstream Bedrock Muck | (% cover) (⊘ Silt Gravel | Boulder Marl | 70 Clay _a Sand _ | 2 0 c |
| Substrate – Downstrea Bedrock Muck | ı m (% cover) Silt Gravel | Boulder Marl | So Clay Sand | 70 c |
| In-water Cover Cover Types Present (ci Overhanging Ve | | A Decided to the second | o Pool Va scular der Other | Plants |
| | tercourse shaded do | | | ccessic |
| Riparian Zone Riparian Cover (% of wa Upstream | | a frees | | |
| Riparian Cover (% of wa UpstreamS DownstreamS Adjacent Land Use UpstreamS DownstreamS Fish Habitat Potential Critical Habitat (spawnin | 10 nostly 50% riponal stre to fields | n trees | | |
| Riparian Cover (% of wa Upstream | g or nursery areas, g seasonal, permanent | roundwater upwell | | |

Highland Cr 21-1

| Project Name S | Suncor Energy- Cedar | Point Wind Project | Station Number | 21-1 | 46. |
|--|----------------------|-------------------------|--|-------------------------------|-------------------------|
| Project Number | 160960709 | W-1 - 3674 | Pass No. (if applicat | ble) | |
| Photos | Seeback | | Date (yyyymmdd): | 201205 | // |
| Descriptive Location | On Hills | 0000 ~ 1km | north of Dou | sglas Line | within |
| | Rowo | nly. No a | ccess. | 0 | |
| UTM coordinates | 477 071 | 9 easting | 411081 | -northing | zone 17T |
| | | | | 110 | 2 Midel 12 |
| Fishing Method (circle of Sampling Method (circle) | | Backpack | Boat Unit Model/ | IFIGNO | a / Coer 12 |
| Sampling Method (circl | e one). | even habita | transect | spot | |
| Effort (Electrofishing Se | econds): 310 | Number of | Netters: | Number of Anode | s: |
| Settings | | | | | |
| Frequency (Hz) 6 | <u> </u> | ge (volts) 600 | Current (Amps) | Power (Watts) | / |
| Station Information | | | | | |
| ength of Stream Surve | eyed (m) | 5.0 muls+d/ | s tunder bridge (10) | ~) | |
| Station Characteristics: | Width | n (m): Range 👱 | 3.0 - 4.0 Average: | 3,5 | |
| | Depti | h (m): Range <u>^</u> | O.70-BO Average: | 0.85 | |
| Vater Clarity/Colour: | 1 110 | | feter Velocity if Management (- (-) | | |
| | 11 2 11 (1, 1) | brown W | later Velocity if Measured (m/s): | : N/A | Time 07:54 |
| | | | | 2194244 | |
| Temperature (°C) | 11.28 | | Conductivity (uS/cm) |) 636 | |
| | | | |) 636 | |
| Temperature (°C) pH Catch Data | 8.22 | lumber of Fish | Conductivity (uS/cm) |) <u>636</u>) <u>8.38</u> | .e. age, disease, etc): |
| Temperature (°C) pH | 8.22 | | Conductivity (uS/cm) |) <u>636</u>) <u>8.38</u> | |
| Temperature (°C) pH Catch Data Species | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) |) <u>636</u>) <u>8.38</u> | |
| Temperature (°C) pH Catch Data Species Rainh Ot | 8.22 | lumber of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | |
| Temperature (°C) pH Catch Data Species Rainh. Ot. Tohn. Ot. Crk Chub Cmn Shn. | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. 01 Tohn. 04 Crk chub Cmn 5hn. WHSC | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. 01 Tohn. 04 Crk chub Cmn 5hn. WHSC | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. 01 Tohn. 04 Crk chub Cmn 5hn. WHSC | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. Tohn. Dt. Crk chub | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainh. Ot. John. Ot. Crkchub Cmn Shn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. John. Ot. Crkchub Cmn Shn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. John. Ot. Crkchub Cmn Shn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. John. Ot. Crkchub Cmn Shn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainh. Ot. John. Ot. Crkchub Cmn Shn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. John. Ot. Crkchub CmnShn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. John. Ot. Crkchub CmnShn. WHSC Bluntnose Mi | 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species Rainb. Ot. John. Ot. Crkchub Cmn Shn. WHSC Bluntnose Mi | 1).28 8.22 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8-38 Comments (1 | .e. age, disease, etc): |
| Temperature (°C) pH atch Data pecies Rainh. Ot. Tohn. Ot. Cik Chub Cmn Shn. WHSC Bluntnose Mi | 1).28 8.22 | lumber of Fish HHHHHHH | Conductivity (uS/cm) Dissolved Oxygen (mg/L) 19 12 3 1 | 636 8.38 Comments (1 | e. age, disease, etc): |



| Project # | WIND FARM WATE | RRODY RA | PID ASSES | SMENT FOR | M / | 1.11 |
|--|--|--|--|--------------------------|-----------------|---|
| tation # 4 2 Project Name (24 1) And tatercourse Name 1 1 1 1 1 1 1 1 1 | WIND PARM WATE | NDODI NA | I ID AGGLO | Higher | nd , | 64- |
| Project # | Stantec | | | 1 shines | check | |
| Field Staff M. K. Time W.S. PS Coordinates (20re) PE 0 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Station # 64-2 | Proje | ect Name <u>Wal</u> | Point | | |
| Time 14/3/12 Veather conditions in previous 24 hrs 15/12 N 4 169576 Datum Dat | Vatercourse Name Highland Creck | Proje | ect # 1609601 | 00 | | |
| Veather conditions in previous 24 hrs (a) to be secriptive Location PS Coordinates (Zore) E E T S S E T S S E T S S E T S S E T S S E T S S E T S S E T S | No. Control of the Co | Field | Staff NK, NE | | | |
| PS Coordinates (Zone) Fe 1/2 Fe 1 | | | 14,05 | | | |
| Acter Quality | | | , N 4 | 769576 | Datum | VAN83 |
| Air Temperature (°C) | Descriptive Location Along May la Line (| outh of), we | ist of littoxed | el; Fostofth | Misporo | |
| Air Temperature (°C) Air Temperature (°C) Commendation of the situ measurements taken 14:25 Air Temperature (°C) Commendation of the situ measurements taken 14:25 Air Temperature (°C) Commendation of the situ measurements taken 14:25 Air Temperature (°C) Commendation of the situ measurements taken 14:25 Maximum Pool Depth (cm) Mean Water Depth (cm) Mean Water Depth (cm) Mean Water Depth (cm) Red (cm) Red (cm) Mean Water Depth (cm) Red (cm) Muck Red (cm) Muck Boulder (cm) Sand (cm) Muck Boulder (cm) Sand (cm) Muck Boulder (cm) Muck Boulder (cm) Maximum Pool Depth (cm) Red (cm) Muck Boulder (cm) | Water Quality | 421 | | | | |
| Interior | Dissolved Oxygen (mg/L) | Triffig many transfer and the second | | | 2 | |
| Maximum Pool Depth (cm) (cm) (cm) (ean Bankfull Width (cm) (m) (ean Bankfull Width (cm) (m) (ean Bankfull Width (cm) (ean Bankfull Width (cm) (ean Bankfull Width (ean | | Air T | emperature (° | c) <i>[0</i> | | |
| lean Watercourse Width \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | ime in situ measurements taken 14.25 | | | | | |
| Mean Water Depth 3 | Watercourse Dimensions & Morphology | | | Fo | | |
| **Riffle 30 % Pool 160 % Run % Flat vidence of eroding banks, Comments on bank stability without the following the order of the following the order of the following the order of the following the following the order of the following the fol | The Construction of the Co | Maxi | imum Pool De | oth_5[] | | |
| widence of eroding banks, Comments on bank stability without the body to be yet a long to be yet yet yet a long to be yet yet yet a long to be yet yet yet yet yet yet yet yet yet ye | | Mean Mean | n water Depth | % Pup | (cm) | % Elst |
| ubstrate (% cover) Bedrock Cobble Sand Silt Muck Boulder Gravel 60 Clay Marl 10 Detritus n-water Cover over Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg overhanging Vegetation Woody Debris Boulder Other 6 Look Combination of the co | | | THE STATE OF THE S | | dhy rado | and valle |
| Sand Silt Muck Boulder Gravel Go Clay Marl Go Detritus | | barn otability | | | | 3 3 3 |
| Bedrock Cobble Sand 30 Silt Muck Boulder Gravel 60 Clay Marl 10 Detritus | | | | | | |
| Boulder Gravel GO Clay Marl (D Detritus newater Cover over Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg over Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg over Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg over Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg over Types Pool Water Types Po | | | Sand | an Silt | | Muck |
| Inwater Cover Over Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other | The state of the s | The state of the s | | | 10 | 2012/02/03/03/03/03/03/03/03/03/03/03/03/03/03/ |
| Voody Debris Deep Pool Watercress Aquatic Veg Verhanging Vegetation Woody Debris Boulder Other A Aquatic Veg Verhanging Vegetation Woody Debris Boulder Other A Aquatic Veg Verhanging Vegetation Woody Debris Boulder Other A Aquatic Veg Vegetation | | | | | | |
| Iparian Zone Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Iparian Cover (% of watercourse shaded, dominant vegetation, mature or early | | rout Bonko | Doop Book | Motororoo | Agus | etic Vod |
| iparian Zone iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) is 60% 40 00 00 00 00 00 00 00 00 00 00 00 00 | | | | A | Grand Day Story | alle veg |
| iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) with the stand Use ish Habitat Potential critical Habitat (spawning or nursery areas, groundwater upwellings) provide of the space of the stand of the space | | | | | | |
| ish Habitat Potential critical Habitat (spawning or nursery areas, groundwater upwellings) color of the label of the lab | Riparian Zone | alamiaan kuas | | | · anional\ | |
| ish Habitat Potential critical Habitat (spawning or nursery areas, groundwater upwellings) coton of the label of the lab | kiparian Cover (% of watercourse snaded | , dominant veg | getation, matur | e or early succe | | 1000 |
| ish Habitat Potential critical Habitat (spawning or nursery areas, groundwater upwellings) coton of the label of the lab | Adjacent Land-Use | W 0531- 10.1 | ands) Signey | MEL MOVIEW | 1 Mars A | 199. |
| ish Habitat Potential critical Habitat (spawning or nursery areas, groundwater upwellings) color of the label | Apriculture | | | | | |
| ritical Habitat (spawning or nursery areas, groundwater upwellings) plouting processor of the processor of the plant. In the processor of the processor of the plant. In the processor of the | | | | | | |
| Instructions (seasonal, permanent) Instructi | Fish Habitat Potential | | | | | |
| ligratory Obstructions (seasonal, permanent) None Interpretation None Notes Interpretation Notes Notes Interpretation Notes Not | Critical Habitat (spawning or nursery areas | s, groundwater | upwellings) | | | |
| None Dominated by Aquatic Veg Dry Dominated by Aquatic Veg Dry | Migratory Obstructions (seasonal perman | ent) | Bh./ | | | |
| Independent of the second of | 18 18 20 20 20 20 20 20 20 2 | 4FTERALERREDER SEE SEEL 1 1470 1 1.4 | | | | |
| Vaterbody Notes Jatural Watercourse √ Trapezoidal Channel Grassed Swale Buried Tile Jurficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry | Note any fish observations | | | | | |
| latural Watercourse V Trapezoidal Channel Grassed Swale Buried Tile Urficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry | 1006. | | | | | |
| latural Watercourse V Trapezoidal Channel Grassed Swale Buried Tile Urficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry | Naterbody Notes | | | | | |
| urficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry | Natural Watercourse V Trapezoidal | Channel | Grassed | Swale | Buried 1 | ſile |
| ther Habitat Notes, incidental Wildlife Observations, etc. | Surficial Drainage (i.e. furrowe) | out Pond | Dominated | by Aquatic Veg |] | Dry |
| Other Habitat Notes, incidental Wildlife Observations, etc. | Julilolai Dialilayo (i.o. luliows) Dug | | | | | |
| | | Observations | | | | |
| | | | s, etc | CONTROL OF ANY AND SHARE | | |
| | | | s, etc | | | |
| | ther Habitat Notes, incidental Wildlife | | | | | |
| eld Notes Authored by N RV Rtt. Field Notes QA/QCed by | Other Habitat Notes, Incidental Wildlife | | | | | |



WIND FARM WATERBODY RAPID ASSESSMENT, FORM (CH-)

| | | | 0 | |
|---|---------------------------------------|-------------------------|-----------------|-------------|
| Station # 64-1 | | Project Name |). | |
| Watercourse Name Nous I | MAN | Project # 16096 | 20209 | |
| Photos | 11000 | Field Staff KC + | NB | |
| Date 12:32012 | | Time | | |
| Weather conditions in previous : | 24 hrs (00) | + ran | | |
| GPS Coordinates (Zone) | - F 1999 | IZ NU | 20301 | Datum 4 |
| Descriptive Location Durch | O DAI | north in Ac | Lield | ylest |
| Of Vills horror | e www. | |) May | 77,700 |
| UA PUNTOUSSA | | | | |
| Water Quality | | | | |
| Dissolved Oxygen (mg/L) | pH_ | Conductivity | (μS/cm) | |
| Water Temperature (°C) | | | | |
| Time in situ measurements take | | | | |
| | | | | |
| Watercourse Dimensions & M | | | / | |
| Mean Watercourse Width | | | | _(cm) |
| Mean Bankfull Width | (m) | Mean Water Depth_ | | _(cm) |
| % Riffle | % Po | | <i>≱</i> % Run | % Flat |
| Evidence of eroding banks, Con | nments on bank s | stability | | |
| | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | |
| Substrate (% cover) | | | | |
| Bedrock | Cobble | Sand | Silt | Muck |
| Boulder | Gravel | Clay | Marl | Detritus |
| Overhanging Vegetation W Riparian Zone | | Boulder Other | | |
| Riparian Cover (% of watercours | se shaded, domir | nant vegetation, mature | or early succes | sional) |
| Adiabatical | / | | | |
| Adjacent Land Use | / | | | |
| | | | | |
| Fish Habitat Potential | | | | |
| Critical Habitat (spawning or nur | rserv areas groui | ndwater upwellings) | | |
| Offical Flabitat (Spattring of Flat | loory arous, groun | | | |
| Migratory Obstructions (seasons | al, permanent) | | | |
| | | | | |
| Note any fish observations | | | | |
| Waterbody Notes | | | | |
| Natural Watercourse Tr | apezoidal Chann | el Grassed S | wale | Buried Tile |
| Surficial Drainage (i.e. furrows)_ | Dugout Po | ond Dominated b | y Aquatic Veg | Dry |
| | | | | |
| Other Habitat Notes, Incidenta | ai Wiidlife Obser | vations, etc. | | |
| 110 Surface ligation | re presen | vt in held | | |
| | | | | |
| | | | | |
| 110 | | | | |
| Field Notes Authored by | Field Not | es QA/QCed by | | |



| | James-Wilkonson. |
|-------|--|
| | RAPID ASSESSMENT FORM FOR AQUATIC HABITAT |
| | Stantec |
| | Project \bigcirc Project # 160960709 Station # 31-> Field Staff \bigcirc Field Staff \bigcirc Project # \bigcirc Proje |
| | Water Quality Dissolved Oxygen (mg/L) 13.16 pH 8.24 Conductivity (μS/cm) 678 Water Temperature (°C) 6.2 Air Temperature (°C) 42 Weather conditions in previous 24 hrs 600 Sunni, evolutions |
| | Watercourse Dimensions & Morphology Mean Watercourse Width (m) Maximum Pool Depth / (cm) Mean Bankfull Width (m) Mean Water Depth 7 (cm) I O % Riffle % Pool 90 % Run % Flat Evidence of eroding banks, Comments on bank stability (con) |
| south | Substrate – Upstream (% cover) Bedrock |
| north | Substrate - Downstream (% cover) Bedrock Silt Boulder Clay Cobble Muck Gravel Marl Sand Detritus |
| | In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Boulder Other |
| | Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 10% Neman trees on west lank Downstream 20% Statlered review trees Adjacent Land Use Upstream 15 Telds Downstream 15 |

Fish Habitat Potential

Critical Habitat (spawning or nursery areas, groundwater upwellings)

Upstream_ Downstream_

Migratory Obstructions (seasonal, permanent) Upstream dry in summer

Downstream Stickleback dis Note any fish observations Brook

Other Habitat Notes, Incidental Wildlife Observations, etc.

Field Notes Authored by

Field Notes QA/QCed by ______

James-Wilkonson 31-2 brown Page (of (

(Station Diagram on Back)

| Project Name | | nsuiting Ltd - Elect | | |
|-----------------------------|--------------------|------------------------|-----------------------------|------------------------------------|
| | Suncor Energy- Ce | dar Point Wind Project | Station Number | 31-2 |
| Project Number | 16096070 | 9 466043.51 | Pass No. (if applicab | le) - / |
| Photos | Seebac | <u> </u> | Date (yyyymmdd): | 2012 05 10 |
| Descriptive Location | On Do | uslas him ~15 | on west of | Kerrigan Lane or |
| | | west of Hills & | | |
| UTM coordinates | 47699 | 789 easting | 411372 | nerthing zone 17 |
| Fishing Method (circ | le one): | Backpack Bo | oat Unit Model/N | Make the 12 |
| Sampling Method (ci | rcle one): | even habitat | transect | Spot |
| Effort (Electrofishing | Seconds): 60 | Number of Net | ere: | Number of Anodes: |
| Settings | | - Hambor of Heli | | Number of Arloges. |
| Frequency (Hz) | 60 V | oltage (volts) 600 Ci | urrent (Amps) | Power (Watts) |
| Station Information | | | | |
| Length of Stream Su | rveyed (m) | 20w -2.50/5+2 | 5.5 md/5.4 thr | ough colvert |
| Station Characteristic | cs: W | idth (m): Range 0.75 | | 0.80 |
| | | epth (m): Range 0.15 | | 0.20 |
| | | | | |
| Water Clarity/Colour: | clea | chellow Water | Velocity if Measured (m/s): | W/A Time 17:3: |
| Temperature (°C) | 15.45 | | Conductivity (uS/cm) | |
| pH | 8,70 | 上 中的一种的 | Dissolved Oxygen (mg/L) | 9.81 |
| Catch Data | | | | |
| Species \\ | | Number of Fish | 6 | Comments (i.e. age, disease, etc): |
| ar and | | 144 114 1 | (1) | |
| 2011 | | | | |
| BRST | | - IIII | <u> </u> | |
| BR51 | | | <u>(j)</u> | |
| | | | | |
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| | | | | |
| B&51 | | | | |
| | | | | |
| | | | | |
| | on Separate Sheet? | | | |



Janes - Wilkonson Brawn 46 1 WIND FARM WATERBODY RAPID ASSESSMENT FORM 46 1

| Station # VIO T | Project Name CP | |
|---|--|-------------|
| Station # Watercourse Name James cul lanson & | Project # 1/209/20709 | |
| | Field Staff 1/2 4 1 1 4 | |
| Photos Date July 3 2017 | Time 4 20 gm | |
| Date 3000 3 2017 | Tille 1 20 for | |
| Weather conditions in previous 24 hrs | 3722 1 1/5/5/87 | 14033 |
| GPS Coordinates (Zone) 17 E 41 Descriptive Location Aberral | 3723 N 4767 830 last of Dive theren | atum (2000) |
| Descriptive Location AND NO. | east of blue theren | |
| Water Quality | | |
| Dissolved Oxygen (mg/L) | H Conductivity (μS/cm) | |
| Dissolved Oxygen (mg/L) pl Water Temperature (°C) | Air Temperature (°C) | |
| Time in situ measurements taken | | |
| Watercourse Dimensions & Morphology | | |
| Mean Watercourse Width(m) | Maximum Pool Depth (c | m) |
| Mean Bankfull Width (m) | Mean Water Depth(c | |
| % Riffle \% | % Pool % Run | % Flat |
| Evidence of eroding banks, Comments on bar | nk stability | |
| Substrate (% cover) | | |
| Bedrock Cobble | Sand Silt | Muck |
| Boulder Gravel | Clay Marl | |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, do | Boulder Other | |
| Adjacent Land Use | | |
| | | |
| Fish Habitat Potential | | |
| Critical Habitat (spawning or nursery areas, gr | | |
| Migratory Obstructions (seasonal, permanent) | | |
| Note any fish observations | | |
| Waterbody Notes | | |
| Natural Watercourse Trapezoidal Cha | annel Grassed Swale Bu | ried Tile |
| Surficial Drainage (i.e. furrows) Dugout | t Pond Dominated by Aquatic Veg | Dry |
| Other Habitat Notes, Incidental Wildlife Ob | servations, etc. | |
| | | |
| Field Notes Authored by Field | ME | |



| WINE | S FARM WATERRO | DY RAPID ASSESSI | MENT FORM Mikonson | 55-2 |
|---|--|--|---|-------------------|
| WINE | PARIN WAILINGO | hmaa l | u konson | Mour |
| Stantec | | June | | Drace. |
| Station # 55-2 | | Project Name | | |
| Vatercourse Name di | neo Wikonson | Project # 1009/00 | 709 | |
| Photos, 155 | | Field Staff | MB . | |
| Date Sec 3 201 | | Time | | |
| Weather conditions in pr | evious 24 nrs (001 -) 17T E 41284 | + raun | 08484 Da | atum |
| Descriptive Location | oudas ine | | P 0 189 De | atam |
| | / 0 | | | |
| Vater Quality | | | | / |
| Dissolved Oxygen (mg/L | _) pH_ | Conductivity | (μS/cm) | |
| Vater Temperature (°C) | | Air Temperature (°C) | | |
| Time <i>in situ</i> measureme | nts taken | | | |
| Vatercourse Dimensio | ons & Morphology | | | |
| lean Watercourse Widt | h(m) | Maximum Pool Depth | | m) |
| ilean Banktull Width | (m) | mean water Deptn | | m) |
| % Riffle | % P | | % Run | % Fla |
| evidence of eroding ban | iks, Comments on bank | stability | | |
| Substrate (9/ cover) | | / | | |
| Substrate (% cover) Bedrock_ | Cobble | Sand_ | Silt | Muck |
| | Gravel | | Mari | Detritus |
| Boulder | Glavei | / Clav | | |
| Boulder_ | Stavet | Clay | | |
| n-water Cover | | / | | Aquatic Veg |
| n-water Cover Cover Types Present (ci | ircle): Undercut B | anks Deep Pool | | Aquatic Veg |
| n-water Cover Cover Types Present (ci Overhanging Vegetation | ircle): Undercut B | / | | Aquatic Veg |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone | ircle): Undercut B | anks Deep Pool Boulder Other_ | Watercress | |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone | ircle): Undercut B | anks Deep Pool | Watercress | |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone Riparian Cover (% of wa | ircle): Undercut B | anks Deep Pool Boulder Other_ | Watercress | |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone Riparian Cover (% of wa | ircle): Undercut B | anks Deep Pool Boulder Other_ | Watercress | |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa | ircle): Undercut B n Woody Debris atercourse shaded, domi | anks Deep Pool Boulder Other_ | Watercress | |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential | ircle): Undercut B n Woody Debris atercourse shaded, domi | anks Deep Pool Boulder Other_ nant vegetation, mature o | Watercress | |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawrin | ircle): Undercut B n Woody Debris atercourse shaded, domi | anks Deep Pool Boulder Other_ nant vegetation, mature o | Watercress | |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawnin | ircle): Undercut B n Woody Debris atercourse shaded, domi | anks Deep Pool Boulder Other_ nant vegetation, mature o | Watercress | |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawrin | ircle): Undercut B Woody Debris atercourse shaded, domin ag or nursery areas, ground (seasonal, permanent) | anks Deep Pool Boulder Other_nant vegetation, mature of andwater upwellings) | Watercress | |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawrin | ircle): Undercut B n Woody Debris atercourse shaded, domi | anks Deep Pool Boulder Other_nant vegetation, mature of andwater upwellings) | Watercress | |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawrin Migratory Obstructions (| ircle): Undercut B Woody Debris atercourse shaded, domin ag or nursery areas, ground (seasonal, permanent) | anks Deep Pool Boulder Other_nant vegetation, mature of andwater upwellings) | Watercress | |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawnin Migratory Obstructions (Note any fish observatio Naterbody Notes Natural Watercourse | ircle): Undercut Ban Woody Debris atercourse shaded, dominatercourse shaded, | anks Deep Pool Boulder Other_ nant vegetation, mature of the control of the cont | watercress or early succession | nal) |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawnin Migratory Obstructions (Note any fish observatio Naterbody Notes Natural Watercourse | ircle): Undercut Ban Woody Debris atercourse shaded, dominatercourse shaded, | anks Deep Pool Boulder Other_nant vegetation, mature of andwater upwellings) | watercress or early succession | nal) |
| n-water Cover Cover Types Present (ci Overhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawnin Migratory Obstructions (Note any fish observation Waterbody Notes Natural Watercourse Surficial Drainage (i.e. for | ircle): Undercut B Woody Debris In Wood | anks Deep Pool Boulder Other_ nant vegetation, mature of the condition of | watercress or early succession vale But Aquatic Veg | ried Tile |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawrin Migratory Obstructions (Note any fish observatio Waterbody Notes Natural Watercourse Surficial Drainage (i.e. fi | ircle): Undercut B Woody Debris In Wood | anks Deep Pool Boulder Other_ nant vegetation, mature of the control of the cont | watercress or early succession waterBut y Aquatic Veg | ried Tile |
| n-water Cover Cover Types Present (ci Dverhanging Vegetation Riparian Zone Riparian Cover (% of wa Adjacent Land Use Fish Habitat Potential Critical Habitat (spawrin Aligratory Obstructions (Note any fish observation Vaterbody Notes | ircle): Undercut B Woody Debris In Wood | anks Deep Pool Boulder Other_ nant vegetation, mature of the condition of | watercress or early succession waterBut y Aquatic Veg | ried Tile <u></u> |



| STG WE |
|---|
| WIND FARM WATERBODY RAPID ASSESSMENT FORM 55 |
| Stanter James Wilkenson Arain |
| Station # 55-3 Project Name C.P |
| Watercourse Name James (LAWONKON Sour Project # 160960709 |
| Photos 1134-1138 Field Staff KE+NB |
| Date 10.3 2017 Time 3:25 |
| Weather conditions in previous 24 hrs (Ø (Ø |
| GPS Coordinates (Zone) 17T E 410820 N 47(08505 Datum |
| Descriptive Location |
| Water Quality |
| Dissolved Oxygen (mg/L) <u>ω.54</u> pH <u>8.09</u> Conductivity (μS/cm) <u>705</u> |
| Water Temperature (°C) 9,07 Air Temperature (°C) 5 |
| Time in situ measurements taken 3:25 |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) Maximum Pool Depth (cm) |
| Mean Bankfull Width (m) Stan Mean Water Depth (cm) |
| % Riffle% Run% Fla |
| Evidence of eroding banks, Comments on bank stability Stable + VCG |
| Substrate (% cover) |
| Bedrock 10 Cobble 20 Sand Silt Muck |
| Boulder 50 Gravel 40 Clay Marl Detritus |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhapging Vegetation Woods Debris Boulder Other |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) HO'D ADS WOOD TOO PROMY, PLG, Walnung Buck Hoom, AC Adjacent Land Use |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| Migratory Obstructions (seasonal, permanent) |
| Note any fish observations |
| Waterbody Notes |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile |
| Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry |
| |
| Other Habitat Notes, Incidental Wildlife Observations, etc. The draing war peld east of utm Trap drainel west of utm |
| Field Notes Authored by K Field Notes QA/QCed by |

G:\01609\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 32-3

| PH | 4 | _ |
|-------|-------|---|
| Stant | 7 - 1 | |

| Project CP | Project # 160960 709 |
|--|--|
| Station # 32 - 2 | Field Staff KE + ME |
| Photos Taken 283-286 | Date Nov. 24 2011 |
| GPS Coordinates 17 4768531 411006 | Time 1/: 10 |
| Descriptive Location Hills boro Rol | , 5 km south of Douglas |
| Water Quality | |
| Dissolved Oxygen (mg/L) 1.46 pH | Conductivity (µS/cm) 658 |
| Water Temperature (°C)9 | Air Temperature (°C) 40 |
| Weather conditions in previous 24 hrs cold, | sunny + Fos |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 30 (cm) |
| Mean Bankfull Width (m) | Mean Water Depth 25 (cm) |
| % Riffle (00 % Pool | % Run% Flat |
| Evidence of eroding banks, Comments on bank sta | bility Stable evectored |
| Substrate Upstream (% cover) | |
| BedrockSilt | _BoulderClayCobble |
| Muck Gravel | Marl Sand Detritus |
| Substrate – Downstream (% cover) | |
| Bedrock <u>30</u> Silt | Boulder 40 Clay Cobble |
| MuckGravel | Marl Sand 30 Detritus |
| in-water Cover | . Su tercres |
| | Dan Barl Va Files |
| Cover Types Present (circle): Undercut Ban Overhanging Vegetation Woody Debris | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, dominal | nt vegetation, mature or early successional) |
| Upstream* | it vogotation, matters of early successional, |
| Downstream 5% naman to | 1 20 |
| Adjacent Land Use | |
| Upstream Ag Galdy | 001101 |
| Downstream / / / / / / / / / / / / / / / / / / / | COUCH |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, ground | water unwellings) |
| Unstream 4 /4 /4 | water upweimige) |
| Downstream waterches . acce | east the How thick wheatall |
| Migratory Obstructions (seasonal, permanent) | The stalland |
| Upstream | |
| Downstream thick contails | and the Committee of th |
| Note any fish observations now | |
| | |
| Other Habitat Notes, Incidental Wildlife Observa | tions. etc. |
| | ercres , enough water nouts |
| neglicible flows | 's / grant tripped |
| -cood deader thick with cutto | Wa |
| SOUR BOULES ! CO | |

plantley 32-2 brain Page Lot L

| Project Name Suncor Ener | rgy- Cedar Point Wind Project | Station Number | 32-2 |
|--|--|--|-----------------------------------|
| A STATE OF THE STA | 0960709 | Pass No. (if applicable) | |
| Photos See b | Annual Composition Millowing Statement of Compositions | | 2012 05 10 |
| | shoin Rd 1.5 Km | | |
| on | east side | | ONDERES DITE |
| UTM coordinates 476 | 58531 - easting - | 411006 | nerthing zone 17 |
| Fishing Method (circle one): Sampling Method (circle one): | Backpack Bos even habitat | ut Unit Model/Ma transect | ke ER-12 |
| Effort (Electrofishing Seconds): | 370 Number of Nette | rs: / N | umber of Anodes: |
| Settings Frequency (Hz) 6 | | rent (Amps) P | |
| Station Information | | | |
| Length of Stream Surveyed (m) | <u>~ 60 m</u> | | |
| Station Characteristics: | | | 1.25 |
| | Depth (m): Range 6.10 | -0.25 Average: _ | 6.70 |
| pH & | 9.93' .63 | /elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Time 13:2 |
| Species | Number of Fish | | Comments (i.e. age, disease, etc) |
| | 이 지면 보는 것이 아니라 가장에 살았다. 그리고 하면 이 집에 되었다고 살았다. | | |
| No catch | | | |
| No catch Note: wateres | ss present. Heave | 1. filamentious | gren alsee. |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 31-1

Field Notes Authored by

| A 415 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Project # <u>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </u> |
|--|--|
| Station # 31-1 Photos Taken 3/3-337 | Date Nov. 24 2011 |
| GPS Coordinates 17476 1996 | |
| Descriptive Location No 196 | 11106 Time 2715 m |
| Descriptive Location 13/11/19(40) | are e mus bor o |
| Water Quality | |
| Dissolved Oxygen (mg/L) | pH_8/13 Conductivity (μS/cm) 68/ |
| Water Temperature (°C) 7. 2.6 | Air Temperature (°C) 4 |
| Weather conditions in previous 24 hrs | s cold sunny & overcant |
| Metanous Dimensions 8 Manut | |
| Watercourse Dimensions & Morph Mean Watercourse Width | 가게 되는 것들은 아이들이 되는 것이 되었다면 그 없어 가입니다 것 같은 사람들이 되었다면 하는데 하는데 하다면 하다. |
| Mean Bankfull Width | (m) Maximum Pool Depth (cm) |
| AND THE PARTY OF T | (m) Mean Water Depth 15 (cm) % Pool % Run % Flat |
| Evidence of eroding banks, Commen | |
| Evidence of eroding banks, Commen | its on bank stability <u>slight overen</u> |
| Substrate - Upstream (% cover) | hick up cartails |
| BedrockSilt | BoulderClayCobb |
| MuckGravel | MarlSandDetri |
| Substrate – Downstream (% cover) | |
| Bedrock Silt | |
| Muck Gravel | |
| Graver | |
| In-water Cover | Undercut Banks Deep Pool Vascular Plants Woody Debris Boulder Other |
| Cover Types Present (circle): | Undercut Banks Deep Pool Vascular Plants |
| 0 | Woody Debris Boulder Other |
| Overhanging Vegetation | |
| | |
| Riparian Zone | |
| Riparian Zone Riparian Cover (% of watercourse sha | aded, dominant vegetation, mature or early successional |
| Riparian Zone Riparian Cover (% of watercourse sha | |
| Riparian Zone Riparian Cover (% of watercourse shall be s | aded, dominant vegetation, mature or early successional |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 30% (10) Downstream 10% 56 | aded, dominant vegetation, mature or early successional |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 30% (P) Downstream 10% Sta Adjacent Land Use | aded, dominant vegetation, mature or early successional |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 30% (%) Downstream 10% Sta Adjacent Land Use Upstream Downstream | aded, dominant vegetation, mature or early successional |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 30% (10) Downstream 10% 56 Adjacent Land Use Upstream Downstream Downstream | aded, dominant vegetation, mature or early successional anar tees Hered noman trae |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 10% 56 Adjacent Land Use Upstream Downstream Downstream Downstream Tish Habitat Potential Critical Habitat (spawning or nursery a | aded, dominant vegetation, mature or early successional anar tees Hered noman trae |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 10% 5% Downstream 10% 5% Adjacent Land Use Upstream Downstream Downstream Downstream Upstream Downstream Upstream Downstream Upstream Downstream | aded, dominant vegetation, mature or early successional anar tees Hered nomen tree |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 3000 500 Downstream 1000 500 Adjacent Land Use Upstream Downstream Downstream Upstream Downstream Upstream Downstream Downstream Downstream | aded, dominant vegetation, mature or early successional analy tees Hered named free ds areas, groundwater upwellings) |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 10% 5% Adjacent Land Use Upstream Downstream 10% 5% Fish Habitat Potential Critical Habitat (spawning or nursery a Upstream Downstream Migratory Obstructions (seasonal, per | aded, dominant vegetation, mature or early successional analy tees Hered named free ds areas, groundwater upwellings) |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 10% 50 Adjacent Land Use Upstream Downstream 10% 50 Adjacent Land Use Upstream Downstream Upstream Downstream Downst | aded, dominant vegetation, mature or early successional analy teles Hered neman trae dominant vegetation, mature or early successional analytics areas, groundwater upwellings) |
| Riparian Zone Riparian Cover (% of watercourse shall be provided by the course of the | aded, dominant vegetation, mature or early successional analy tees Hered named free ds areas, groundwater upwellings) |
| Riparian Zone Riparian Cover (% of watercourse shall be provided by the course of the | aded, dominant vegetation, mature or early successional analy teles Hered neman trae dominant vegetation, mature or early successional analytics areas, groundwater upwellings) |
| Riparian Zone Riparian Cover (% of watercourse sha Upstream 10% 5% Adjacent Land Use Upstream Downstream 10% 5% Adjacent Land Use Upstream Downstream Upstream Downstream Downst | aded, dominant vegetation, mature or early successional anar trees Hered penan tree dominant vegetation, mature or early successional anar trees dominant vegetation for the succession anar trees areas, groundwater upwellings) |
| Riparian Zone Riparian Cover (% of watercourse shall be provided by the course of the | aded, dominant vegetation, mature or early successional enantheman free Hered noman free dy areas, groundwater upwellings) rmanent) Sum were |

Field Notes QA/QCed by ______

Mortley 31-1

| Pass No. (if applicable) Date (yyyymmdd): 2017-05 10 as Line + Hillsboro Boat Unit Model/Make R-12 Interpreted transect spot) of Netters: Number of Anodes: Current (Amps) Power (Watts) Current (Amps) Power (Watts) Water Velocity if Measured (m/s): NIA Time 17:10 Conductivity (uS/cm) 633 Dissolved Oxygen (mg/L) 9.87 |
|--|
| Date (yyyymmdd): 2012 05 10 as Line + Hills bo (0) Boat Unit Model/Make the 12 illat transect spot) of Netters: Number of Anodes: Current (Amps) Power (Watts) + 4/5. 10-1.5 Average: 1.25 0.16 - 0.20 Average: 5.15 Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| As Line + Hills bo(o) Hosting zone 17 Boat Unit Model/Make 12-12 Initial transect spot Of Netters: Number of Anodes: 1 Current (Amps) Power (Watts) Holis - 0.20 Average: 5.15 Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| Boat Unit Model/Make R-12 of Netters: Number of Anodes: / Current (Amps) Power (Watts) **A 5 O-1.5 Average: 1.25 O-16 - 0.20 Average: 5.15 Water Velocity if Measured (m/s): N/A Time 7:10 Conductivity (uS/cm) 633 |
| Boat Unit Model/Make 12-12 initiat transect spot of Netters: Number of Anodes: Current (Amps) Power (Watts) # 4/5- |
| r of Netters: / Number of Anodes: / Current (Amps) Power (Watts) / Power (Watts) / O-1.5 Average: /.25 / O.16 - O.20 Average: 5.15 Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| 10-1.5 Average: 1.25 0.16 - 0.20 Average: 0.15 Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| Water Velocity if Measured (m/s): N/A Time 17:10 Conductivity (uS/cm) 633 |
| Conductivity (uS/cm) 633 |
| |
| Comments (i.e. age, disease, etc): |
| |
| |
| |
| |
| ecef5 |
| |
| |
| |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 31-4

| C.P | - 11-001-008 | |
|---|---------------------------------------|----------------|
| Project C.P | Project # 160960709 | |
| Station # 31-4 | Field Staff KE + MF | |
| Photos Taken 329-332 | Date Nov. 24 2011 | |
| GPS Coordinates 17 4769969 912119 | 7 Time 2:55 pm | |
| Descriptive Location Douglas Live | Time 2:55 m From east of Hills | bono |
| Water Quality | | |
| Dissolved Oxygen (ng/L) pH_ Water Temperature (°C) | Conductivity (uS/cm) | |
| Nater Temperature (%C) | Air Temperature (°C) | |
| Weather conditions in previous 24 hrs | (3, | n su 3 V J F\$ |
| Watercourse Dimensions & Morphology | | |
| Mean Watercourse Width (m) | Maximum Pool Depth | (cm) |
| wean Banktuli vviotn <u>\</u> (m) | Mean Water Depth | (cm) |
| % Riffle \% Pool | % Run % | Flat |
| Evidence of eroding banks, Comments on bank | stability | |
| | | 9)12 25 |
| Substrate – Upstream (% cover) | | |
| BedrockSilt | BoulderClay | |
| MuckGravel | MarlSand | Detritus |
| Substrate – Downstream (% cover) | | |
| Bedrock Silt | BoulderClay | Cobble |
| Muck Gravel | Marl Sand | Detritus |
| | | |
| n-water Cover | | |
| Cover Types Present (circle): Undercut B Overhanging Vegetation Woody Det | | |
| evernaring vegetation voodly bet | oris Boulder Other | |
| Riparian Zone | | |
| Riparian Cover (% of water course shaded, domi | inant vegetation, mature or early suc | cessional) |
| Upstream \ | | |
| Downstream \ | | |
| Adjacent Land Use | | jedanija i |
| Upstream / | | |
| Downstream/ | | |
| ish Habitat Potential | | |
| Critical Habitat (spawning or nursery areas, grou | industar (invellings) | |
| Upstream | indwate(upweilings) | |
| | | |
| Downstream | | |
| ligratory Obstructions (seasonal, permanent) | | |
| Upstream | | |
| Doyvnstream_ | | And the Even |
| lote any fish observations | | |
| | | |
| Other Habitat Noteș, Incidental Wildlife Obse | rvations, etc | |
| road ditch drainage north | h cidl | |
| surficial drainage seith | through Reld to wa | HE COUR |
| grassed swale | | |
| 11/1- | otos 04/00ed by | Page of |
| d Notes Authored by KE Field No | otes QA/QCed by | D |



Kernohan - O'bonnell Brain DY RAPID ASSESSMENT FORM 60-1

| 3 | WIND FARM | WATERBODY | RAPID A | ASSESSMENT | FORM |
|---|-----------|-----------|---------|------------|------|
| | | | | | |

| Station # 60 - | |
|--|--|
| | Project Name Cale Part |
| Watercourse Name Unknown | Project # (,) **(6 0 /0) |
| Photos 820 - 824 | Field Staff Jule E |
| Date 2012/10/03 | Time 4:00pm |
| Weather conditions in previous | 24 hrs for han |
| GPS Coordinates (Zone) 171 | E 46514 N 4767 222 Datum NAV) 83 |
| Descriptive Location O By | ish the, Nort of Alexander Kd. |
| Water Quality | |
| Dissolved Oxygen (mg/L) | <u>L</u> pH <u>8.15</u> Conductivity (μS/cm) <u>1602</u> |
| Water Temperature (°C) | Air Temperature (°C) 20°C |
| Time in situ measurements tak | on 4:08 gm |
| Watercourse Dimensions & I Mean Watercourse Width Mean Bankfull Width Riffle Evidence of eroding banks, Co | 7 (m) Maximum Pool Depth 15 (cm) (m) Mean Water Depth 5 (cm) 10 % Pool ,% Run , % Flat |
| | |
| Substrate (% cover) | [|
| Substrate (% cover) | Cobble 10 Sand Silt 30 20 Muck |
| Bedrock Boulder In-water Cover | Gravel Clay 70 Marl Detritus |
| Bedrock Boulder In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercou | Gravel Clay 70 Marl Detritus Undercut Banks Deep Pool Watercress Aquatic Veg |
| Bedrock Boulder In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use Adjacent Land Use Adjacent Land Use Adjacent Land Use | Gravel Clay 70 Marl Detritus Undercut Banks Deep Pool Watercress Aquatic Veg Voody Debris Boulder Other Arts Side |
| Bedrock Boulder In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounty) Adjacent Land Use Adj | Undercut Banks Deep Pool Watercress Aquatic Veg rse shaded, dominant vegetation, mature or early successional) Sey - Cattellon west side (N) Block water photon arsery areas, groundwater upwellings) |
| Bedrock Boulder In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounty) Adjacent Land Use Adj | Undercut Banks Deep Pool Watercress Aquatic Veg /oody Debris Boulder Other rse shaded, dominant vegetation, mature or early successional) |

Kernohan-O'Sonnell Brain

| | | Fishing Re | ecord and (| Catch Results | s (passive collection | n methods) Page of |
|---------------------------|-------------------------------|----------------|-------------|-------------------------------|---------------------------|--------------------------------------|
| Stantec Project Number | er | 6096076 | 9 | | Station Number | 60-1 |
| Project Name: | | a point. | | | Lift / Haul / Pass No. | |
| Waterbody Na | me: unk | Nun . | | | Date (yyyymmdd): | 20 12/10/03 |
| Field Staff: | TIKE | | | | | |
| Fishing Metho | d (check one) an | nd Gear Specs: | | Trap Net Hoop Net Minnow Trap | o. of Panels:Mesh | |
| Descriptive Lo | cation of Station | on Brust | - Lhe, | woth of Al | sende PJ. | |
| UTM Coordina | ates: | Zone 17 T | Easting | 416514 | Northing 4 | 767272 |
| SET: Date: | 2012/10/ | 103 | LIFT: Date | 61.42 | Ola Total Netting Hours (| (approx.) 19 h |
| Time: | 4:08 02 | | Time: | 11:34 A | <u></u> | |
| O | leasurements (r Temp. (°C) | | r | Min: | Time 4:08 | tch Data on Separate Sheet?: Y/N |
| | | | | | | Measurements on Separate Sheet? Y/N |
| Catch Data | | | | | | |
| Mesh Size | Species Cope 14 C | hulo | Number + | 32 - | 10H | Comments (i.e. age, disease, etc.) |
| | VIUVE (| N VO -VO | 307 | | | LIWAY, 13 A CHAYA |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 7 | | | | | | |
| | | | | | | |
| | | | | | | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM 55-1 Kernghan O'Donnell Brau

| Station # 55-1 | Project Name C, P | |
|---|--|-----------|
| | Project # 100960709 | |
| Watercourse Name Photos \\ 33 \\ \\ 134 | Field Staff Kt + NS | |
| Photos 135 134 Date 200 3 20 3 | Time 3:05 | |
| Weather conditions in previous | AND | |
| GPS Coordinates (Zone) | | atum |
| Descriptive Location bound | | atum |
| rest of util | exter. | |
| Water Quality | | |
| Dissolved Oxygen (mg/L) | pH Sall Conductivity (μS/cm) 57 S | |
| Water Temperature (°C)7 | pH Sαll Conductivity (μS/cm) 57 § Air Temperature (°C) 5° | |
| Time in situ measurements tak | ken_3:05pm | |
| Watercourse Dimensions & I | | |
| Mean Watercourse Width | | m) |
| | | :m) |
| % Riffle | % Pool% Run | % Flat |
| Evidence of eroding banks, Co | omments on bank stability | |
| Substrate (% cover) | | |
| Bedrock | Cobble Sand (Company Silt Silt Silt Silt Silt Silt Silt Silt | Muck |
| Boulder | | Detritus |
| | urse shaded, dominant vegetation, mature or early successio | onal) |
| | ASh | |
| Adjacent Land Use | | |
| AS | | |
| Fish Habitat Retartial | | |
| Fish Habitat Potential | urnery eroes, groundwater unwellings) | |
| Critical Habitat (spawning or ne | ursery areas, groundwater upwellings) | |
| Migratory Obstructions (seaso | nal, permanent) | |
| Note any fish observations | | |
| Weterhody Notes | | |
| Waterbody Notes Natural Watercourse | Trapezoidal Channel Grassed Swale Bu | ried Tile |
| Surficial Drainage (i.e. furrows | | |
| Curiciai Diamage (i.e. luitows | Dominated by Aquatic veg | |
| | ntal Wildlife Observations, etc, | |
| | vert could be refuge in low 40 | w |
| Field Notes Authored by | vert could be retrige in low 40 | س , |



| 4 | | | MR |
|---|---------------------------|---------------------|-------------|
| WIND FARM WATERB | ODV DADID ASSESS | MENT FORM | |
| WIND FARW WATERD | | | 1-11-2 |
| Stantec | Kernonan | o'somell Svair | , 164 - |
| Station # 64-3 | Project Name Ou | 0 | |
| Vatercourse Name | Project # 1609 | (0.07.09 | |
| Photos 1129-1131 | Field Staff Kt | LNB | |
| Date Dec 3 200 | , Time <u>२.4५</u> | | |
| Weather conditions in previous 24 hrs | | | |
| GPS Coordinates (Zone) 17 E 41 | 2904 N | <u>4767144 c</u> |)atum |
| Descriptive Löcation Days La | e - forth | | |
| Water Quality | | | |
| Dissolved Oxygen (mg/L) 12,79 pl | H 8, 27 Conductivi | ty (μS/cm) _551 | |
| | Air Temperature (°0 | | |
| Fime <i>in situ</i> measurements taken | Spm | | |
| Natercourse Dimensions & Morphology | | | |
| Mean Watercourse Width (m) | Maximum Pool Dep | th 40 (| cm) |
| Mean Bankfull Width (m) | Mean Water Depth | 25 | cm) |
| | Pool <u>100</u> | % Run | % FI |
| Evidence of eroding banks, Comments on ban | k stability Umler cut | | |
| Substrate (% cover) | | | |
| Bedrock 30 Cobble | Sand_ | Silt | Muck |
| BoulderBoGravel | るの Clay | Marl | Detritus |
| n-water Cover | | | RCG |
| Cover Types Present (circle): Undercut | Banks Deep Pool | Watercress | Aquatic Veg |
| Overhanging Vegetation Woody Debris | | | |
| | | | |
| Riparian Zone | minant vegetation, mature | or early successiv | anal) |
| Riparian Cover (% of watercourse shaded, do | AS A | or earry succession | Jilai) |
| Adjacent Land Use | | | |
| AC | | | |
| | | | |
| Fish Habitat Potential | | | |
| Critical Habitat (spawning or nursery areas, gr | oundwater upwellings) | | |
| Ninestan Obstructions (according | | | |
| Migratory Obstructions (seasonal, permanent) | | | |
| Note any fish observations | | | |
| (V) | | | |
| Waterbody Notes | | | |
| Natural Watercourse Trapezoidal Cha | nnel Grassed | Swale Bı | uried Tile |
| Surficial Drainage (i.e. furrows) Dugout | Pond Dominated | by Aquatic Veg | Dry |
| Other Habitat Notes, Incidental Wildlife Obs | servations. etc. | | |
| | | | |
| | | | |
| | | | |
| Field Notes Authored by 46 | Notes OA/OCed by | | |



Soughs Sain 56-1
WIND FARM WATERBODY RAPID ASSESSMENT FORM NWB

| C | 10 |
|--|---|
| Station # 56-1 | Project Name |
| Watercourse Name Douglas Drawn | Project # (60960709 |
| Photos | Field Staff KE + JK |
| Date 111, 3 2012 | Time 5:45 pm |
| Weather conditions in previous 24 hrs | N 477 OUG Datum ANAM 93 |
| GPS Coordinates (Zone) 17T E 414162 | N 477 0446 Datum NAN 83 |
| Descriptive Location | |
| Douglas ver tot 11H | Oxere |
| Water Quality | |
| | Conductivity (μS/cm) |
| Water Temperature (°C) | Air Temperature (°C) |
| Time in situ measurements taken | Air remperature (0) |
| Time in situ measurements taken | |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width(m) | Maximum Pool Depth (cm) |
| Mean Bankfull Width (m) | Mean Water Depth / (cm) |
| % Riffle% Po | % Run / % Flat |
| Evidence of eroding banks, Comments on bank s | |
| | |
| | |
| Substrate (% cover) | |
| BedrockCobble | Sand Silt Muck |
| BoulderGravel | ClayDetritus |
| in-water Cover | |
| Cover Types Present (circle): Undercut Ba | anks Deep Pool Watercress Aquatic Veg |
| Overhanging Vegetation Woody Debris | |
| Overnatiging vegetation Woody Debris | Bodide: Othor |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, doming | ant regetation, mature or early successional) |
| | |
| Adjacent Land Use | |
| | |
| | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, grour | ndwater upwellings) |
| | |
| Migratory Obstructions (seasonal, permanent) | |
| | |
| Note any fish observations | |
| | |
| Waterbady Notes | |
| Waterbody Notes / | el Grassed Swale Buried Tile |
| Natural Watercourse Trapezoidal Channel | |
| Surficial Drainage (i.e. furrows) Dugout Po | ond Dominated by Aquatic Veg Dry |
| Other Hebitat Notes Incidental Wildlife Obser | votlene ete |
| Other Habitat Notes, incidental Wildlife Obser | valions, dic. |
| | |
| | |
| | |
| Field Notes Authored by Field Not | es QA/QCed by |
| Field Not | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Douglas Sau | 010 |
|--------------|------|
| Douglas Saur | 18-5 |
| | , NR |

| Station # 18-5 | | Project Name | 0 | |
|--|----------------------|---------------------------|--------------------|------------|
| Watercourse Name <u>bouglas</u> <u>brain</u> Photos Project # 16960709 Field Staff Kt + JK | | | | |
| | | | | |
| | | | - | |
| Weather conditions in previous 24 hrs 7-8+000, het - Sunny | | | | |
| | | O 2 NI LI- | 7/657 Do | tum NAV 23 |
| | | | | |
| Descriptive Location Hubbard Live Kin east of Hullsboro | | | | |
| Water Quality | | 1 de | 1 | |
| Dissolved Oxygen (mg/L) | pH | Conductivity | μS/cm) | |
| Water Temperature (°C) | | Air Temperature (°C) | | |
| Time in situ measurements taker | | X | | |
| Watercourse Dimensions & Mo | orphology | | 1 d | 1 |
| Mean Watercourse Width | | Maximum Pool Depth | / (cr | n) (|
| Mean Bankfull Width | (m) | Mean Water Depth | (cr | n) |
| % Riffle | % P | Pool | % Run | % Flat |
| Evidence of eroding banks, Com | ments on bank | stability | | |
| | e e e | | | |
| Substrate (% cover) | O-bb!- | 200- | Oill | |
| Bedrock | Cobble | Sand_ | | Muck |
| Boulder | Gravel | フロ Clay | Marl | Detritus |
| Overhanging Vegetation Works & Soliday ORIparian Zone Riparian Cover (% of watercours | se shaded, domi | nant vegetation, mature o | r early succession | nai) |
| Adjacent Land Use | Enchoppy | \sim | | Adva |
| Forest = | DOWNED O | | | 110100 |
| Fish Habitat Datastici | | | | |
| Fish Habitat Potential | | | | |
| Critical Habitat (spawning or nur | sery areas, grou | indwater upweilings) | | |
| Migratory Obstructions (seasona | l, permanent) | | | |
| Note any fish observations | | | | |
| none | | | | |
| Waterbody Notes | | / | | |
| Natural Watercourse Tra | pezoldal Chanr | Grassed SW | aleBur | led Tile |
| Surficial Drainage (i.e. furrows)_ | Dugout P | ond Dominated by | Aquatic veg | _ Ury |
| Other Habitat Notes, Incidenta | i Wiidiife Obse | rvations, etc | | |
| | | | | |
| | de nydd y llifen fen | | | |
| Field Notes Authored by | | otes QA/QCed by | | |
| | FIGIR NO | | | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 18-1 WB

| Project Station # S Photos Taken GPS Coordinates Descriptive Locati | | Project # 160960 Field Staff KF & n Date Nov. 24 2 Time 3130 pm South of Lak | 109 1F 011 eshore |
|--|--|--|----------------------------|
| Water Temperatur | re (°C) 7.51 as in previous 24 hrs (A) | pH_8.58 Conductivity (μS Air Temperature (°C)_(| 00 |
| Mean Watercours Mean Bankfull Wid% Riffle | \\ | Maximum Pool Depth Mean Water Depth | 20 (cm) 0 (cm) |
| Substrate – Upst Bedrock Muck | ream (% cover)SiltGravel | Boulder <u>40</u> Cla | |
| Substrate – Down Bedrock Muck | nstream (% cover) so^ 20 Silt Gravel | Boulder 40 Cla Marl Sai | y 20 Cobble |
| In-water Cover Cover Types Pres Overhangir | ent (circle): Underc | | Scular Plants Grant |
| Riparian Zone Riparian Cover (% Upstream_ Downstread Adjacent Land Use Upstream_ | 5% m 40% npm | ominant vegetation, mature or ea | rly successional) |
| Downstream Fish Habitat Pote | ntial awning or nursery areas, g | roundwater upwellings) | |
| Downstream | mtions (seasonal, permanen | | |

Douglas Drain

| | yy- Cedar Point Wind Project Station I | Number18- (|
|---|--|-----------------------------------|
| | 960709 Pass No | o. (if applicable) |
| thotos <u>See No</u> | The state of the s | gymmdd): 05/10/2012 |
| Children Andrew Committee | Hillsborn Rd - 30m so | |
| | Donla | |
| | +2621 easting 411143 | East |
| ishing Method (circle one): | Backpack Boat | Unit Model/Make |
| ampling Method (circle one): | even habitat tran | spot spot |
| ffort (Electrofishing Seconds): | Number of Netters:/ | Number of Anodes: |
| ettings requency (Hz) | Voltage (volts) 600 Current (Amps) | Power (Watts) |
| tation information | | |
| ength of Stream Surveyed (m) | ~4.0m ys+d/s of ROW + U | |
| tation Characteristics: | Width (m): Range 1.0 - 2.0 | Average: 1.5~ |
| | Depth (m): Range <u>0.20-0.40</u> | Average: 0.30 |
| pH <u>8</u> . atch Data | U) Dissolved Ox | |
| pecies | Number of Fish | Comments (Le. age, disease, etc): |
| rkchub | (matin | z colours) |
| | | |
| | | |
| | | |
| | | |
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RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

18-3 WB

| Stantec | _ | | | |
|---------|------|-------|-----|---|
| | Par. | | 4 | |
| | | - i • | 1.1 | - |

| Station # 18 - 3 Photos Taken 356 - 361 GPS Coordinates 17 477 2746 411358 | Project # 160960709 Field Staff KE+ MF Date Nov 24 2011 Time 3:50 pm |
|---|--|
| Dissolved Oxygen (mg/L) pH | Conductivity (µS/cm)Air Temperature (°C) |
| | Maximum Pool Depth 3 (cm) Mean Water Depth 3 (cm) % Run% Flat ility |
| | Boulder 30 Clay Cobble Marl Sand 40 Detritus |
| | Boulder 30 Clay Cobble Marl Sand 40 Detritus |
| In-water Cover Cover Types Present (circle): Undercut Banks Overhanging Vegetation Woody Debris | Deep Pool Vascular Plants Catta Boulder Other |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant Upstream Downstream Adjacent Land Use Upstream Downstream Downstream | vegetation, mature or early successional) |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundw Upstream | ater upwellings) |
| Migratory Obstructions (seasonal, permanent) Upstream Downstream | |
| Note any fish observations | |
| Other Habitat Notes, Incidental Wildlife Observation of Lake whom Consisting Standing water at cuttails in meets definition of water body. Field Notes Authored by K.E. Field Notes O. | Mubbard), incised channel, |

(Station Diagram on Back)

| Project Name Suncor Ene | orgy- Cedar Point Wind Project | Station Number | 18-3 |
|----------------------------------|--|--|--|
| Project Number16 | 0960709 | Pass No. (if applic | able) |
| Photos See | back | Date (yyyymmdd): | : 2012 05 10 |
| Descriptive Location | Lalashare + Hu | boord | |
| UTM coordinates 49 | 72746 easting | 411358 | northing zone 1377 |
| Fishing Method (circle one): | Backpack | Boat Unit Mode | el/Make |
| Sampling Method (circle one): | even hab | pitat transect | spot |
| Effort (Electrofishing Seconds): | Number | r of Netters: | Number of Anodes: |
| Settings | | | |
| Frequency (Hz) | Voltage (volts) | Current (Amps) | Power (Watts) |
| Station Information | | | |
| Length of Stream Surveyed (m) | /_ | | |
| Station Characteristics: | Width (m): Range | Average: | |
| | Depth (m): Range | Average: | |
| Water Clarity/Colour: | | Water Velocity if Measured (m/s | s): Time |
| | HARDON AND THE RESIDENCE OF THE PARTY OF THE | | |
| Temperature (°C) | | Conductivity (uS/c | m) |
| pH | | Conductivity (uS/ca Dissolved Oxygen (mg/ | [2] [[문항] - H. |
| pH | Number of Eleh | | (L) |
| pH | Number of Fish | | [2] [[문항] |
| pH | Number of Fish | | (L) |
| pH | | Dissolved Oxygen (mg/ | (L) |
| pH | Number of Fish Not 43 | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |
| pH | | Dissolved Oxygen (mg/ | /L) |



WIND FARM WATERBODY RAPID ASSESSMENT FORM 58-1 WB.

| Station #Watercourse Name # Change Creek | Project Name |
|--|---|
| VValoriburist Marris VVLVVVI CI CTAL | Project # 100900799 |
| Photos | Field Staff KE +JK |
| Date July 5 2012 | Time 11/310 |
| Weather conditions in previous 24 hrs | e Hazy |
| GPS Coordinates (Zone) E 416 | N 4771944 Datum NAD83 |
| Descriptive Location Rush Rd | south of Hippord I - |
| | |
| Water Quality Dissolved Oxygen (mg/L) 233 Water Temperature (°C) 2437 | H 8,28 Conductivity (μS/cm) 623. Air Temperature (°C) 33 |
| Time in situ measurements taken 11 49 | All Temperature (C) // // / |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 0 (cm) |
| Mean Bankfull Width (m) | Mean Water Depth O / (cm) |
| | 6 Pool % Run % Fla |
| Evidence of eroding banks, Comments on bar | |
| one enosien + underku | |
| Substrate (% cover) | |
| BedrockCobble_ | Silt Muck |
| BoulderQ O Gravel | O Clay Marl Detritus |
| In-water Cover | W/S right benker |
| Cover Types Present (circle): Undercut | |
| Overhanging Vegetation Woody Debris | Soulder Other |
| | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, do | minant vegetation, mature or early successional) |
| | |
| a die | oper RCG |
| Adjacent Land Use | Roper RCG |
| Adjacent Land Use | ropear RCG |
| A3, | ropear RCG |
| Fish Habitat Potential | roper RCG |
| A3, | roundwater upwellings) |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations | o in unknown minnow traips |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Cha | annel Grassed Swale Buried Tile |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Waterbody Notes | annel Grassed Swale Buried Tile |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Natural Watercourse Surficial Drainage (i.e. furrows) Dugout Other Habitat Notes, Incidental Wildlife Obs | annel Grassed Swale Buried Tile a Pond Dominated by Aquatic Veg Dry servations, etc |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Cha Surficial Drainage (i.e. furrows) Dugout Other Habitat Notes, Incidental Wildlife Observations | annel Grassed Swale Buried Tile Pond Dominated by Aquatic Veg Dry servations, etc. |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, grading of the control of th | annel Grassed Swale Buried Tile Pond Dominated by Aquatic Veg Dry servations, etc. |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidental Wildlife Observations | annel Grassed Swale Buried Tile Pond Dominated by Aquatic Veg Dry servations, etc. |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) Dugout Other Habitat Notes, Incidental Wildlife Observations | annel Grassed Swale Buried Tile Pond Dominated by Aquatic Veg Dry servations, etc. |

G:\01609\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

Hickory 58-1

| | | Fishing R | ecord and | Catch Resu | its (passive collection | on methods) Page of |
|---------------------------------|-------------------|--------------|------------|---|-------------------------|---|
| Project Numbe | ner 160960709 | | | | Station Number | 58-1 |
| Project Name: | | | | | Lift / Haul / Pass No. | |
| Waterbody Name: LICKON Creek | | | 4 | Date (yyyymmdd): July 5 2012 | | |
| Field Staff: | KE | +24 | | | | |
| | d (check one) ar | | | Gillnet Trap Net Hoop Net Minnow Trap Other (specify) | 2 | Sizes: |
| Descriptive Loc | cation of Station | brush k | South . | of bladland | Lice | |
| UTM Coordinate SET: Date: Time: | July 11: 40 | 5/12 2 Am | LIFT: Date | duly 5 | | (approx.) 2.5 h. |
| Supporting Me | Temp. (°C) | D.O. (mg/L) | pH 8.28 | Cond. (µS/cm) | Additional Ca | tch Data on Separate Sheet?: Y/ID |
| | Temp. (°C) | D.O. (mg/L) | pН | | Additional Ca | tch Data on Separate Sheet?: YAD Measurements on Separate Sheet? YAD |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pН | | Additional Ca | |
| Depth (m) Catch Data | Temp. (°C) | D.O. (mg/L) | pH 8.28 | | Additional Ca | Measurements on Separate Sheet? Y |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pН | | Additional Ca | |
| Depth (m) Catch Data | Temp. (°C) | D.O. (mg/L) | pH 8.28 | | Additional Ca | Measurements on Separate Sheet? Y |
| Depth (m) Catch Data | Temp. (°C) | D.O. (mg/L) | pH 8.28 | | Additional Ca | Measurements on Separate Sheet? Y |
| Depth (m) Catch Data | Temp. (°C) | D.O. (mg/L) | pH 8.28 | | Additional Ca | Measurements on Separate Sheet? Y |
| Depth (m) Catch Data | Temp. (°C) | D.O. (mg/L) | pH 8.28 | | Additional Ca | Measurements on Separate Sheet? Y |

Wekon 58

| Project Name Project Number U 0 1 4 C | 7499 | Station Number Pass No. (if applicable) | 58-) |
|--|-------------------------------------|--|---------------------------------------|
| Photos | | Date (yyyymmdd): | July 5 2012 |
| Descriptive Location | I South of Hubbard LA | Company of the Compan | |
| UTM coordinates 4167 | 2 easting 4 | 771946 | northing zone |
| Fishing Method (circle one): Sampling Method (circle one): | Backpack Boat | Unit Model/Matransect | ke R-24 |
| | | | |
| Effort (Electrofishing Seconds): <u>&</u> Settings | Number of Netters | S | lumber of Anodes: |
| 그래마 사람들이 들어가 내려왔다. 얼마나 얼마나 이 그렇게 하는 것이 하는 것이 없는데 없다면 없다. | Oltage (volts) 250 Curr | ent (Amps) | Power (Watts) |
| Station Information | Row- | 20 m | |
| Length of Stream Surveyed (m) Station Characteristics: V | Vidth (m): Range 2.5 | | 2 |
| | Depth (m): Range $O(1 - 1)$ | | D. 15 |
| Water Clarity/Colour: Temperature (°C) pH 3.33 Catch Data | | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | Time 2:2 718 mS/cm 6.22 mg/L |
| Species | Number of Fish | | Comments (Le. age, disease, e |
| 3 | | | |
| Brown Trout | 2 | attal | at A down |
| Brown Trout | 11+9+9+9 | T+6 al Blacks | |
| Brown Trout Creek Chub | 11+9+9+5 | 7+6 al Blacks | |
| Brown Trout Creek Chub Johnny Darter | 3 11+9+9+9 9+2+2+1 87 = 16 | 7+6 of Blacks | not YBY, So |
| Brown Trout Creek Chub | | attories T+e of Blacks Y+Y+7+7+ | 2004 YOY, Su 8+1+4 |
| Brown Trout Creek chub Johnny Darter. Bluntrose | 図:7 = 16 図:7 = 21 | THE of Blacks | 20+ 704, So 8+1-+4 Jun + A |
| Brown Trout Creek Chub | 87 = 16 | attories | 2004 YOY, Su 8+1+4 |
| Brown Trout Creek chub Johnny Larter Bluntmore Blockside Sarter | 図:7 = 16 図:7 = 21 | atteleses 1+4+7+7+ | 20+ YBY, Si 8+1-+4 Jun + A A |
| Brown Trout Creek Chub Johnny Darter Bluntmore Bluntmore Rock Bass | Ø 77 = 16 ■ 21 • = 1 | attelete T+e y Blacks Y+Y+7+7+ | 20+ 704, So 8+1-+4 Jun + A |
| Brown Trout Creek chub Johnny Larter Bluntmore Blockside Sarter | ※ 三 1 | apples | 20+ YBY, Si 8+1-+4 Jun + A A |
| Brown Trout Creek Chub Johnny Darter Blockside Sorter Rock Bass White Sucher | Ø 77 = 16 ■ 21 • = 1 | applese | 20+ YBY, Si 8+1-+4 Jun + A A |
| Brown Trout Creek Chub Johnny Darter Bluntmore Bluntmore Rock Bass | MM' = 21 MM' = 21 MM' = 21 | applese | 20+ YBY, S 8+1+4 Jun + A A |



WIND FARM WATERBODY RAPID ASSESSMENT FORM

thickory er

20-3 WB

| Station # 30 - 3 Watercourse Name | 24 hrs T-Sc E 4.15 | Project Field S Time | Staff KE Himpon | +UK 17725790 | Datum NAO 83 |
|---|----------------------------|----------------------------|----------------------------------|----------------------|------------------|
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements take | | Air Te | See Donductivity mperature (°C) | | |
| | (m) (m) | Mean Pool | water Depth_ | 30 (i | cm) cm) % Flat |
| Substrate (% cover)Bedrock Boulder | Cobble Gravel | 40 | _Sand | Silt_ Marl | Muck Detritus |
| | Undercut E Voody Debris | Banks Bould | Deep Pool er Other | Watercress | Aquatic Veg |
| Riparian Zone Riparian Cover (% of watercou | rse shaded, dom | inant vege | etation, mature Noun May | or early succession | onal) out, el |
| Fish Habitat Potential Critical Habitat (spawning or nu | ursery areas, gro | undwater (| upwellings) | | |
| Migratory Obstructions (season | nal, permanent) | | | | |
| Note any fish observations | | | | | |
| Waterbody Notes Natural Watercourse T Surficial Drainage (i.e. furrows) | rapezoidal Chan | nel Pond | _ Grassed S _ Dominated b | wale Boy Aquatic Veg | uried Tile |
| Other Habitat Notes, incident | tai Wiidlife Obse | ervations, | etc. | | |
| | | | | | |
| Field Notes Authored by | Field N | otes QA/QCe | d by TK | | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 30 -1

| Project () () () () () () () () () (| |
|--|--|
| Station # 20- | Project # 160960709 |
| | Field Staff KB + MF |
| Photos Taken 39 | 4 400 Date Nov. 25 2011 |
| GPS Coordinates I | 7 477 7610 415188 Time 9:35 |
| Descriptive Location | n Hubbard we 250 n east of uttoxeter |
| Vater Quality | |
| A second contract of the second contract of t | (mg/L) 13.11 pH 8/19 Conductivity (μS/cm) 776 |
| | (°C) S(5 Air Temperature (°C) 5 |
| | in previous 24 hrs <u>Gold</u> consulat a sunny |
| | ensions & Morphology |
| lean Watercourse | |
| lean Bankfull Widtl | |
| % Riffle | % Pool <u>(©</u> % Run% Flat |
| .Vidence of eroding | banks, Comments on bank stability + stelp mnles, minimal undercuts |
| | eam (% cover) turbid |
| Bedrock | SiltBoulder _SD Clay Cobble |
| Muck | Gravel Mari Sand 20 Detritus |
| ubstrate – Downs | stream (% cover) +word |
| Bedrock | |
| Muck | SiltBoulderOClayCobbleGravelMarlSandODetritus |
| MOOK | Sand _600 Detritus |
| n-water Cover | deep work , the |
| over Types Preser | nt (circle): Undercut Banks Deep Pool Vascular Plants RC5 |
| Overhanging | Vegetation Woody Debris Boulder Other |
| iparian Zone | |
| | of watercourse shaded, dominant vegetation, mature or early successional) |
| | 30% reporter trought should |
| Upstream | |
| Upstream | 40% riponan trees + shrubs |
| Upstream | 40% riponan trees + shrubs |
| Upstream Downstream | Ar I nonline |
| Upstream Downstream djacent Land Use | Ar I nortice |
| Upstream Downstream_ djacent Land Use Upstream Downstream ish Habitat Potent | tial |
| Upstream Downstream_ djacent Land Use Upstream Downstream_ ish Habitat Potent ritical Habitat (spay | As I pastire |
| Upstream Downstream_ djacent Land Use Upstream Downstream_ ish Habitat Potent ritical Habitat (spay | tial whing or nursery areas, groundwater upwellings) |
| Upstream Downstream_ djacent Land Use Upstream Downstream_ ritical Habitat (spay Upstream_ Downstream_ Downstream_ | tial whing or nursery areas, groundwater upwellings) |
| Upstream Downstream djacent Land Use Upstream Downstream ritical Habitat (spavupstream Upstream Downstream ligratory Obstructio | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) |
| Upstream Downstream djacent Land Use Upstream Downstream ish Habitat Potent ritical Habitat (spay Upstream Downstream_ ligratory Obstructio Upstream | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) nownant none |
| Upstream Downstream djacent Land Use | tial whing or nursery areas, groundwater upwellings) none permanent) permanent |
| Upstream Downstream djacent Land Use Upstream Downstream ish Habitat Potent ritical Habitat (spay Upstream Downstream_ ligratory Obstructio Upstream | tial whing or nursery areas, groundwater upwellings) none permanent) permanent |
| Downstream | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) permunent vations none stand basaged |
| Downstream | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) parmunent vations nurse s, Incidental Wildlife Observations, etc. AB J part Laborators Stungt bassacca The solutions The next L |
| Downstream | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) permanent vations name stand bassage |
| Upstream | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) parmunent vations nurse s, Incidental Wildlife Observations, etc. AB J part of shubs stungt busined stungt busined the next the n |
| Upstream | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) parmunant vations name s, Incidental Wildlife Observations, etc. Mandaning Mandaning |
| Downstream Jacent Land Use Upstream Downstream The Habitat Potent Stream Upstream Upstream Downstream Downstream Downstream The John Color | tial whing or nursery areas, groundwater upwellings) none ons (seasonal, permanent) parmunent vations name s, Incidental Wildlife Observations, etc. Meandann q |

Hickory on 201

| Project Name C.P. | | | Statio | n Number | 20-/ | ATT THOUSAN |
|--|--|-------------|----------------------------|--|---------------------------|-----------------------|
| roject Number 160960709 | | | | Pass No. (if applicable) / | | |
| | 1 566 = d/ | 5 | | yyyymmdd): | Service Manager A. | 6 06 |
| Descriptive Location On H | ubbard Line | ~ 250, | | | | |
| | | | | | | a works officers |
| JTM coordinates 473 | 2610 | easting | 415188 | } | -northing | zone <u>/ 7</u> |
| ishing Method (circle one): | Backpa | | Boat | Unit Model/Ma | Control of the second | 412 |
| Sampling Method (circle one): | even | habitat | tra | ansect one | spot | |
| iffort (Electrofishing Seconds): | 305 | Number of N | etters: / | · N | umber of Anode | s: / |
| lettings | | | | | | |
| requency (Hz) 60 | Voltage (volts) | 700 | Current (Amps) | P | ower (Watts) | / |
| tation information | | | | | | |
| ength of Stream Surveyed (m) | ~100 | | | | | |
| tation Characteristics: | Width (m): | Range 3.5 | 111 | Average: _ | 4.0 | |
| | Depth (m): | Range 0.2 | - 0.75 | Average: | 0.60 | |
| | | | | | | Time 0821 |
| later Clarity/Colour Cle | ow. | Wat | er Velocity if Ma | SECTION (UNC). | | |
| | 84. | _ Wat | er Velocity if Me Condu | THE PARTY OF THE P | 700 | THIRE Y |
| | 84 | _ Wat | Condu | ctivity (uS/cm) Oxygen (mg/L) | 700 | |
| Temperature (°C) pH 9.5 atch Data | 84 20 | | Condu | ctivity (uS/cm) | 700 | |
| Temperature (°C) pH 9.6 atch Data pecies | 84 | | Condu | ctivity (uS/cm) Oxygen (mg/L) | 700 | |
| Temperature (°C) pH 9.5 atch Data pecies | 84 20 | | Condu | ctivity (uS/cm) Oxygen (mg/L) | 700 | |
| Temperature (°C) pH 9.5 atch Data pecies (K chub | Number of | | Condu | ctivity (uS/cm) Oxygen (mg/L) | 700 8.62 Comments (| .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data pecies HSC (K chub mn Shn | 84 Ro Number of | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 | 700 | .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data pecies HSC (K chub mn Shn ock bass | Number of | | Condu | ctivity (uS/cm) Oxygen (mg/L) 31 41 41 | 700 8.62 Comments (| .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data pecies (K chub mn Shn ock bass ainb. N+ | 84 Ro Number of | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 | 700 8.62 Comments (| .e. age, (Recase, etc |
| Temperature (°C) pH 9.5 atch Data pecies (K chub mn Shn ock bass cinb. 0+ Kside dt. | 84 Ro Number of | | Condu | ctivity (uS/cm) Dxygen (mg/L) 3 31 HH (41) 3 11 | 700 8.62 Comments (| .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data sectes HSC (Kchub mn Shn ockhass cinb. N+ Ksilu dt. | 84 Ro Number of | | Condu | ctivity (uS/cm) Oxygen (mg/L) 31 41 11 0 | 700 8.62 Comments (| .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data pecies IHSC (K chub mn Shn ock bass ainh. N+ Ksia at. Juntose Min ohn D+ ohn D+ | 84 Ro Number of | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | 700 8.62 Comments (| .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data pecies PHSC (K chub mn Shn ock hass cinh. NH Ksia dh. | 84 Ro Number of | | Condu | ctivity (uS/cm) Oxygen (mg/L) 31 41 11 0 | 700 8.62 Comments (| .e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data pecies OKSC (Kchub mn Shn ockbass ainb. 0+ Ksia dt. Juntnose Mn ohn Ot | 84 Ro Number of | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | Comments (1 | e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data secles HSC (K chub mn Shn ock bass cinh. Nt Ksid att. untrose Min ohn Dt ainbow Trost | 84 20 Number of +++ ++++ ++++ ++++ ++++ ++++ +++++ | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | 700 8.62 Comments (| e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data secles HSC (K chub mn Shn ock bass cinh. Nt Ksid att. untrose Min ohn Dt ainbow Trost | 84 20 Number of +++ ++++ ++++ ++++ ++++ ++++ +++++ | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | Comments (1 | e. age, disease, etc |
| Temperature (°C) pH 9.5 atch Data secles HSC (K chub mn Shn ock bass cinh. Nt Ksid att. untrose Min ohn Dt ainbow Trost | 84 20 Number of +++ ++++ ++++ ++++ ++++ ++++ +++++ | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | Comments (1 | e. age, disease, etc |
| Temperature (°C) pH 9.6 atch Data pecies OKSC (Kchub mn Shn ock bass ainb. Ot Ksin dt. Juntnose Mn ohn Ot ainbow Trout | 84 20 Number of +++ ++++ ++++ ++++ ++++ ++++ +++++ | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | Comments (1 | e. aga, diseasa, etc |
| Temperature (°C) pH 9.5 stch Data pecies OKSC (Kchub mn Shn ock bass cinb. Ot Ksaudt. Juntnose Min ohn Ot ainbow Trout | 84 20 Number of +++ ++++ ++++ ++++ ++++ ++++ +++++ | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | Comments (1 | e. age, disease, etc |
| remperature (°C) pH 9.5 atch Data pecies OHSC (K chub mn Shn ock bass cinb. Ot Vontnose Mn ohn Ot ohn Ot | 84 20 Number of +++ ++++ ++++ ++++ ++++ ++++ +++++ | | Condu | ctivity (uS/cm) Dxygen (mg/L) 31 11 10 10 7 | Comments (1 | e. age, disease, etc |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 19-2 WB

| Project C.C | Project # 160960 709 |
|--|---|
| Station # 19 - 2- | Field Staff KE + MF |
| Photos Taken 367 - 371 | Date Nov. 24 2011 |
| GPS Coordinates 17 4772676 41 4230 | Time 4,25 pm |
| Descriptive Location Hubbard Line | 600 m west of |
| Water Quality | |
| Dissolved Oxygen (mg/L) 13 pH_ | \$ (25 Conductivity (µS/cm) 697 |
| Water Temperature (°C) \ Weather conditions in previous 24 hrs | Air Temperature (°C) 5° |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 40 (cm) |
| Mean Bankfull Width (m) | Mean Water Depth 40 (cm) |
| % Riffle% Pool Evidence of eroding banks, Comments on bank st | 100 % Run % Flat |
| sight underwit | ability <u>JUVIC OVSCOV</u> |
| Substrate - Upstream (% cover) | issured day based on banks |
| Bedrock 20 Silt | Boulder So Clay Cobble |
| Muck Gravei | Marl Sand Detritus |
| Substrate - Downstream (% cover) | a assumed day based on la |
| BedrockSilt | BoulderClay \(^LCobble\) |
| MuckGravel | SandDetritus |
| in-water Cover | |
| Cover Types Present (circle): Undercut Bar | ###################################### |
| Overhanging Vegetation Woody Debr | Boulder Other |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domina | ant vegetation, mature or early successional) |
| Downstream / Ash Successor p | ucodland |
| Adjacent Land Use | |
| Upstream An Aul | |
| Downstream // / / / / / / / / / / / / / / / / / | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, ground | dwater upwellings) |
| Upstream none | |
| Downstream // Paragraph Paragraph | |
| Migratory Obstructions (seasonal, permanent) Upstream | |
| Downstream Permount | |
| Note any fish observations | |
| | |
| Other Habitat Notes, Incidental Wildlife Observ | |
| mide, Shallow, moandering, n | 100 - tast Howing |
| | |
| Field Notes Authored by | s QA/QCed by Page of |
| Field Note | rage of |

| Project Name Su | ncor Energy- Ced | ar Point Wind Proj | ect S | Station Number | 19-2 | |
|--|--------------------------|---|--|--|-----------------|--|
| Project Number | 160960709 | that a | F | Pass No. (if applica | able) | |
| Photos | See bac | | | Date (yyyymmdd): | 2012 0 | 5 10 |
| Descriptive Location | On Hub | bord Lin | e ~ 600r | n west | of WHQ | xetered |
| UTM coordinates | 041424 | 8 east | ting <u>47</u> | 72683 | northing | zone <u>/</u> 7 |
| Fishing Method (circle on | | Backpack | Boat | Unit Mode | Make LR-10 | 2 |
| Sampling Method (circle | one): | even | habitat | transect | spot | |
| Effort (Electrofishing Sec | onds): 51 | O Nun | nber of Netters: | 1 | Number of Anode | es: <u>/</u> |
| Settings Frequency (Hz) <u>(a()</u> | Vot | tana (volte) 61 | A Current // | Amna) | Power (Watts) | |
| Station Information | | age (vois) <u>OU</u> | Current (A | | Power (watts) | |
| ength of Stream Survey | ed (m) | -80m | | | | |
| Station Characteristics: | Acceptable of the second | | ge 5.D - 6. | O Average: | 5.5 | |
| | Dep | | ge 0.4-0; | The Late I will be a provided by the property of the | 0,5 | |
| | | | | | | |
| Vater Clarity/Colour: | بيراامير | brown | Water Velocity | v if Measured (m/s | A A) /A | Time 19: |
| Vater Clarity/Colour: Temperature (°C) | | brown | | y if Measured (m/s Conductivity (uS/cn | n) 704 | Time <u>09 : 0</u> |
| Temperature (°C) | 11.86 8.48 | brown | C | y if Measured (m/s Conductivity (uS/cn Ived Oxygen (mg/l | | Time <u>09:30</u> |
| Temperature (°C) pH Catch Data | | | C | Conductivity (uS/cm | L) 9.1/5 | |
| Temperature (°C) pH catch Data | | Number of Fish | Dissol | Conductivity (uS/cm | L) 9.1/5 | |
| Temperature (°C) pH Catch Data Species | | Number of Fish | C | Conductivity (uS/cm | L) 9.1/5 | |
| Temperature (°C) pH satch Data pecies NMSC | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (i.e. age, disease, etc) |
| Temperature (°C) pH atch Data pecies which | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H males) | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH satch Data species whise | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH catch Data species which wh | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH atch Data species which which which which out bass blunt nose Min | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH Catch Data Species WHSC | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH Satch Data Species NHSC NHSC NHSC NHSC NHSC NHSC NHSC NHSC | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH Catch Data Species NHSC NHSC NHSC NHSC NHSC NHSC NHSC NHSC | | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH Catch Data Species WHSC WHSC WHSC WHSC WHSC WHSC WHSC WHSC | 8.48 | Number of Fish 12 (ado) 1+++++++++++++++++++++++++++++++++++ | Dissol H-HH-H-H++ | Conductivity (uS/cnived Oxygen (mg/L | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH Satch Data Species NHSC | 8.48 | Number of Fish 12 (ado' 13 +6++++ + 15 +6++++ + 14+++++++ 1 +++++++ 1 ++++++++ 1 | Dissol H-HH-H-H++ | Conductivity (uS/cn ived Oxygen (mg/l | Comments (| Le. age, disease, etc) CKSpot ack Spot |
| Temperature (°C) pH Catch Data Species NHSC NHSC NHSC NHSC NHSC NHSC NHSC NHSC | 8.48 - 8.48 | Number of Fish 12 (ado) 13+6++++ 1 15+6++++ 1 1++++++++ 1+++++++++ 1 11 (| Dissol H-HH-HH-H+++ H-HH H-HH-H++++ H-HH-H++++ H-HH-H+++++ H-H++++++++ | conductivity (uS/cmived Oxygen (mg/l | Comments (| Le. age, disease, etc) CKSpot ack Spot |
| Temperature (°C) pH Catch Data Species WHSC | 8.48 | Number of Fish 12 (ado' 13 +6++++ + 15 +6++++ + 14+++++++ 1 +++++++ 1 ++++++++ 1 | Dissol H-HH-HH-H+++ H-HH H-HH-H++++ H-HH-H++++ H-HH-H+++++ H-H++++++++ | Conductivity (uS/cn ived Oxygen (mg/l | Comments (| (Le. age, disease, etc) |
| Temperature (°C) pH atch Data pecies NHSC NH | 8.48 - 8.48 | Number of Fish 12 (ado) 13+6++++ 1 15+6++++ 1 1++++++++ 1+++++++++ 1 11 (| Dissol H-HH-HH-H+++ H-HH H-HH-H++++ H-HH-H++++ H-HH-H+++++ H-H++++++++ | conductivity (uS/cmived Oxygen (mg/l | Comments (| ckspot ack spot |



Field Notes Authored by #9

WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Stantec | prices y wear |
|--|--|
| Station # 7-5 Watercourse Name | Project Name C.P. Project # |
| GPS Coordinates (Zone) 17T E 413121 Descriptive Location Property Road | d 100y/s of MOSSING of thekoy Creek |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken | Conductivity (μS/cm) |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m) ——————————————————————————————————— | ability |
| Substrate (% cover) Bedrock Gravel Boulder Gravel In-water Cover Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debris | |
| Riparian Zone Riparian Cover (% of watercourse shaded, domina Adjacent Land Use | ant vegetation, mature or early successional) |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground | dwater upwellings) |
| Migratory Obstructions (seasonal, permanent) | |
| Me | HOTEL HOUSE HELE AND HELE HOUSE HELE HOUSE HELE HOUSE HOUSE HOUSE HOUSE HOUSE HE HOUSE HE HOUSE HE HOUSE HOUSE |
| Waterbody Notes Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Por | I Grassed Swale Buried Tile nd Dominated by Aquatic Veg Dry |
| Other Habitat Notes, incidental Wildlife Observ | |
| | |

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Field Notes QA/QCed by



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT WB

| Stantos | | | |
|---------|--|--|--|

| Photos Taken 3 GPS Coordinates | 172-376 14713338 4130 | Field Staff _Ł | 20960709 E+MF 242011 |
|---|--|---------------------------|-------------------------------|
| Descriptive Location | 1 Elmsley | Rd., 750 c | south of |
| Water Quality | 1110 | ~ >- | 100 |
| Dissolved Oxygen (| mg/L) 14,05 | pH <u> 8・ ~う</u> Cond | uctivity (μS/cm) 683 |
| Wasther conditions | | | re (°C) |
| vveatrier conditions | in previous 24 hrs _ Ca | old, sunny, | ouer cast |
| | nsions & Morphology | | |
| Mean Watercourse | Will be a second of the second | Maximum Poo | |
| Mean Bankfull Widtl | Company of the compan | Mean Water D | |
| 30 % Riffle | % Poo banks, Comments on b | | |
| | banks, Comments on L | ark stability <u>Cros</u> | TOVI + SONE WE |
| Substrate - Unstre | am (% cover) turb | id, | |
| Bedrock | LO Silt | Mo Boulder | 40 Clay 20 Cobble |
| Muck | Gravel | Marl | SandDetritu |
| Substrate – Downs | stream (% cover) | oid. | |
| Bedrock | Silt | 30 Boulder | 60 Clay 10 Cobble |
| Muck | Gravel | Marl | SandDetritu |
| In-water Cover | | | |
| Cover Types Preser | nt (circle): Under | cut Banks Deep F | Pool Vascular Plants |
| Overbanging | | Debris Boulde | |
| Riparian Zone | | | |
| Niparian Lone | f watercourse shaded | tominant vegetation in | nature or early successional) |
| | 6.0010 | Johnnant Vegetation, II | lature or earry successionar) |
| Riparian Cover (% o | 1019 10 | | |
| Riparian Cover (% o Upstream | 4000 | | |
| Riparian Cover (% o Upstream Downstream | | | |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use Upstream | 40°10 | dist | |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use | 40°10 | diot | |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use Upstream Downstream | 40°10 | diot | |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use Upstream Downstream | 40°10 | groundwater upwelling | (S) |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use Upstream Downstream | 40°10 A9 + w000 | groundwater upwelling | en limiting ? |
| Riparian Cover (% o Upstream | tial whing or nursery areas. | iffle compl | ex limiting? |
| Riparian Cover (% o Upstream | tial whing or nursery areas, | iffle compl | ex limiting? |
| Riparian Cover (% o Upstream | tial whing or nursery areas, NOTE ins (seasonal, permane) | iffle compl | ex limiting? |
| Riparian Cover (% o | tial whing or nursery areas, Nore ins (seasonal, permane) | iffle compl | ex limiting? |
| Riparian Cover (% o | tial whing or nursery areas, Nore ins (seasonal, permane) | iffle compl | es limiting? |
| Riparian Cover (% o Upstream | tial whing or nursery areas. Norce ins (seasonal, permaner yations | iffe compl | en limiting? |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use Upstream Downstream Critical Habitat (spay Upstream Downstream Migratory Obstructio Upstream Downstream Note any fish observement of the Habitat Notes | tial whing or nursery areas, ons (seasonal, permaner vations | observations, etc. | ex limiting? |
| Riparian Cover (% o Upstream Downstream Adjacent Land Use Upstream Downstream Critical Habitat Potent Critical Habitat (spay Upstream Downstream Downstream Downstream Downstream Note any fish observed of the Habitat Notes Source | tial whing or nursery areas, ons (seasonal, permaner vations | iffe compl | tee anded back to |
| Riparian Cover (% o | tial whing or nursery areas. Nore ins (seasonal, permaner vations | bservations, etc. | tep, enough bank to |
| Riparian Cover (% or Upstream Downstream Downstream_ D | tial whing or nursery areas, ons (seasonal, permaner vations | bservations, etc. | tep limiting? |

Hickory Cr. 17-1

(Station Diagram on Back)

Page / of Stantec Consulting Ltd - Electrofishing Record and Catch Results CP **Project Name** Station Number 160960709 **Project Number** Pass No. (if applicable) 465:id 466:015 977=015, 468=5016 **Photos** Date (yyyymmdd): 2012 Elmsley + Townsend north Descriptive Location Hubbard line 773338 easting **UTM** coordinates 413029 zone Unit Model/Make Fishing Method (circle one): Backpack **Boat** Sampling Method (circle one): even habitat transect ion . . spot **Number of Netters:** Effort (Electrofishing Seconds): **Number of Anodes: Settings** Voltage (volts): 700 **Current (Amps)** Power (Watts) Frequency (Hz) 60 Station Information ~ 40.0 Length of Stream Surveyed (m) Station Characteristics: Width (m): Range 9.0-10.0 9.5 Average: Range 0.15. 0.75 Depth (m): Average: 0.40 nellow Water Clarity/Colour: Water Velocity if Measured (m/s): A/A Time 13:40 Temperature (°C) Conductivity (uS/cm) 680 11.93 Dissolved Oxygen (mg/L) **Catch Data** Number of Fish **Species** Comments (i.e. age, disease, etc): Brown Trout Cmn. Shn 2 WHSL. 3 ock logss 4 Blumlasse Mr photos: 469 Fish Measurements on Separate Sheet? Y(N) Field Staff: NB WK Notes By: MY



| 4 | | | | | 11B |
|---|------------------|------------------|--|-----------------|----------------|
| WIND FARM W | ATERBOD | | Control of the contro | | 9-11 |
| Stantec | | N | 1ckinley | Sour | 117 |
| Station # 19 4 | | Draiget No. | mez 609601 | na | |
| Watercourse Name Mckhley | train | Project Na | Cod Point | | |
| Watercourse Name Mchley Photos 1123125 | | Field Staff | NBKE | | |
| Date 1843/12 | | Time <u>13:4</u> | 9 | | |
| Weather conditions in previous 24 h GPS Coordinates (Zone) \ | E 04/31/3 | 8 | N 477170 | C Date | IMNAU 83. |
| Descriptive Location and of Florish | , Southof on | ner of Elms | leyt thobasd | | |
| Water Quality | | | | | |
| Dissolved Oxygen (mg/L) 10.11 | _ pH <u>_'</u>) | | onductivity (μS/e | cm) <u>390</u> | |
| Water Temperature (°C) 109 | 200 | Air Temper | rature (°C) <u>↓</u> | | |
| Time in situ measurements taken \(\frac{1}{2} \) | 142 | | | | |
| Watercourse Dimensions & Morp | | | | | |
| | _(m) | Maximum I | Pool Depth 15 er Depth 7 | (cm (cm | |
| Mean Bankfull Width 6.0 Riffle | _(m) % Po | ol Handhallat | % R | | % Fla |
| Evidence of eroding banks, Comme | | | | | |
| Substrate (% cover) | | | | | |
| Bedrock | _Cobble | | nd 498 | Silt | Muck |
| Boulder | _Gravel | 25 Cla | y | Marl 5() | Detritus |
| In-water Cover | | | | | |
| Cover Types Present (circle): Overhanging Vegetation Wood | | | | ercress A | quatic Veg |
| Riparian Zone | | | | /0 | |
| Riparian Cover (% of watercourse s | haded, domina | ant vegetation | n, mature or ea | rly successiona | ıl) |
| a oben rod roed Convaras | 10.1 shaded | , buckt Koco | yra Spherry | | |
| Adjacent Land Use | | | | | |
| Ma / ICA HOC | | | | | |
| Fish Habitat Potential | | | | | |
| Critical Habitat (spawning or nursery | y areas, groun | dwater upwe | llings) | | |
| Migratory Obstructions (seasonal, p | ermanent) | | | | |
| Note any fish observations Nove- | | | | | |
| | | | | | |
| Waterbody Notes | | . / | | | |
| Natural Watercourse Trape: Surficial Drainage (i.e. furrows) | zoidal Channe | 1 V C | Grassed Swale_ | | od Tile Dry |
| Guillelai Diaillage (i.e. lullows) | Dagoat For | DC | miliated by Aqt | | <u> </u> |
| Other Habitat Notes, Incidental W | ildlife Observ | ations, etc. | | | |
| | | | | | |
| | | | | | |
| - 5 | | | | | |
| Field Notes Authors by N. R. Coff | Field Note | e OA/OCed by | | | |

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WIND FARM WATERBODY RAPID ASSESSMENT FORM WB

| Stantec |
|---|
| Station # 50-2 Project Name C |
| Watercourse Name Mckinley Draw Project # 160960 709 |
| Photos . Field Staff C + J > |
| Date July 3 2012 Time lown |
| Weather conditions in previous 24 hrs T 510 mm |
| GPS Coordinates (Zone) 7 E 414796 N 4770714Datum MAD |
| Descriptive Location uttorety north of sourlas |
| |
| Water Quality |
| Dissolved Oxygen (mg/L) VO 11 pH 8.38 Conductivity (μS/cm) 778 |
| Water Temperature (°C) 19 33 Air Temperature (°C) 28 |
| Time in situ measurements taken (b p m |
| |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) Maximum Pool Depth 2 (cm) |
| Mean Bankfull Width (m) Mean Water Depth (cm) |
| % Riffle% Pool% Run% F |
| Evidence of eroding banks, Comments on bank stability |
| ves + stable |
| |
| Substrate (% cover) |
| Bedrock Cobble 49 Sand Silt Muck |
| Boulder Gravel 60 Clay Marl Detritu |
| Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| Migratory Obstructions (seasonal, permanent) |
| Note any fish observations |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry |
| Other Habitat Notes, Incidental Wildlife Observations, etc. — CATTA DASIN F PA O LONF |
| Field Notes Authored by Field Notes QA/QCed by |

Fishing Record and Catch Results (passive collection methods) Page **Station Number Project Number Project Name:** Lift / Haul / Pass No. Waterbody Name: Date (yyyymmdd): Field Staff: Fishing Method (check one) and Gear Specs: Gillnet No. of Panels: Mesh Sizes: Trap Net **Hoop Net** Minnow Trap Descriptive Location of Station 850 m North of Douglas Line, Quitable Rd.

UTM Coordinates: Zone 7 Easting 41476 Northing 4770714 SET: Date: July 3 LIFT: Date July 4/12 Total Netting Hours (approx.) 21,5 hs.

Time: 10:01 pm Time: 3:50 pm Max: 25 cm Min: Swaon Depth (m): Supporting Measurements (recorded at time of net set) Time Copm Cond. (µS/cm) D.O. (mg/L) Temp. (°C) Additional Catch Data on Separate Sheet?: Y/10 Detailed Fish Measurements on Separate Sheet? YAN **Catch Data** Mesh Size **Species** Number Comments (i.e. age, disease, etc.) 42+



19-1 WB

| | RAPID ASSESS | MENT FORM FOR AQUATIC HABITA |
|-----------------|--------------|------------------------------|
| Stantec Project | c.P | Project # 16096078 |

| | Water Quality Dissolved Oxygen (mg/L) \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
|---|--|
| | Dissolved Oxygen (mg/L) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
| | Weather conditions in previous 24 hrs cold sunny overcast |
| | Watercourse Dimensions & Morphology |
| | Mean Watercourse Width (m) Maximum Pool Depth 50 (cm) |
| | Mean Bankfull Width (m) Mean Water Depth 30 (cm) |
| | % Riffle% Pool% Flat |
| | Evidence of eroding banks, Comments on bank stability stable fines |
| | |
| 1 | Substrate - Upstream (% cover) clard, clay bottom |
| | Bedrock 20 SiltBoulder 20 ClayCobb |
| | MuckGravelMarlSandDetrit |
| 1 | Substrate - Downstream (% cover) turbed assured day |
| | Bedrock |
| | MuckGravelMarlSandDetrit |
| | In-water Cover |
| | Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants |
| | Overhanging vegetation Woody Debris Boulder Other |
| | |
| | Riparian Zone |
| | |
| | Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) |
| | Upstream Or open |
| | Upstream 00 cores + Shalo |
| | Upstream Or open Downstream 30 % + Les + Show Adjacent Land Use |
| | Upstream 0 to open Downstream 30 % + xes + 5hnlo Adjacent Land Use Upstream As field |
| | Upstream 0 to exclusion 20° to +xes + 5hnlo Adjacent Land Use Upstream As field Downstream words of |
| | Upstream Or open Downstream 20° of the show Adjacent Land Use Upstream As held Downstream woods of |
| | Upstream Or open Downstream 20° la + Les + Sholo Adjacent Land Use Upstream As held Downstream Lood of Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| | Upstream 20 % + Les + Show Adjacent Land Use Upstream As held Downstream wood of Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream now |
| | Upstream 20 % + Les + Sholo Adjacent Land Use Upstream As held Downstream woods of Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream |
| | Upstream 20 % + Les + Show Adjacent Land Use Upstream As Reld Downstream Wood of Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream Downstream (seasonal, permanent) |
| | Upstream 20° la + Les + Sholo Adjacent Land Use Upstream As Reld Downstream Lood Lot Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream Migratory Obstructions (seasonal, permanent) Upstream As Reld Downstream Seasonal, permanent) Upstream As Reld Downstream Seasonal, permanent) |
| | Upstream 20 % + Les + Show Adjacent Land Use Upstream 45 Reld Downstream 45 Reld Downstream 45 Reld Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream 50 Common 10 Comm |
| | Upstream 20° la + Les + Sholo Adjacent Land Use Upstream As Reld Downstream Lood Lot Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream Migratory Obstructions (seasonal, permanent) Upstream As Reld Downstream Seasonal, permanent) Upstream As Reld Downstream Seasonal, permanent) |
| | Upstream 20 % + Les + Show Adjacent Land Use Upstream 45 Reld Downstream 45 Reld Downstream 45 Reld Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream 50 Common 10 Comm |
| | Upstream 30 % + Les + Sholo Adjacent Land Use Upstream 45 held Downstream 45 held Downstream 45 held Critical Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream 50 held Downstream 10 held Downst |

meknley Bosch 197

(Station Diagram on Back)

| Project Name Suncor Ene | rgy- Cedar Point Wind Project | Station Number | 19-1 |
|--|--|--|---------------------------------------|
| Project Number 16 | 0960709 | Pass No. (if applicable) | |
| Photos Sec | back | Date (yyyymmdd): _a | 20.12 05/0 |
| Descriptive Location O | Hubbard ~ 70 m | | |
| | | | |
| UTM coordinates 47 | 72674 easting L | 112932 | northing zone 17 |
| Fishing Method (circle one): | Backpack Boa | t Unit Model/Ma | ke LR-12 |
| Sampling Method (circle one): | even habitat | transect | spot |
| Effort (Electrofishing Seconds): | 300 Number of Netter | rs:/ N | lumber of Anodes:/ |
| Frequency (Hz) 60 | Voltage (volts) 650 Cur | rent (Amps) P | ower (Watte) |
| Station Information | conge (reins) <u>90°</u> Cull | one (ranpo) | Onei (Malis) |
| Length of Stream Surveyed (m) | ~ 60 m | | |
| Station Characteristics: | A CHILD AND REAL PROPERTY AND ADDRESS OF THE PARTY OF THE | . 2 Average: | 1.1 |
| | | | |
| Temperature (°C) / 8 | Depth (m): Range 0.10 Car \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | 0.15 |
| Temperature (°C) | Depth (m): Range 0.10 Car \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | elocity if Measured (m/s): Conductivity (uS/cm) | 0.15 N/A Time 09:30 565 |
| Temperature (°C) pH S Catch Data | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V 1.65 Number of Fish | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.15 N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V 1.65 Number of Fish | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 0.15 N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V 1.65 Number of Fish | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |
| Temperature (°C) pH 8 Catch Data Species Crk chub Cmn Shn. Rainb. D+. | Depth (m): Range 0.10 Water V 1.65 Number of Fish | elocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09:30 565 9.8a |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

Project Station # Field Staff Photos Taken 401 - 40 Date Nw. GPS Coordinates 17 477 2592 Time Descriptive Location Hybbard Part **Water Quality** Dissolved Oxygen (mg/L) 12.0 7.99 Conductivity (µS/cm) 707 Water Temperature (°C) Air Temperature (°C) Weather conditions in previous 24 hrs SUMMUY OMORGAD **Watercourse Dimensions & Morphology** Mean Watercourse Width 1.5 (m) Maximum Pool Depth Mean Bankfull Width_ (m) Mean Water Depth // Riffle 20 % Pool % Run. Evidence of eroding banks, Comments on bank stability Provon Substrate - Upstream (% cover) 20 Silt Bedrock Boulder Clav Cobble Muck 10 Gravel Mari Sand **Detritus** Substrate - Downstream (% cover) culvert to adjacent Bedrock Boulder Clay Cobble Muck Gravel Mari **Detritus In-water Cover** Cover Types Present (circle): **Undercut Banks** Vascular Plantsa (900 Deep Pool Overhanging Vegetation **Woody Debris** Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 0% open Downstream Adjacent Land Use Upstream Downstream **Fish Habitat Potential** Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream **Downstream** Migratory Obstructions (seasonal, permanent) Upstream Downstream Other Habitat Notes, Incidental Wildlife Observations, etc. old channel blocked off · ul com Field Notes Authored by Field Notes QA/QCed by_

Fisher 20-2 brain Page of

| Protos Descriptive Location Description Descriptive Location Description Descriptive Location | |
|--|--|
| Photos Date (yyyymmdd): 2012 06 Descriptive Location Descriptiv | |
| Descriptive Location Comments Comments | THE PARTY OF THE P |
| Fishing Method (circle one): Backpack Boat Unit Model/Make even habitat transect Spot Effort (Electrofishing Seconds): Number of Netters: Number of Anodes: Settings Frequency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Average: Vater Clarity/Colour: Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Species Number of Fish Comments (La. | a |
| Fishing Method (circle one): Sampling Method (circle one): Seven habitat transect spot Effort (Electrofishing Seconds): Number of Netters: Number of Anodes: Settings Frequency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (i.e. | atomi de des |
| Sampling Method (circle one): even habitat transect spot Effort (Electrofishing Seconds): Number of Netters: Number of Anodes: Settings Frequency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Conductivity (us/cm) Dissolved Oxygen (mg/L) Catch Data Number of Fish Comments (Le. | zone 17 |
| Sampling Method (circle one): even habitat transect spot Fiort (Electrofishing Seconds): Number of Netters: Number of Anodes: Settings Frequency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Vater Clarity/Colour: Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (Le. | |
| Settings Frequency (Hz) | |
| Settings Frequency (Hz) | |
| Frequency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information | |
| Station Information Length of Stream Surveyed (m) Station Characteristics: Depth (m): Range Average: | |
| Length of Stream Surveyed (m) Station Characteristics: Depth (m): Range Average: Average: Water Clarity/Colour: Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (Le. | |
| Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: Water Velocity if Measured (m/s): Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (i.e. | |
| Depth (m): Range Average: Water Clarity/Colour: Water Velocity if Measured (m/s): Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (Le. | |
| Water Clarity/Colour: Temperature (°C) Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (Le. | |
| Temperature (°C) Conductivity (uS/cm) Dissolved Oxygen (mg/L) Catch Data Number of Fish Comments (i.e. | |
| Catch Data Species Number of Fish Comments (Le. | Time |
| Catch Data Species Number of Fish Comments (i.e. | |
| Species Number of Fish Comments (Le. | |
| | ego, disease, etc |
| No fishing. No acress Off Row. | |
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| ish Measurements on Separate Sheet? Y(N) | No. of the last of |



WIND FARM WATERBODY RAPID ASSESSMENT FORM 1000

| Stantec | | | | U | |
|---|-----------------|---------------|----------------|-----------|----------|
| Station # 49 - 4 | Projec | t Name | P. | | |
| Watercourse Name Filter AND MI | Projec | 1 # 10090 | 20709 | | |
| Photos 810-813 | Field S | Staff KE - | + SIC | | |
| Date 0(+,) 2012 | Time | 3:20 | | a - 8034 | |
| Weather conditions in previous 24 hrs | arm a | | | | |
| GPS Coordinates (Zone) 17 T E 414 | 0126 | N 4 | 4771204 | Datum | olia di |
| Descriptive Location DEC Brush & | ld | | | | |
| Water Quality | | dry | | | |
| | H / | Conductivit | y (μS/cm) | | |
| Water Temperature (°C) | Air Te | mperature (°C | (*) | | |
| Time in situ measurements taken | | | | iariya ka | |
| | | | | | |
| Watercourse Dimensions & Morphology | | | | | |
| Mean Watercourse Width(m) | Maxim | | th | | |
| Mean Bankfull Width (m) | Mean | Water Depth_ | 0/ 0 | | 0/ Fi-4 |
| % Riffle Evidence of eroding banks, Comments on ba | % P00l | Chalada | % Run | | % Flat |
| Evidence of eroding banks, Comments on ba | nk stability | stable | 4 46 | | |
| Substrate (% cover) | | | | | |
| Bedrock Cobble_ | 50 | _Sand | Silt | | Muck |
| Boulder Gravei | 50 | Clay | Marl | | Detritus |
| Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, do | | | | ssional) | |
| Adjacent Land Use | | | | | |
| Agadem Land Osc | | | | | |
| Fish Habitat Potential | | | | | |
| Critical Habitat (spawning or nursery areas, g | | ipwellings) | | | |
| Migratory Otistructions (seasonal, permanent |) | | | | |
| Note any fish observations | | | | | 8.1 |
| Waterbody Notes | / | | | | |
| Natural Watercourse Trapezoidal Ch | annel | | Swale | | |
| Surficial Drainage (i.e. furrows) Dugou | it Pond | Dominated | by Aquatic Veg | | Dry V |
| Other Habitat Notes, incidental Wildlife Ob | servations, | etc. | 5 15010 | / ~~ | |
| solidano, grans, neled |). | 1 0010 | 1 1010 4010 | 1810 | 7-, |
| | | | | | |
| Field Notes Authored by K Field | d Notes QA/QCed | i by | | | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM 19-3

| Station # 19 - 3 | | Proie | ct Name | CV | 2 | | |
|--|---------------------|---------------------|-----------|---|---------------|------------|-----------|
| Watercourse Name | | Proie | ct # | 19960 | 709 | | |
| Photos 862 - 865 | | Field | Staff K | E4. | | | |
| Date 001-4 2012 | | | | | | | |
| Weather conditions in previous | 24 hrs Nov | | | | | | |
| GPS Coordinates (Zone)7_1 | E 413 | 059 | | N 4776 | (07) | Datum | |
| Descriptive Location Huhba | and just | east | of - | Minstr | eu. | | |
| Dogonpavo Location A DA VATA | 1 / 1 " | | | | | | |
| Water Quality | | | d | M | | | |
| Dissolved Oxygen (mg/L) | \ oF | | Condi | uctivity (uS | /cm) | | |
| Water Temperature (°C) | | | | | | | |
| Time in situ measurements take | | | omporata | | Lincoln Links | Part Carry | |
| | | | | | | | |
| Watercourse Dimensions & M | orphology | Mayi | mum Boo | I Dooth | | (cm) | |
| Mean Watercourse Width | (m) | Mac | Motor D | ooth | | (cm) | |
| Mean Bankfull Width 3 | (m) | | | THE SHAPE AND A PERSON OF THE | Run | _(CIII) | % Flat |
| % Riffle Evidence of eroding banks, Cor | mmente on han | rooi k etahility | | % | nuii | | /0 I IQL |
| Evidence of eroding banks, Cor | IIIIGIIIS OII Daiii | K Stability | | | | | |
| Substrate (% cover) | | 20 | | | | | |
| Bedrock | Cobble | 30 | | 30 | Silt | SHOULD V | _Muck |
| Boulder | Gravel | 40 | Clay | | Marl | | _Detritus |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercour | oody Debris | Boul | der | Other | | sional) | |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu | rsery areas, gr | oundwater | upwelling | js) | | | |
| Migratory Obstructions (season | al, permanent) | | | | | | |
| Note any fish observations | | | | | | | |
| TO FE | | | | | | | |
| Waterbody Notes | | . 1/ | - | | | Dundad : | PU . |
| Natural Watercourse To | rapezoidal Chai | unel —— | _ Gras | sed Swale | 3 | Delina | De: |
| Surficial Drainage (i.e. furrows) | Dugout | Pond | _ Domir | nated by A | quatic Veg_ | <u></u> | Ury |
| Other Habitat Notes, Incident | Hubbard | ervations F EIN | nsley | a clo | uvo al | ong | |
| Field Notes Authored by | Field | Notes QA/QC | ed by | | | | |

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| |
| Stantec |

| WIND FARM WATERBOD | Y RAPID ASSESS | MENT FORM | 19-5 N |
|--|---------------------------------|------------------------|----------------------|
| WIND FARM WATERBOD | | S | adler - |
| Station # 19-5 Watercourse Name <u>Sadler Drain</u> Photos | Project Name | 0-109 | |
| Date NC 3 2012 Weather conditions in previous 24 hrs GPS Coordinates (Zone) 17 T E 4130 Descriptive Location F Ms Py RO + U | TimeN 4 ubbard line | 172635 | Datum |
| Water Quality Dissolved Oxygen (mg/L) pH Water Temperature (°C) Time in situ measurements taken | | | |
| Watercourse Dimensions & Morphology Mean Watercourse Width(m) Mean Bankfull Width(m)% Riffle% Pool Evidence of eroding banks, Comments on bank sta | | | cm) cm) % Flat |
| Substrate (% cover) | | | |
| Bedrock Cobble Boulder Gravel | Sand Clay | Silt Marl | Muck Detritus |
| In-water Cover Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debris | | Watercress | Aquatic Veg |
| Riparian Zone Riparian Cover (% of watercourse shaded, domina | ant vegetation, mature | or early successi | onal) |
| Adjacent Land Use | | | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground | dwater upwellings) | | |
| Migratory Obstructions (seasonal, permanent) | | | |
| Note any fish observations | | | # W_ |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pon | Grassed Swale id Dominated b | _ Buried Tile <u>✓</u> | Seep |
| Other Habitat Notes, Incidental Wildlife Observ | ations, etc | | |
| | | | |
| Field Notes Authored by Field Notes | o OA/OCod by | | 2 |



WIND FARM WATERBODY RAPID ASSESSMENT FORM NWB

| P 4 | |
|------------|-------|
| V | MIEC. |
| | HUG. |

| Station # 19 6 Project Name |
|---|
| Watercourse Name Unknown Down 3 Project # (60960) 109 |
| Dhatas |
| Date Sec 3 2017 Time |
| Weather conditions in previous 24 hrs GPS Coordinates (Zone) 17 T E 414245 N 4772632 Datum Descriptive Location Lubrara Use, Cast of Elmsley en South |
| GPS Coordinates (Zone) 17 T E 414245 N 4772632 Datum |
| Descriptive Location Mulbrard use east of Elingten en south |
| stal |
| Water Quality |
| Water Quality Discolard Overson (mg//) |
| Dissolved Oxygen (mg/L) pH Conductivity (μS/cm) |
| Water Temperature (°C) Air Temperature (°C) |
| Time in situ measurements taken |
| Watercourse Dimensions & Morphology |
| Mean Watercourse Width(m) Maximum Pool Depth(em) |
| Mean Bankfull Width (m) Mean Water Depth (cm) |
| % Riffle% Pool% Run% Flat |
| Evidence of eroding banks, Comments on bank stability |
| |
| |
| Substrate (% cover) |
| BedrockCobbleSandSiltMuck |
| BoulderBravelClayDetritus |
| In-water Cover |
| Cover Types Present (circle): Undercot Banks Deep Pool Watercress Aquatic Veg |
| Overhanging Vegetation Woody Debris Boulder Other |
| Dodider Offici |
| Riparian Zone |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) |
| |
| Adjacent Land Use |
| |
| |
| Fish Habitat Potential |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| |
| Migratory Obstructions (seasonal, permanent) |
| |
| Note any fish observations |
| |
| Waterbody Notes |
| Natural Watercourse Transzoidal Channel Grassed Swale Buried Tile Seen |
| |
| Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Seep Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry |
| |
| Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc |
| |
| |
| Other Habitat Notes, Incidental Wildlife Observations, etc. |
| |
| Other Habitat Notes, Incidental Wildlife Observations, etc. |



Unknown Drainy 17-6 SESSMENT FORM NOVB

| 10 | WIND FARM WATERBODY RAPID ASSESSMENT FO |
|---------|---|
| Stantec | |

| Station # 17-4 | Project Name | |
|--|---|---------------------------|
| Watercourse Name Unknown Avour 4 | Project #\((0.09(0.0))0° | 7 |
| Photos Date 3 3013 | Field Staff VE 4 N3 | |
| | Time | |
| Weather conditions in previous 24 hrs | 2 1/2726 | -2 /- Det |
| GPS Coordinates (Zone) 17 T E 41414 Descriptive Location Townsking Une | 00 at a C Elastic | Datum |
| Descriptive Location - Thungs No Che | table of emile | y rea. |
| | | |
| Water Quality | | |
| Dissolved Oxygen (mg/L) pH | | |
| Water Temperature (°C) | Air Temperature (°C) | |
| Time in situ measurements taken | | |
| Watercourse Dimensions & Morphology | | |
| Mean Watercourse Width (m) | Maximum Pool Depth | (cm) |
| Mean Bankfull Width(m) | Mean Water Depth | (cm) |
| % RMfle% Poo | ol% Rur | n% Flat |
| Evidence of eroding banks, Comments on bank sta | ability | |
| | | |
| Substrate (% cover) | | |
| | Sand | Silt Muck |
| Boulder Gravel | Clay | Marl Detritus |
| In-water Cover | | |
| Cover Types Present (circle): Undercut Ban | iks Deep Pool Water | cress Aquatic Veg |
| Overhanging Vegetation Woody Debris | Boulder Other | |
| Riparian Zone | | |
| Riparian Cover (% of watercourse shaded, domina | nt vegetation, mature or early | successional) |
| | | |
| Adjacent Land Use | | |
| | | |
| Fish Habitat Potential | | |
| Critical Habitat (spawring or nursery areas, ground | lwater upwellings) | |
| | | |
| Migratory Obstructions (seasonal, permanent) | | |
| | | |
| Note any fish observations | | |
| | | |
| Waterback, Notes | | |
| waterbody notes | | |
| Natural Watercourse Trapezoidal Channel | Grassed Swale Buried | d Tile Seep |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pon | Grassed Swale Buried d Dominated by Aquat | d Tile Seep ic Veg Dry |
| | | |
| Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pon Other Habitat Notes, Incidental Wildlife Observa | | |
| | | |
| | | |
| | | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

BITAT 16-5

Stantoc

| Project Station # Photos Taken | Project # 160960709 Field Staff Ke me Date Nov-29 2011 Time 18:03 pm |
|--|--|
| Water Quality Dissolved Oxygen (mg/L) <u>ル・93</u> pH Water Temperature (°C) <u> </u> | Air Temperature (°C) |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m) % Riffle % Pool Evidence of eroding banks, Comments on bank | Maximum Pool Depth (cm) Mean Water Depth (cm) 100% Run stability |
| Substrate – Upstream (% cover) BedrockSiltMuckGravel | Boulder 20 Clay Cobble Marl Sand 80 Detritus |
| Substrate - Downstream (% cover) Bedrock Silt Muck Gravel | Boulder 20 Clay Cobble Marl Sand 50 Detritus |
| Cover Types Present (circle): Undercut E Overhanging Vegetation Woody De Riparian Zone Riparian Cover (% of watercourse shaded, domi Upstream Downstream Upstream Upstream Downstream Downstream Downstream | bris Boulder Other |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground Upstream Downstream Down | undwater upwellings) |
| Downstream | NE - |
| Other Habitat Notes, Incidental Wildlife Obse - Only flowing block rain - neet denifican et wis field Notes Authored by Field Notes - March 1 1800 de to be addition | ervations, etc. |

Anderson 16-5 brain
Page 1 of /

(Station Diagram on Back)

| | uncor Energy- Cedar Point Wind Project | | nd Project | | Station Number | .16 | ,-5 | | |
|------------------------------|--|--|------------------|---------------|--------------------|----------|----------------|--------------|------------|
| Project Number | 160960709 | | Pass No. (if app | licable) | | errici | | | |
| Photos | | | | Date (yyyymmd | d): 201 | 205 | 10 | | |
| Descriptive Location | Townser | nd Lina | + 4 | Hox | | | | | |
| UTM coordinates | 47127 | 03 | -easting | 41 | 4891 | | offing asim | zone | 17 |
| Fishing Method (circle one) |): | Back | pack | Boat | Unit Mo | del/Make | | | |
| Sampling Method (circle or | | even | habitat | | transect | sp | ot | | |
| Effort (Electrofishing Secor | nds): | | Number of | Netters: | | Numbe | er of Anodes | | |
| Settings | | | | | | | | | |
| Frequency (Hz) | Vo | ltage (volts) | - | Curren | t (Amps) | - Power | (Watts) | | |
| Station Information | | | | | | | | | |
| Length of Stream Surveyed | All Shirts State (10) | | | A. | | | | | |
| Station Characteristics: | | epth (m): | Range | | Average Average | | _/ | | |
| | | THE RESERVE THE PARTY OF THE PA | | | solved Oxygen (m | yL) | | | |
| Catch Data Species | | Number o | f Fish | | Solito Cxygell (II | | mments (L | e. age, dise | ase, etc): |
| | | Number o | f Fish | | Contraction (in | | mments (L | age, dise | ase, etc): |
| Species | not Fis | | | | O.J. Gen (| | mments (L | a. age, dise | ase, etc): |
| Species | not Fis | | f Fish | | O.J. Gen (| | mments (L | a. age, dise | ase, etc): |
| Species | not Fis | | | | - Conject (| | mments (L | e. age, dise | ase, etc): |
| Species | not Fis | | | | | | mments (L | e. age, dise | 888, etc): |
| Species | not Fis | | | | | | mments (L | s. age, dise | 880, etc): |
| Species | not Fis | | | | | | mments (L | a. age, dise | 888, etc): |
| Species | | <i>Y</i> 0 | (y | | S- NW | | mments (L | a. age, dise | 888, etc): |
| Species Did | | <i>Y</i> 0 | (y | | | | mments (L | a. age, dise | 888, etc): |
| Species Did | | <i>Y</i> 0 | (y | | | | mments (L | a. age, dise | 888, etc): |
| Species Did | | <i>Y</i> 0 | (y | | | | mments (L | age, dise | 886, etc): |
| Species Did | | <i>Y</i> 0 | (y | | | | mments (L | age, dise | 890, etc) |

Anderson 17-3 Brown 17-3

| Project Name | - P. | | | | Station Number | 17-3 | |
|-------------------------------------|--------------------------|----------------|----------------|------------|---|-----------------|-----------------------|
| Project Number /6 | 09607 | 29 | | | Pass No. (if applica | able) | depends. |
| | 4=id 4 | | , cham- | | | 2012 06 | and desired |
| | On To. | | | | | Lakesho | |
| oodipare Location | Un | - ijenec | 7.0 | -11 | and the | Lakejno | TE RA |
| ITM coordinates | 414415 | | easting | 477 | 3809 | northing | zone 17 |
| ishing Method (circle one |); | Backp | ack | Boat | Unit Mode | /Make | - 1 |
| ampling Method (circle o | ne): | even | habitat | l . | transect and | a spot | |
| Hart /Electrofiching Coop | ndo): | | Number of | Mattern | | | |
| fort (Electrofishing Seco | ikisj. | | Multiper of | Metters: _ | / | Number of Anode | |
| ettings requency (Hz) | V | oltage (volts) | | Current (7 | (mne) | Power (Watts) | |
| | | onago (rom) | | OG JAK V | | Tower (vvaus) | |
| tation information | | | | | | | |
| ength of Stream Surveye | and the same of the same | _/ | | | | | |
| tation Characteristics: | | idith (m): | Range | | Average: | | |
| | _ D | epth (m): | Range | | Average: | | |
| | | | | | | | |
| Temperature (°C) pH atch Data | | | | | Conductivity (uS/crr lved Oxygen (mg/L | | |
| pH | | Number of | l Fish | | |) | e. age, disease, etc |
| atch Data | | Number of | l Flish | | |) | .e. ege, disease, etc |
| atch Data | | Number of | ! Fish | | |) | .e. nge, disease, etc |
| atch Data | | Number of | Fish | | |) | .e. age, disease, etc |
| atch Data | | Number of | TFish | | |) | e. nge, disease, etc |
| atch Data | | Number of | Fleh | | |) | .e. nga, disease, etc |
| atch Data | | Number of | Fish)RY | | |) | A. ago, disease, etc |
| atch Data | | Number of | 1 Fish | | |) | e. ege, disease, etc |
| atch Data | | Number of | Fleh | | |) | .e. nge, disease, etc |
| atch Data | | Number of | Fish | | |) | A. ago, discusso, etc |
| atch Data | | Number of | 1 Flish | | |) | a. aga, disease, etc |
| atch Data | | Number of | Pich | | |) | .a. nga, disease, etc |
| atch Data | | Number of | Fish | | |) | e. ego, discosso, etc |
| atch Data | | Number of | Pich DRY | | |) | a. nga, disease, etc |
| atch Data | | Number of | Flein | | |) | a. nga, disease, etc |
| atch Data | | Number of | Pish DRY | | |) | e. ego, disease, etc |
| atch Data | | Number of | Fish | | |) | A. nga, disease, etc |
| atch Data | | Number of | Pish Property | | |) | a. ega, diseasa, etc |



| | Anderson 17- |
|---|---|
| | ORM FOR AQUATIC HABITAT |
| Stantec | 13.000 Mesper |
| Project C. P | Project # 160960789 |
| Station # (7-2 | Field Staff KE 7 MF |
| Photos Taken 377 + 378 | Date Nov. 24 2011 |
| GPS Coordinates 17 4773884 414198 | Time 4:500n |
| Descriptive Location town send Live | e. 1.4 km past of |
| Water Quality | |
| Dissolved Oxygen (mg/L) pH | Conductivity (μS/cm) |
| Water Temperature (°C) Weather conditions in previous 24 hrs | Air Temperature (°C) |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) | Mariana Parl Politica |
| Mean Watercourse Width(m) Mean Bankfull Width(m) | Maximum Pool Depth(cm) Mean Water Depth(cm) |
| % Riffle % Pool | Mean Water Depth(cm) **Run % Flat* |
| Evidence of eroding banks, Comments on bank st | |
| Substrate – Upstream (% cover) | |
| Bedrock Silt | BoulderClayCobble |
| Muck Gravel \ | Marl Sand Detritus |
| Substrate – Downstream (% cover) | |
| Bedrock Silt | BoulderClayCobble |
| Muck Gravel | Marl Sand Detritus |
| \ / | |
| n-water Cover | nke Deen Beel Vescules Blants |
| Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debri | |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domina | ant vegetation, mature or early successional) |
| Upstream/ Downstream / | |
| Adjacent Land Use | |
| Upstream / | |
| Downstream/ | |
| ish Habitat Potential | |
| Critical Habitat (spawning or hursery areas, groun | dwater upwellings) |
| Upstream / | dwater upwetings) |
| Downstream / | |
| ligratory Obstructions (seasonal, permanent) | |
| Upstream/ | |
| Downstream/ | |
| lote any fish observations | |
| | |
| Other Habitat Notes, Incidental Wildlife Observ | vations, etc. |
| ditch along Townsend (so | with side filled it contract |
| Field Notes Authored by Field Note | as QA/QCed by Tk Page of |

Anderson 17-2 brain

| | Station Number | 17-2 |
|----------------------|--|--|
| 9 | Pass No. (if applicable) | - 10 El State States |
| | | are at the same of |
| | | The second secon |
| | The state of the state of | noth indep the server of the s |
| easting <u>47</u> | 73922 | northing zone 17 |
| Backpack Boat | Unit Model/Ma | ke ~ · · |
| even habitat | transect on | spot |
| Number of Netters | E N | umber of Anodes: |
| | | |
| oltage (volts) Curre | ent (Amps) Pr | ower (Watts) |
| Mark Ar | | |
| | | |
| Midth (m): Range | Average: | |
| lepth (m): Range | Average: | |
| Water Ve | locity if Maggreed (m/s). | |
| Train 10 | | Time |
| D | | |
| | | |
| Number of Fish | | Comments (i.e. age, disease, etc) |
| | | |
| | | |
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| | - thick | W |
| fish | | |
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| | | |
| YØ American ne osa i | | |
| | easting 47 Backpack Boat even habitat Number of Netters Voltage (volts) Curre Water Ve | Pass No. (if applicable) Pass No. (if applicable) Pass No. (if applicable) Pass No. (if applicable) Date (yyyymmdd): 6 Pass No. (if applicable) Pass No. (if applicable) Date (yyyymmdd): 6 Pass No. (if applicable) Average: No. No. Pass No. (if applicable) Date (yyyymmdd): 6 Pass No. (if applicable) Average: No. No. No. No. No. Pass No. (if applicable) Date (yyyymmdd): 6 Pass No. (if applicable) Average: No. No. No. No. No. Pass No. (if applicable) Average: No. No. No. No. No. No. No. No |



17-3 17-23 17-4)

| 96 | Arderson boun |
|---------|---|
| | RAPID ASSESSMENT FORM FOR AQUATIC HABITAT |
| Stantec | |

| Project | Project # 16.0960709 |
|--|--|
| Station # 17-2,17-3,17-4 | Field Staff KE+ MF |
| Photos Taken | Date PON 29 2011 |
| GPS Coordinates 17-3(17 47738a5 | 5414422) Time 12"17 000 |
| Descriptive Location 17-2 (17 47 | 13944 413978) |
| 17-4 17477071 413462 | |
| Water Quality \ | |
| Dissolved Oxygen (mg/L) | pH Conductivity (μS/cm) |
| Water Temperature (°C) | Air Temperature (°C) |
| Weather conditions in previous 24 hrs _ | 7 iii Tomporataro (o) |
| | |
| Watercourse Dimensions & Morpholo Mean Watercourse Width (m | |
| Mean Bankfull Width (m | Maximum Pool Depth(cm) |
| % Riffle % | Pool % Run % Flat |
| Evidence of eroding banks, Comments | |
| and the control of th | on barn stability |
| | |
| Substrate – Upstream (% cover) | Parking and a second a second and a second a |
| BedrockSilt | BoulderClayCobble |
| MuckGravel | NarlSandDetritus |
| Substrate - Downstream (% cover) | |
| BedrockSilt | BoulderClayCobble |
| MuckGravel | Marl \SandDetritus |
| | ody Debris Boulder Other |
| | ed, dominant vegetation, mature or early successional) |
| Upstream | sa, asimilari vogstation, mataro or carry successionary |
| Downstream | |
| Adjacent Land Use | |
| Upstream | |
| Downstream | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery are | eas aroundwater unwellings) |
| Upstream / | as, groundwater apwellings) |
| Downstream | |
| Migratory Obstructions (seasonal, perma | anent) |
| Upstream | |
| Downstream | |
| Note any fish observations | |
| | |
| Other Habitat Notes, Incidental Wildli | fe Observations, etc. |
| confirmed similar halo | ntat as, le-5 - mased cattail cho |
| stopped to continu | 15 @ each noosed crossing |
| | 4 7 7 3 |
| 19 | i OK |
| Field Notes Authored by | Field Notes QA/QCed by Pageof |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

soun

| 1/ |) / |
|-----|-----|
| 10 | 7 |
| 16. | B |

| I | Project Project # 10960209 Station # 16-4 Photos Taken 180-685 Operation Total Send Time 11-52 Descriptive Location Total Send Time 11-52 Project # 10960209 Field Staff KE + MF Date NOV 29 2011 Time 11-52 Time 11-52 Total Send Time 11-52 |
|---------------|---|
|] \ | Water Quality Dissolved Oxygen (mg/L) 11.7 pH 7.96 Conductivity (μS/cm) 325 Water Temperature (°C) 4°C Weather conditions in previous 24 hrs cold conductivity |
| | Watercourse Dimensions & Morphology Mean Watercourse Width |
| h : | Substrate – Upstream (% cover) + world Bedrock Silt Boulder Clay Cobble Muck Gravel Marl Sand 80 Detritus |
| ገ s - - | Substrate - Downstream (% cover) + World Bedrock Silt Boulder 20 Clay Cobble Muck Gravel Marl Sand 50 Detritus |
| | In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Overhanging Vegetation Woody Debris Boulder Other |
| F | Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Upstream Upstream Downstream Downstream |
| | Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream |
| | Wigratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations |
| - | Other Habitat Notes, Incidental Wildlife Observations, etc. - nexted cettral lived channel slow tribid flow - functions as a will chandling water day before rown - up flows along gouth stall of road Field Notes QAQCed by The Page 1 of 1 |
| | -dis flows along north side of road & Blog nate tourse should be may ped |

Elliot Branch 16-4 Brain Page Lot L

(Station Diagram on Back)

| Project Name Suncor Ene | rgy- Cedar Point Wind Project | Station Number | 16-4 |
|----------------------------------|-------------------------------|--|------------------------------|
| Project Number16 | 0960709 | Pass No. (if applicable |) and the control of the |
| Photos See | hack | THE RESIDENCE OF THE PARTY OF T | 20.12 05 10 |
| Descriptive Location On | Townsential - 500 | | |
| | | | |
| UTM coordinates 473 | 73088 easting _ | 417-334 | northing zone |
| Fishing Method (circle one): | | oat Unit Model/Ma | |
| Sampling Method (circle one): | even habitat | transect | spot |
| Effort (Electrofishing Seconds): | Number of Nett | ers: | Number of Anodes: |
| Settings | | | |
| Frequency (Hz) | Voltage (volts) | irrent (Amps) | Power (Watts) |
| Station Information | | | |
| Length of Stream Surveyed (m) | | | |
| Station Characteristics: | Width (m): Range | Average: | |
| | Depth (m): Range | Average: _ | |
| Vater Clarity/Colour: | Water | Velocity if Measured (m/s): | Time |
| Temperature (°C) | | Conductivity (uS/cm) | |
| | | Conductivity (doron) | |
| pH | | Dissolved Oxygen (mg/L) | |
| pH | | ************************************** | |
| | Number of Fish | ************************************** | Comments (i.e. age, disease, |
| pHpHpecles | | Dissolved Oxygen (mg/L) | |
| pHpHpecles | Number of Fish | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pH pecies | | Dissolved Oxygen (mg/L) | |
| pH pH pH pecies | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |
| pHpHpecles | | Dissolved Oxygen (mg/L) | |
| pHpHpecles | | Dissolved Oxygen (mg/L) | |
| pH pH pecles | | Dissolved Oxygen (mg/L) | |



| Project CP Station # 16-1 Photos Taken 40 | | Project # Field Staff Date | KF 4 MF U. 25 20 | () T |
|--|---|--|--|-----------------|
| GPS Coordinates Descriptive Location | | COLUMN TO THE PARTY OF THE PART | vest o | - Dolma |
| Water Quality | | 0.11 | | |
| Dissolved Oxygen (Water Temperature Weather conditions | mg/L) 15 11 p e (°C) 5 , 6 6 in previous 24 hrs 0 | Air Temper | nductivity (µS/cm) _ ature (°C) \(^C)/\(^L/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/\(^C)/(C)/\(^C)/(C)/(C)/(C)/(C)/(C)/(C)/(C)/(C)/(C)/(| 760 |
| Mean Watercourse Mean Bankfull Widt | h(m) | Maximum F Mean Wate | | (cm) (cm) |
| % Riffle Evidence of eroding | % Pool banks, Comments on ba | nk stability re | un | Flat |
| Substrate - Upstre | eam (% cover) | | | |
| Bedrock Muck | Silt Gravel | Boulder Marl | <u> </u> | Cobble |
| Substrate – Downs Bedrock | stream (% cover) Silt | Boulder | 90 Clay | Ochbia |
| Bedrock | Gravel | Boulder Marl | ClaySand | Cobble Detritus |
| In-water Cover Cover Types Preser Overhanging | | | p Pool Vascular der Other | Plants |
| Riparian Zone | of watercourse shaded, do | minant vagetation | mature er early ev | iD |
| Upstream | 0% | minant vegetation | , mature or early su | |
| Adjacent Land Use Upstream_ Downstream | An held | | | |
| Fish Habitat Poten | | roundwater unwall | | |
| Upstream Downstream | 100100 | roundwater upwei | ings) | |
| Transfer to the first the first think and the state of the first think and the first t | ons (seasonal, permanent | mner |) | |
| Note any fish observ | | | | |
| | s, Incidental Wildlife,Ob | | | |

Ebliot 167
Drain
Page 1 of

(Station Diagram on Back)

| Project Name Si | uncor Energy- Ceda | ar Point Wind Project | Station Number | 16-1 |
|---|--------------------|---|--|----------------------------------|
| Project Number | 160960709 | As a Victoria | Pass No. (if applicab | ole) / |
| Photos | See back | | Date (yyyymmdd): | 2012 05 10 |
| Descriptive Location | Do Town | send lin ~ 1 | | of Dolmage Rd |
| | within | ROW only. | | |
| UTM coordinates | 477353 | 8 easting | 15573 | northing zone 17 |
| | | | | [May |
| Fishing Method (circle o | | Backpack Box | | Make this |
| Sampling Method (circle | one): | even habitat | transect | spot |
| Effort (Electrofishing Se | conds): 3D | Number of Nette | rs: | Number of Anodes: |
| Settings () | | | | |
| Frequency (Hz) 60 | Volta | age (volts) 600 Cui | rrent (Amps) | Power (Watts) |
| Station Information | | | | |
| Length of Stream Surve | yed (m) <u>~~2</u> | om uls +dls Row. | | |
| Station Characteristics: | Widt | th (m): Range 1,5- | 1.35 Average: | 1.60 |
| | | th (m): Range O, 10 | - 0.15 Average: | 0.12 |
| Temperature (°C) pH | 13.07 8,60 | | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | |
| pH Catch Data | 8,60 | Number of Fish | | |
| pH Catch Data | 8,60 | | | 9.04 |
| pH Catch Data Species | 8,60 | | | 9.04 |
| pH Catch Data | 8,60 | | | 9.04 |
| pH Catch Data Species | 8,60 | | | 9.04 |
| pH Catch Data Species | 8,60 | | | 9.04 |
| pH Catch Data Species | 8,60 | | | 9.04 |
| pH Catch Data Species | 8,60 | | | 9.04 |
| pH Catch Data Species No Catch | 8,60 | Number of Fish | Dissolved Oxygen (mg/L) | 9.04 |
| pH Catch Data Species No Catch Note: Fishi | 3,60 2 in Ro | Number of Fish | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, etc |
| PH Catch Data Species No Catch Note: Fishi Ditch | n in Ro has be | Number of Fish world no en cleared out | Dissolved Oxygen (mg/L) | 9.04 |
| PH Catch Data Species No Catch Note: Fishi Ditch | 3,60 2 in Ro | Number of Fish | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, etc |
| PH Catch Data Species No Catch Note: Fishi Ditch | n in Ro has be | Number of Fish world no en cleared out | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, etc |
| PH Catch Data Species No Catch Note: Fishi Ditch | n in Ro has be | Number of Fish world no en cleared out | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, etc |
| PH Catch Data Species No Catch Note: Fishi Ditch | n in Ro has be | Number of Fish world no en cleared out | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, etc |
| PH Catch Data Species No Catch Note: Fishi Ditch | n in Ro has be | Number of Fish world no en cleared out | Dissolved Oxygen (mg/L) | Comments (i.e. age, disease, etc |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 16-2

Page of

| Stantec | TORM TOR AGOATIC HABITAT |
|--|--|
| | $\frac{2}{2}$ |
| Project | Project # 166960709 |
| Station # (6-2) | Field Staff Kt + MF |
| . Hotoo Tukon | Date Novi 25 2011 |
| GPS Coordinates 17 4774409 4(440)9 | |
| Descriptive Location Townskind un | e + uttoxeter, I km had |
| Water Quality | |
| Dissolved Oxygen (mg/L) 12.08 pH | 8.08 Conductivity (µS/cm) 879 |
| Water Temperature (°C) 7.37 | Air Temperature (°C) |
| Weather conditions in previous 24 hrscald | , sun + convercest |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 15 (cm) |
| Mean Bankfull Width 3 (m) | Mean Water Depth (Cm) |
| % Riffle% Pool | /00 % Run |
| Evidence of eroding banks, Comments on bank | stability due recently |
| | |
| Substrate - Upstream (% cover) east | |
| BedrockSilt | BoulderClay Cobble |
| Muck Gravel | MarlSandDetritus |
| | |
| Substrate - Downstream (% cover) | |
| Bedrock Silt | BoulderCobble |
| MuckGravel | MarlSandDetritus |
| n-water Cover dus | |
| Cover Types Present (circle): Undercut B | Banks Deep Pool Vascular Plants |
| Overhanging Vegetation Woody Del | |
| | Other |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domi | nant vegetation, mature or early successional) |
| Upstream | |
| Downstream/ djacent Land Use | |
| Upstream (A) Cold | |
| Downstream 5 | |
| Downstream : J | |
| ish Habitat Potential | |
| critical Habitat (spawning or nursery areas, grou | indwater upwellings) |
| Upstream MAN | |
| Downstream //e/ | |
| ligratory Obstructions (seasonal, permanent) | |
| Upstream | Nº47 |
| Downstream | |
| ote any fish observations none | |
| | |
| ther Habitat Notes Incidental Wildlife Co. | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| ther Habitat Notes, Incidental Wildlife Obse | |
| alls chances, the drainage | a input! |
| teently weared | |
| A STATE OF THE PARTY OF THE PAR | |
| slow run | |

Field Notes QA/QCed by

Elliot ban 16-2

| Project Name $C.P$ | Station Number | 16-2 |
|--|---|--|
| Project Number 1609 60 | | |
| Confidence of the Confedence o | | : 2012 06 04 |
| | send line & Uttoparter - 1km in | The state of the s |
| TTM coordinates 47 | 7.4405 posting 414909 | northing zone 17 |
| ishing Method (circle one): ampling Method (circle one): | | el/Make LK-12 - |
| ffort (Electrofishing Seconds): | 80 Number of Netters: / | Number of Anodes: |
| requency (Hz) 60 | Voltage (volts) 700 Current (Amps) | Power (Watts) |
| tation information | | |
| ength of Stream Surveyed (m) | ~ 100 m | |
| tation Characteristics: | Width (m): Range /.D1.2. Average: | |
| | Depth (m): Range 0.05-0.06 Average: | 0.05 |
| | | |
| Marie Committee of the | Water Velocity if Measured (m/s | |
| | Conductivity (uS/cr 35 Dissolved Oxygen (mg/ | ALL DESCRIPTION OF THE PROPERTY OF THE PROPERT |
| atch Data | Discussion Only Gail (ing. | 4 <u>18.39</u> |
| pecies | Number of Fish | Comments (i.e. age, disease, etc): |
| | | |
| | | |
| No cate | h | |
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RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

58-3 WB

Stantec

| Station # State | Project C.P. | Project # 1609.60769 |
|---|--|---|
| Photos Taken 42 4 7 7 7 8 9 Posecriptive Location Townserval ("C) Water Quality Water Quality Water Gunity Water Council ("C) Water Temperature ("C) Water Depti ("C) Water Temperature ("C) Air Temperature ("C) Water Temperature ("C) Water Temperature ("C) Water Temperature ("C) Air Temperature ("C) Water | TO PARTY DISPLAYS THE PROPERTY OF THE PROPERTY | |
| GPS Coordinates 197308 47334 Time Descriptive Location Tourns and 400 m went of Fuller Rd Water Quality Confunction of Management ("Conductivity (µS/cm) and the property of | | 3 |
| Descriptive Location Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Water Depth | | |
| Dissolved Cxygen (mg/L) Water Temperature (°C) Weather conditions in previous 24 hrs Water Course Dimensions & Morphology Mean WaterCourse Width (m) | | send 400 m west of Fuller Rd |
| Dissolved Cxygen (mg/L) Water Temperature (°C) Weather conditions in previous 24 hrs Water Course Dimensions & Morphology Mean WaterCourse Width (m) | Water Overlier COO C | |
| Water Temperature (°C) Weather conditions in previous 24 hrs Watercourse Dimensions & Morphology Mean Watercourse Width (m) | Disselved Owner (mg/l) | |
| Weather conditions in previous 24 hrs Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Water Depth (cm) % Riffle % Pool 60% Run % Flat Evidence of eroding banks, Comments on bank stability \$fable | Dissolved Oxygen (mg/L) | |
| Watercourse Dimensions & Morphology Mean Watercourse Width | Weather conditions in previous | Air Temperature (°C) |
| Mean Watercourse Width | | |
| Mean Bankfull Width 3 (m) Mean Water Depth 6 (cm) (cm) William Riffer | | |
| Riffle Evidence of eroding banks, Comments on bank stability Substrate - Upstream (% cover) Bedrock Silt Muck Gravel Mari Substrate - Downstream (% cover) Bedrock Silt Boulder Muck Gravel Mari Sand Detritus Substrate - Downstream (% cover) Bedrock Silt Boulder Clay Cobble Muck Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Over Property Over Cover (circle): Over Types Present (circle): Ove | | (011) |
| Substrate - Upstream (% cover) Bedrock Silt Boulder Clay Cobble Muck Gravel Mari Sand Co Detritus Substrate - Downstream (% cover) Bedrock Silt Boulder Clay Cobble Muck Gravel Mari Sand Co Detritus Substrate - Downstream (% cover) Bedrock Silt Boulder Clay Cobble Muck Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Phase Cotter Cover Types Present (circle): Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream O Downstream As Development As Downstream As Downstr | | |
| Substrate - Upstream (% cover) Bedrock Silt Boulder Sand Detritus Substrate - Downstream (% cover) appeals for the recently cleared Bedrock Silt Boulder Colay Cobble Muck Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vaccular Plants Phrase Cathour Overlanding Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Obounstream As Downstream As Downstrea | | nments on bank stability. |
| Bedrock Gravel Mari Sand Cobble Muck Gravel Mari Sand Cobble Detritus Substrate - Downstream (% cover) appears for he recently cleared Bedrock Silt Boulder Collay Cobble Muck Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Phase cather Overhamping Vegetation Woody Debris Boulder Other | | STARLE TO DATE STABLE TO THE |
| Bedrock Gravel Mari Sand Cobble Muck Gravel Mari Sand Cobble Detritus Substrate - Downstream (% cover) appears for he recently cleared Bedrock Silt Boulder Collay Cobble Muck Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Phase cather Overhamping Vegetation Woody Debris Boulder Other | Substrate - Upstream (% cov | ar) |
| Substrate - Downstream (% cover) appears for he recently cleared Bedrock Silt Boulder 10 Clay Cobble Muck Gravel Mari Sand Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Priasy + Cathae Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 10 0 Downstream As Do | | |
| Substrate - Downstream (% cover) appears fo be recently cleared Bedrock Silt Boulder 10 Clay Cobble Muck Gravel Mari Sand Deep Pool Vascular Plants Priase cathous Overlanding Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | The state of the s | |
| Muck Gravel Marl Sand Cobble Marl Sand Cobble Marl Sand Cobble Marl Sand Cobble Cobble Marl Sand Cobble Cobbl | | |
| Muck Gravel Marl Sand Cobble | Substrate - Downstream (% c | over) appeals to be recently cleared |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Phrase cattace Overhanding Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Downstream Downstream Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Downstream Downstream Downstream Obstructions (seasonal, permanent) Upstream Downstream Downstream Downstream Downstream Downstream Downstream Note any fish observations Other Habitat Notes, Incidental Wildlife Observations, etc. | SI | Boulder <u>LO</u> ClayCobble |
| Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Priag + Catholic Overhanding Vegetation Woody Debris Boulder Other | G | avelMarlSand <u>\(\varphi \opi \)</u> Detritus |
| Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Priag + Catholic Overhanding Vegetation Woody Debris Boulder Other | In-water Cover | |
| Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Downstream Downstream Downstream Downstream Downstream Downstream Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream More any fish observations Woody Debris Boulder Other Boulder Boulder Other Boulder Other Boulder Other Boulder Other Boulder Other Boulder Boulder Other Boulder Other Boulder Other Boulder Boulder Boulder Other Boulder | The state of the s | Undercut Banks Doop Book Martin Blanco NO COS Con Ha |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations WWC Other Habitat Notes, Incidental Wildlife Observations, etc. | | |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations WWC Other Habitat Notes, Incidental Wildlife Observations, etc. | Riparian Zone | |
| Downstream 20% renambles Adjacent Land Use Upstream | | se shaded dominant vegetation, mature or early successional) |
| Downstream As Open As | Upstream 0 6 | o stidded, dominant vegetation, mature of early successionar) |
| Adjacent Land Use Upstream Downstream Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations Other Habitat Notes, Incidental Wildlife Observations, etc. Canhaned whe use the product of | | applian hello |
| Upstream readential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream ADME Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations was a trade of the first observations, etc. Confirmed when the product of the first observations, etc. | | 1901190119129 |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations Were Other Habitat Notes, Incidental Wildlife Observations, etc. Confirmed where of the process of the proce | | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream | | lential |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream | | |
| Upstream | | |
| Downstream Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations Note any fish observations Other Habitat Notes, Incidental Wildlife Observations, etc. Confirmed when it was a family was a famil | Critical Habitat (spawning or nur | sery areas, groundwater upwellings) |
| Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations Other Habitat Notes, Incidental Wildlife Observations, etc. Confirmed whe up of the training common of the common o | | |
| Upstream | | |
| Downstream On Standard Wildlife Observations, etc. Confirmed whe use of trains crowns I mand channel up wig. | Migratory Obstructions (seasona | ıl, permanent) |
| Other Habitat Notes, Incidental Wildlife Observations, etc. — cenhand we wis of trains cromms — mand channel wing. | | an colinative of |
| Other Habitat Notes, Incidental Wildlife Observations, etc. - confirmed who us of tribing croming - incidental wildlife Observations, etc. | | II Outrier of |
| -confirmed up us of torbine cromms -incord channel up veg. | Note any fish observations 100 | |
| -confirmed up us of torbine cromming -incord channel up veg. | | |
| -confirmed up us of torbine cromming -incord channel up veg. | | |
| -incised channel by meg. | Other Habitat Notes Incidente | I Wildlife Observations at |
| Field Notes Authored by KK Field Notes On 100 of by TK | | |
| Field Notes Authored by K. Field Notes Of 1994 by T. K. | | |
| Field Notes Authored by Kill | | |
| FIEID INDIES CLARLICATION () | | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 16-3

| C1 | roject | 7 | DELLEY BOOK | Project #_ | 16090 | 00709 | |
|-------------|---|---------------------------|-------------------|-------------------|-------------|---------------|-------------|
| | notos Taken | 31-42 | 10 | Field Staff | | +MF | |
| | PS Coordinates | 72 | 630 415720 | Date | 1001. 9 | 5 201 | |
| | escriptive Location | | mae Ro | | | | |
| _ | socriptive Locatio | | THE RO | <u> </u> | mr | orn o | |
| w | ater Quality | | | | | | |
| | ssolved Oxygen | (mg/L) 13 | 136 pH | 8.160 | onductivity | (uS/cm) | 82- |
| | ater Temperature | | | Air Tempe | rature (°C | 100 | |
| W | eather conditions | in previous | 24 hrs(o(d) | sunny | 4 are | ercast | V 1 |
| | atercourse Dime | | | | | | |
| | ean Watercourse | | (***) | Maximum | | | <u> (cr</u> |
| Me | ean Bankfull Widt | th 5.0 | (m) | Mean Wat | | | (cr |
| E | % Riffle | - hanks O | % Pool | | Run | 100%F | |
| EV | 5 m d/l | g banks, Con | nments on bank s | tability <u>P</u> | nos nor | + d1 | (er |
| 1 - | | | | 1 1 | 1 | . 0 | |
| Su | bstrate - Upstre | | | ~ Ired | | | |
| _ | Bedrock | Sil | | Boulder | 20 | _Clay | Co |
| | Muck | Gr | ravel | Marl | | _Sand _ | ②_De |
| Su | bstrate – Downs | stream (% c | over) | | | | |
| | Bedrock | Sil | | Boulder | 20 | Clay | Co |
| - | Muck | Gr | avel | Marl | | Sand & | 2 De |
| | water Cover | | | | | 90,41 | |
| Co | ver Types Prese | nt (circle): | Undercut Ba | | ep Pool | Vascular Pl | ants |
| | Overhanging | Vegetation | Woody Debi | ris Bou | ulder | Other | dwi 1 |
| Rij | parian Zone | | | | | | |
| Rip | arian Cover (% d | of watercours | se shaded, domin | ant vegetatio | n. mature | or early succ | ession |
| | Upstream | 80 /6 1 | Lec noadle | of | | | 000.011 |
| | Downstream | | | WE TEST | | | |
| Ad | acent Land Use | | 0 1 | | | | HM HI |
| | Upstream | Agy | noodlot | | | | |
| | Downstream | Ast | usodlot | | | | 1 1/4 |
| | h Habitat Poten | | | | | | |
| | ical Habitat (spa | wning or nur | sery areas, grour | dwater upwe | llings) | | |
| | Upstream | none | | | | | |
| | D | | | | | | |
| Cri | Downstream | | 1 | | | | |
| Cri | ratory Obstruction | | | 7 | | | |
| Cri | ratory Obstruction Upstream | ons (seasona | II, permanent) | 7 | | | |
| Crit Mig | ratory Obstruction Upstream Downstream | ons (seasona | in summe | 2v? | | | |
| Crit Mig | ratory Obstruction Upstream | ons (seasona | in summe | 2.7 | | | |
| Mig | ratory Obstruction Upstream Downstream te any fish observ | ons (seasona Vations W | in summe | | | | |
| Mig | upstruction Upstream Downstream te any fish observer Habitat Note | vations More | I Wildlife Obser | | | 0 | |
| Mig | upstruction Upstream Downstream te any fish observer Habitat Note | vations More | in summe | | hanne | l | |

North Street Drain

16-3

| Project Name | C.P. | | | Station Number | 16-3 | ALL TRACES |
|---|--|------------------|-----------------|---|--|------------|
| Project Number | 609607 | 09 | 2084 | ass No. (if applicable | e) / | |
| | | 0: 1/5 49/=0/5 | | | | 04. |
| Descriptive Location | On Dole line | næge Rd ~ | - 1.5 km | north | of Tow | n send |
| JTM coordinates | 47746 | 30 east | ing 415 | 729 | northing | zone / |
| Fishing Method (circle Sampling Method (circ | | Backpack | Boat habitat | Unit Model/M | lake the spot | 12- |
| Effort (Electrofishing S Settings | econds): <u>E</u> | Num | ber of Netters: | <u></u> | Number of Anodes | :) |
| Frequency (Hz) 6 | <u>) </u> | oltage (volts) 7 | O Current (A | (mps) | Power (Watts) | |
| Station information | | | | | | |
| Length of Stream Surv | eyed (m) | Row (~3.0 | u/5+d/5) | | and the state of t | |
| Station Characteristics | | | 9 8.40 -0.8 | Average: | 0.45 | JH S |
| | ` \ C | Pepth (m): Ran | je 0:05 - 0.1 | Average: | 0.07 | |
| Vater Clarity/Colour | deal | | Water Velocity | if Maseurad (m/e)- | | Time 15-2 |
| Temperature (°C) | 18.07 8.64 | | C | if Measured (m/s): conductivity (uS/cm) ved Oxygen (mg/L) | 430 | Time /5-3 |
| Temperature (°C) pH Catch Data | 18.07 | Number of Fish | C | onductivity (uS/cm) | | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data species | 18.07 | Number of Fish | C | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH catch Data pecies | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| | 18.07 | | Dissol | onductivity (uS/cm) | 10.43 | |
| Temperature (°C) pH Catch Data Species | 18 07 8.64 | | Dissol | onductivity (uS/cm) | 10.43 | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM / 0 -/

| Station # 0 - (| Project Name C.P. |
|---|--|
| Watercourse Name (2000) Creek | Project # (60960709 |
| Photos | Field Staff KF + JK |
| Date July 2012 | Time 2:23, m |
| Weather conditions in previous 24 hrs _ +-5+0 | m hot & sunny |
| GPS Coordinates (Zone) E 420 | 030 N 4774334 Datum NA983 |
| Creek 1300m Wishol Kinner of | Rd, 700m South of Cedar Ph Lau @ woods |
| Water Quality Dissolved Oxygen (mg/L) 8.20 pH Water Temperature (°C) 24.04 Time in situ measurements taken 2.20 b | 8,34 Conductivity (µS/cm) 726 Air Temperature (°C) 41° |
| | |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 3-5 (m) | Maximum Pool Depth (cm) |
| Mean Bankfull Width (m) | Mean Water Depth 30 (cm) |
| % Riffle % Po | |
| Start Students of banks, confinents on banks | ANA Jeant Some project |
| - SHIPPEY WISHING | my miles, some erector |
| Substrate (% cover) | |
| BedrockCobblec | Sand Silt Muck |
| Boulder 50 Gravel | Marl Detritus |
| Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, domination) On woods On woods | Boulder Otherant vegetation, mature or early successional) |
| | a, white pive |
| Adjacent Land Use | |
| | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groun | dwater upwellings) |
| Migratory Obstructions (seasonal, permanent) | |
| Note any fish observations | |
| Waterbody Notes | |
| | I Grassed Swale Buried Tile |
| Surficial Drainage (i.e. furrows) Dugout Por | |
| | |
| Other Habitat Notes, Incidental Wildlife Observance | channel through world |
| - 00 00 | |
| | |

G:\01609\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

woods 10-1

| | | Fishing R | ecord and | Catch Results | s (passive collection methods) Page of |
|-----------------------------------|--------------------|-----------------------|-----------------------|-------------------------------|---|
| Project Numb | er | 60960 | 209 | | Station Number/ |
| Project Name | : <u>C</u> | 18 | | | Lift / Haul / Pass No. |
| Waterbody Na | ame: V | pods | Creek | ٠,٠ | Date (yyyymmdd): 4 20/ 3 |
| Field Staff: | KEY | HJK | | | |
| Fishing Metho | od (check one) a | nd Gear Specs | | Trap Net Hoop Net Minnow Trap | o. of Panels:Mesh Sizes: |
| Descriptive Lo | ocation of Station | 1 | | | |
| UTM Coordina | ates: | Zone \ | Eastin | 9 <u>420b3</u> | |
| SET: Date: | | | LIFT: Date | | Total Netting Hours (approx.) |
| Time: | | | Time: | | |
| O Doub | | Man. | \times | | |
| Son Depth | (m): | Max: | | Min: | |
| | | | | _ | |
| Supporting N | leasurements (| recorded at tin | ne of net set) | | |
| Supporting N Depth (m) | Temp. (°C) | recorded at tin | ne of net set) | Cond. (µS/cm) | Time 2:25 1 |
| Andrew Commission of the State of | | Microsoft and Control | and the second second | Cond. (µS/cm) | Time 2:25 ph |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pH | Cond. (μS/cm) | Time 2:25 V |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pH | Cond. (µS/cm) | |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pH | Cond. (μS/cm) | Additional Catch Data on Separate Sheet?: Y/N |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pH | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pH | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | рН 3.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N |
| Depth (m) | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |
| Depth (m) O.\ Catch Data | Temp. (°C) | D.O. (mg/L) | pH J.34 | Cond. (µS/cm) | Additional Catch Data on Separate Sheet?: Y/N Detailed Fish Measurements on Separate Sheet? Y/N Comments (i.e. age, disease, etc.) |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT WB.

| 0 | Project Project # 160960709 Station # Field StaffK + M = |
|-------------|--|
| | Photos Taken 477 - 485 GPS Coordinates 17 4716341 914813 Time 2 pm Descriptive Location Cedar Pant 4re 1.5 km west of Rawlings Rd |
| | Water Quality Dissolved Oxygen (mg/L) 1. 42 pH 7. Conductivity (μS/cm) 930 manual Mater Temperature (°C) (μ. 6 Air Temperature (°C) 6 Sun Ay |
| | Watercourse Dimensions & Morphology Mean Watercourse Width S (m) Maximum Pool Depth G (cm) Mean Bankfull Width S (m) Mean Water Depth 30 (cm) Mean Water Depth 30 (cm) Mean Water Depth 30 (cm) Mean Water Depth Work Flat Evidence of eroding banks, Comments on bank stability Stable To divert Plate (n) Mean Water Depth G (cm) Mea |
| outh | Substrate – Upstream (% cover) Bedrock |
| Jordh | Substrate - Downstream (% cover) Bedrock 30 Silt Muck Boulder Marl Sand 40 Detritus |
| | In-water Cover Cover Types Present (circle): Overhanging Vegetation Undercut Banks Woody Debris Deep Pool Vascular Plants Other straw + the |
| 6 21 | Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 20% Aponton 1000 Downstream 5% |
| | Adjacent Land Use Upstream Downstream |
| | Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream |
| | Migratory Obstructions (seasonal, permanent) Upstream Downstream |
| | Note any fish observations dond circle chilb on boink - MUSEL shells on cultivent - Not resident species - dumped on site |
| 0 | Other Habitat Notes, Incidental Wildlife Observations, etc. - us slow mod wide flow (2m) - dis flow constructed through RCG (0571m) - tile drawn inputs |
| | Field Notes Authored by VE |

woods Chark

Stantec Consulting Ltd - Electrofishing Record and Catch Results **Project Name** Station Number \\-Project Number 160000 Pass No. (if applicable) 530= d/s. Date (yyyymmdd): 2012.06.05 Rewlings Rd **Descriptive Location** 477634 easting Nath **UTM** coordinates _northing Backpack Fishing Method (circle one): **Boat** Unit Model/Make -Sampling Method (circle one): habitat even ign ... spot transect Effort (Electrofishing Seconds): **Number of Netters: Number of Anodes:** Settings Voltage (volts): 700 Frequency (Hz) (0) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) ~ 100m Station Characteristics: Width (m): Range 20-30 Average: Depth (m): Range 0 20-0.70 Average: 0.50 Water Clarity/Colour: Mounish-Cled Water Velocity if Measured (m/s): Time 12:00 Temperature (°C) 18.42 Conductivity (uS/cm) 1000 8.24 Dissolved Oxygen (mg/L) **Catch Data Species Number of Fish** Comments (i.e. age, disease, etc): 22 Crk chub Min 6 BRST Shn Carp

Fish Measurements on Separate Sheet? Y/N)

Field Staff:

Notes By: N. Burne



Field Notes Authored by Ka

RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 14-2

| Project C.P | Project # 169960709 |
|--|---|
| Station # 14-2 | Field Staff KE + MF |
| Photos Taken 454 - 457 | Date Nov. 25 2011 |
| GPS Coordinates 17 47756576 4178 | II Time I wo |
| Descriptive Location Fuller Rd. | km north of coder Point () |
| | |
| Water Quality | Q 11. |
| Dissolved Oxygen (mg/L) 16 | pH_8, 16 Conductivity (μS/cm) 891 |
| Water Temperature (°C) 630 | Air Temperature (°C) 6 |
| Weather conditions in previous 24 hrs | ld + sunny |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width(m) | Maximum Pool Depth (cm) |
| Mean Bankfull Width(m) | Mean Water Depth (cm) |
| % Riffle % Pool | |
| Evidence of eroding banks, Comments on ba | ank stability stable + regulated |
| | 0 |
| Substrate - Upstream (% cover) | |
| Bedrock <u>&O</u> Silt | Boulder <u>SO</u> ClayCobble |
| Muck <u>30</u> Gravel | MarlSandDetritus |
| Substrate – Downstream (% cover) | |
| Bedrock 20 Silt | Boulder SO Clay \ Cobble |
| Muck 20 Gravel | Marl Sand Detritus |
| | |
| n-water Cover | ABOUT BY BY A CAR OF |
| Cover Types Present (circle): Underconderc | |
| | Debits Boulder Other |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, de | ominant vegetation, mature or early successional) |
| Upstream 6 10 Ofen | |
| Downstream 5% nylonan | trees |
| djacent Land Use | |
| Upstream | • |
| Downstream // J | 1200 |
| ish Habitat Potential | A Sec |
| critical Habitat (spawning or nursery areas, g | proundwater upwellings) |
| Upstream OOO P | 0000 |
| Downstream | |
| figratory Obstructions (seasonal, permanent | t) |
| Upstream Devon Don | |
| Downstream 1 | |
| | |
| ote any fish observations | |
| ote any fish observations | |
| | servations atc |
| ther Habitat Notes, Incidental Wildlife Ot | pservations, etc. |

Field Notes QA/QCed by

Page of

woods creek 14-2

| Project Name | C.P. | | | Station | n Number | 14-2 | The Williams |
|--|--|---------------------------------|----------------------|-------------------|--|--|-------------------------|
| | 16096 | 0709 | W. Can Jan 19 | | Vo. (if applicab | Bridge of the control | a deservation |
| Photos 5 | iacid 5 | 13=3/3 | 514=4/5 | | | 2012 06 | |
| Descriptive Location | | | | | | Point L | |
| UTM coordinates | 47780 | 56 | easting . | 4178 | Ц | northing Existing | zone /7 |
| Fishing Method (circle (Sampling Method (circle | THE RESERVANCE OF THE RESERVAN | Backp | ack habitat | Boat tra | Unit Model/N | Make spot | 12 - |
| Effort (Electrofishing Se | econds): 2 | 29 | Number of N | etters: / | | Number of Anode | s: _ / |
| Settings Frequency (Hz) <u>60</u> | | Voltage (volts): | 700 | Current (Amps) | | Power (Watts) | |
| Station Information | | | | | | | |
| Length of Stream Surve | eyed (m) | N 150 | | | | | |
| Station Characteristics: | | Midth (m): Depth (m): | Range /. 5 | | Average: | 1.8 | |
| | | | Parties and the same | 0-0,20 | Avelage. | 0.15 | |
| Nater Clarity/Colour: | THE RESERVE TO SHARE THE PARTY OF THE PARTY | colour | _ Wate | er Velocity if Me | THE RESERVE OF THE PARTY OF THE | THE RESERVE OF THE PARTY OF THE | Time 09:45 |
| | | | | | | | |
| Temperature (°C) | 9.35 | | | | ctivity (uS/cm) | 1001 | |
| Temperature (°C) pH Catch Data | 8.35 | | | | xivity (us/cm) xygen (mg/L) | 13.64 | |
| pH | | | Fish | | | 13,64 | e. ago, (fisease, etc): |
| Catch Data Species CCK chub | | | Fish | | | 13,64 | e. age, (fisease, etc): |
| Catch Data | | Number of | Fish HHT | | xygen (mg/L) | 13,64 | e. age, disease, etc): |
| Catch Data Species CCK chub | | Number of | Fish HHT | | bxygen (mg/L) | 13,64 | e. aga, diseasa, etc): |
| Catch Data Species Crk chub BRST | 8.35 | Number of | HH | | bxygen (mg/L) | 13,64 | e. ago, disease, etc): |
| Catch Data Species Crk chub BRST WHSC | 8.35 | Number of | HH | | bxygen (mg/L) | 13,64 | 0. ago, disease, etc): |
| Catch Data Species Crk chub BRST WHSC | 8.35 | Number of | HH | | bxygen (mg/L) | 13,64 | e. ago, disease, etc): |
| Cok chub BRST WHSC BIK nose dae Rainb Dt | 8.35 | Number of | HH | | bxygen (mg/L) | 13,64 | e. age, classase, etc): |
| Cok chub BRST WHSC BIK nose dae Rainb Dt | 2.35 u | Number of ###- | HH | Dissolved C | bxygen (mg/L) | 13,64 | e. aga, disease, etc): |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | Mongho |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | e. ago, disease, etc): |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | A. ago, disease, etc): |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | e. age, disease, etc): |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | A througho |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | A sgo, disease, etc): |
| Catch Data Species Crk chub BRST WHSC BIK nose dae Rainb Dt Crnn 5hn | 2.35 u | Number of ###- | HHT ovenile) | Dissolved C | bxygen (mg/L) | Comments (L | e. aga, disease, etc): |



| woods Greek | 14-4 |
|---|------|
| WIND FARM WATERBODY RAPID ASSESSMENT FORM | WB. |

| Cover Types Present (circle): Undercut Banks Deep Pool Watercress Addition Vegetation Woody Debris Boulder Other | |
|--|--|
| Photos Date Duty 4 2 2 Time 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| Date July 4 20 2 Time 9:35 Weather conditions in previous 24 hrs 4 GPS Coordinates (Zone) E 9773 Datum Descriptive Location 950 Sould Proof Limb 700 m Wash Full Vool Water Quality Dissolved Oxygen (mg/L) pH Conductivity (µS/cm) Water Temperature (°C) Air Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Water Depth 5 (cm) % Riffle (0) % Pool % Run Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Cobble Sand Silt Boulder Gravel Day Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Age Overhanding Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Water Outh Width Water Outh Wat | |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m) Mean Water Depth (cm) % Riffle (O) % Pool Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Gravel Gravel Gravel Undercut Banks Deep Pool Watercress Adi Overhanging Vegetation Woody Debris Boulder Gravel Cover Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m) Mean Bankfull Width (m) Watercourse Of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Cobble Sand Silt Boulder Gravel Older Other In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | N/1083 |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m) Mean Water Depth (cm) % Riffle (0) % Pool % Run Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Gravel Gravel Cobble Gravel Gravel Undercut Banks Deep Pool Watercress Aut Overbanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Dissolved Oxygen (mg/L) pH | |
| Dissolved Oxygen (mg/L) pH | |
| Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width | |
| Watercourse Dimensions & Morphology Mean Watercourse Width | |
| Mean Watercourse Width (m) Maximum Pool Depth (cm) Mean Bankfull Width (m) Mean Water Depth (cm) % Riffle (O) % Pool (m) Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock (Cobble (Cobbl | |
| Mean Watercourse Width (m) Maximum Pool Depth (cm) Mean Bankfull Width (m) Mean Water Depth (cm) % Riffle (O) % Pool (m) Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock (Cobble (Cobbl | |
| Mean Bankfull Width 5 (m) Mean Water Depth 5 (cm) % Riffle 00 % Pool % Run Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Cobble 5 Sand Silt Boulder Gravel 00 Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Add Overbanding Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Substrate (% cover) Bedrock Cobble Sand Silt Boulder Gravel Cob Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Substrate (% cover) Bedrock Cobble Sand Silt Boulder Gravel Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | % Flat |
| Substrate (% cover) Bedrock Cobble Clay Sand Silt Boulder Gravel Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Substrate (% cover) Bedrock Cobble Sand Silt Boulder Gravel Clay Mari In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Bedrock Cobble Cobble Sand Silt Boulder Gravel Clay Mari In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Acti Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Acti Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | Muck |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Acti Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | Detritus |
| Cover Types Present (circle): Undercut Banks Deep Pool Watercress Addition Vegetation Woody Debris Boulder Other | rasses |
| Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | iatic Veg |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | |
| 13 10 scattered montain | |
| | |
| Adjacent Land Use | |
| | |
| Fish Ushing Beautici | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) | |
| Migratory Obstructions (seasonal, permanent) | |
| dinost din | |
| Note any fish observations/ | |
| Waterbody Notes | |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried | Tile |
| Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg | Control State Control of the Control |
| | |
| Other Habitat Notes, Incidental Wildlife Observations, etc. | |
| | |
| | |
| Field Notes Authored by V Field Notes QA/QCed by Tk | |

| RAPID ASSESSMENT FORM FOR AQUATIC HABITAT |
|--|
| Stantec Woods creek |
| |
| Project Project # 160960 DD 9 |
| Station # 13-3 Field Staff KE + MF |
| Photos Taken 469 - 476 Date Nov. 35 3011 |
| GPS Coordinates 17 477/0341 414213 Time 1:40 pm Descriptive Location Laceshave 150 m east of Codar Po |
| Descriptive Location lakeshove, 150 m east of Cedar Pe |
| Water Quality |
| Dissolved Oxygen (mg/L) 13.27 pH 8.31 Conductivity (µ\$/cm) 81/ |
| Water Temperature (°C) 6 O Air Temperature (°C) |
| Weather conditions in previous 24 hrs cold + sunny |
| Watercourse Dimensions & Morphology |
| Mean Watercourse Width (cm) Maximum Pool Depth 30 (cm) |
| Mean Bankfull Width (m) Mean Water Depth 20 (cm) |
| <u>20</u> % Riffle <u>10</u> % Pool <u>70</u> % Run % Flat |
| Evidence of eroding banks, Comments on bank stability 11 He enosion - undle |
| Substrate – Upstream (% cover) |
| BedrockSiltBoulder |
| MuckGravelMarlSandDetri |
| Substrate - Downstream (% cover) |
| BedrockSiltBoulder \(\sqrt{D} \) Clay Cobl |
| MuckGravelMarlSandDetri |
| In-water Cover |
| Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants |
| Overhanging Vegetation Woody-Debris Boulder Other |
| Riparian Zone |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional |
| Upstream 10 /0 0 ccasco do de c |
| Downstream 10% |
| Adjacent Land Use |
| Upstream AC Field |
| Downstream / 8 (1010) |
| Fish Habitat Potential |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| Upstream 1000 |
| Downstream |
| Migratory Obstructions (seasonal, permanent) |
| Upstream promoten + |
| Downstream |

Note any fish observations more (but known Righ community according to land owner). Other Habitat Notes, Incidental Wildlife Observations, etc.

-tiny NHLE 25 m dls near bend, gravel cobble substrate under brodge
-possible ground valer upwelling in 5t entanknent (photo)
- uls braided flow through RCG islands Field Notes Authored by -nittle just als of pridx -mod-widl, somewhat reandering vatercourse

woods cred 13-2

Stantec Consulting Ltd - Electrofishing Recognized Name

Project Number 160960909 Pass No. (if a Photos 491=1d 497=1/s 498=4/s 499-346 Date (yyyymr Descriptive Location 00 Lake Shore Rd ~ 200 m A Line

UTM coordinates 4776341 easting 414873

Fishing Method (circle one):

Sampling Method (circle one):

Effort (Electrofishing Seconds):

Length of Stream Surveyed (m)

Frequency (Hz) 60

Station Characteristics:

Water Clarity/Colour: Temperature (°C)

Tohn. Ot

nk chib inn Shn Nasc

Nose

Dace

Fish Measurements on Separate Sheet? YN

Field Staff:

Catch Data Species

Settings

Backpack

Voltage (volts): 700

Number of Fish

Width (m):

Depth (m):

ROW [~ 4.0 m u/s to

Bos

habitat

Number of Nette

Range /, / -

Range 0.10 -

| ofishing Record | and Catch Results |
|----------------------------|--|
| Station Number | 13-2 |
| Pass No. (if applical | ble) |
| Date (yyyymmdd): | 2012 06 04 |
| loom NE | of Ceder Point |
| | |
| 114873 | nerthing zone 177 |
| t Unit Model/ | |
| transect open | The Contract of the Contract o |
| | |
| s:/ | Number of Anodes: |
| rent (Amps) | Power (Watts) |
| an (Amps) | Formal (Mails) |
| (5) + 10m (under | bridge 18m Total |
| 3.0 Average: | |
| 0.25 Average: | 015 |
| 7.20 Molago. | |
| elocity if Measured (m/s): | 198 11 |
| Conductivity (uS/cm) | |
| Dissolved Oxygen (mg/L) | 11810 |
| | Comments (i.e. age, disease, etc): |
| (D) | |
| (12) | |
| - B | |
| Ö | |
| Ŏ | |
| (9) | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Notes By:

MF

(Station Diagram on Back)

Woods Creek-1 11-2 WIND FARM WATERBODY RAPID ASSESSMENT FORM WB



| Watercourse Name Woods | | | ct Name @Powt | | |
|---|--|-----------|--|----------------|------------------|
| | reek-1 | | ct # 16096070 | | |
| Photos 1 | | | Staff NB, mF | | |
| Date 2012 06 | 07 | | 16112 | | Villa |
| Weather conditions in previous | 24 hrs No | precip | | | |
| GPS Coordinates (Zone) 17 | E41976 | 7 | N 477 59 | 015 | Datum ルルロ83 |
| Descriptive Location 100 - | west of Rawli | ngs floor | d on south state of | - Ceder Pa | int the |
| Water Quality | | | | | |
| | pH_ | | Conductivity (| iom) £ | dry. |
| Dissolved Oxygen (mg/L) | The state of the s | | Conductivity (μS/ emperature (°C) | CIII) | |
| Water Temperature (°C) Time in situ measurements tak | | All II | emperature (°C) | | Yn ac Asia Maria |
| Watercourse Dimensions & I | | | | | |
| | 9-7 (m) | Maxi | num Pool Depth | Dry 1 | cm) |
| Mean Bankfull Width 2,5 | | | Water Depth | | cm) |
| % Riffle | | | % F | | % Flat |
| Evidence of eroding banks, Co | | | 10 | | 70 T Tat |
| WALWIS IN THE PROPERTY OF THE | | | WY | | |
| Substrate (% cover) | | | | | |
| Bedrock | Cobble | 35 | Sand | Silt | Muck |
| Boulder | Gravel | 65 | Clay | Marl | Detritus |
| Riparian Zone Riparian Cover (% of watercou | ırse shaded, domi | nant veg | etation, mature or ea | rly succession | onal) |
| 1000 | | | | | |
| Adjacent Land Use | | | | | |
| Adjacent Land Üse | | | | | |
| Fish Habitat Potential Critical Habitat (spawning or no | A A | | | | |
| Fish Habitat Potential Critical Habitat (spawning or no | ursery areas, grou | | | | A |
| Fish Habitat Potential Critical Habitat (spawning or no Declared Action Migratory Obstructions (season Declared Fish Indulate | ursery areas, grou | | | | A |
| Fish Habitat Potential Critical Habitat (spawning or not be a constructions (season to be a constructions) Migratory Obstructions (season to be a constructions) Note any fish observations Waterbody Notes | ursery areas, grounal, permanent) | indwater | upwellings) _ Grassed Swale_ Dominated by Aqu | Bu | ried Tile |
| Fish Habitat Potential Critical Habitat (spawning or not be described) Migratory Obstructions (season be described) Note any fish observations Waterbody Notes Natural Watercourse | rapezoidal Chann | endwater | upwellings) Grassed Swale_ Dominated by Aqu | Bu | A |
| Fish Habitat Potential Critical Habitat (spawning or not be described) Migratory Obstructions (season be described) Note any fish observations Waterbody Notes Natural Watercourse | rapezoidal Chann | endwater | upwellings) Grassed Swale_ Dominated by Aqu | Bu | A |
| Fish Habitat Potential Critical Habitat (spawning or not be a compared to the | rapezoidal Chann Dugout Potal Wildlife Obser | endwater | Grassed Swale_Dominated by Aquetc. | Bu | A |

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| 10 | |
|----|--|
| | |
| | |

WIND FARM WATERBODY RAPID ASSESSMENT FORM Halley Dan

| Stantec | | | | 00 | 771 | (,) | 2 |
|--|-----------------|------------|--------------|-----------------|--------------|--|--------------|
| Station # 427 | | Proie | ct Name | Cir | | 00 | |
| Watercourse Name Malley So | WW | Proie | ct # 60 | 090070 | 79 | | |
| Photos 860-a01 | | | | S FIX | | | |
| Date Dct. 4 2012- | # 0 M P 1 | Time | 10:5 | 0 | | | 81 1 1 1 1 |
| Weather conditions in previous 2 | 4 hrs | | 0 | | | 5 | |
| GPS Coordinates (Zone) 17 T | E 4219 | 890 | | V 477 | 3510 | Datum | |
| Descriptive Location Kinnau | | hoto | wa | live | | | |
| | P. C. Maria | | a se mala | | | | 11/0/15 |
| Water Quality | | 1 | W | | | | |
| Dissolved Oxygen (mg/L) | DH | \ V | Condu | ctivity (µS/c | m) | | |
| Water Temperature (°C) | p | AirTe | emperature | | | Mary and S | |
| Time in situ measurements taker | 10 20 20 | All IC | Alporator | 3 (0) | | | 102 |
| Time in situ measurements taker | | | Saran Bart | | | T 10 100 | S = 1,18 |
| Watercourse Dimensions & Mo | | | | | | | |
| Mean Watercourse Width | (m) | | | Depth | | | |
| Mean Bankfull Width 5 | (m) | | Water De | epth | | (cm) | o. =1 . |
| % Riffle | | Pool | | % R | un | Eng- | _% Flat |
| Evidence of eroding banks, Com | ments on bank | stability | A Total | | | | Q HERAII |
| stable a veg | | | | | | | |
| Substrate (% cover) | | | | | | The state of the s | |
| Bedrock | Cobble | 40 | Sand | 20 | Silt | N | /luck |
| Boulder | Gravel | 40 | Clay | ** I = 43 = 7 F | Marl | | etritus |
| | | | | | | | 206 |
| In-water Cover | | | | | | 10.75 | |
| Cover Types Present (circle): | Undercut | Banks | Deep Po | | ercress | Aquat | ic Veg |
| Overhanging Vegetation Wo | oody Debris | Bould | ler (| Other | | | |
| Riparian Zone | | | | | | | |
| Riparian Cover (% of watercours | se shaded, dom | ninant veg | etation, ma | ature or ear | tv success | ional) | |
| 40°10 ASh. An | ale Shr | Jb1 | Porbl | grov | de | 32412 | |
| Adjacent Land Use | | / | | 0 | | | |
| Ada | | | | | | | |
| O Company of the Comp | | | | | | | Pala V |
| Fish Habitat Potential | | | | | | | |
| Critical Habitat (spawning or nurs | sery areas, gro | undwater | upwellings | 3) | | | |
| mre | | | | | | | |
| Migratory Obstructions (seasona | I, permanent) | | | | | | |
| Note on fish the actions | | | | | | | |
| Note any fish observations | | | | | | | |
| | | | / | | | | |
| Waterbody Notes | | / | 0 | d O | | December of Title | |
| Natural Watercourse Tra | apezoldal Char | nnei | | sed Swale_ | | | |
| Surficial Drainage (i.e. furrows)_ | Dugout | Pona | | ated by Aqu | latic veg_ | | Dry <u> </u> |
| Other Habitat Notes, Incidenta | l Wildlife Obs | ervations. | etc. | | | - Y | |
| | | | | | | | E) |
| | | | Ext. Alexand | 1 - Tabumana | | | - 51/FB" |
| | | | | | | | |
| | | | | | od V Such de | | |
| 10/ | | | | | | | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM WB

| | Station #52-1 | | | / 1 / | | |
|--------------|--|--|-------------------------------|---------------|----------|-----------|
| | | | Project Name | C.P. | | |
| | Watercourse Name Jakhou | | Project # 160 | 960709 | And "T | 11 |
| | Photos 639=1d 640=500th | 641= North | Field Staff N | | | |
| | Date 2012 06 06 | | Time 16:27 | | QUI PL | |
| | Weather conditions in previous 2 | 24 hrs No | precio. | | 11 0 0 0 | |
| | GPS Coordinates (Zone) 171 | E 4210 |) 40 N | 4771552 | Datum | WAY |
| | Descriptive Location On E | lorton Rd. | on east side. | Runs parallel | ~ 200 | m |
| | south of Town | send Line. | | | | i Massile |
| - 1 | Water Quality | | | | | |
| | Dissolved Oxygen (mg/L) | Ha | Conduct | ivity (uS/cm) | | |
| | Water Temperature (°C) | | Air Temperature | (°C) | 47.0 | |
| | Time in situ measurements taker | | 74i Tomperature | | | |
| | Watercourse Dimensions & Mo | ornhology | | | | |
| | Mean Watercourse Width 2.0 | (m) | Maximum Bool D | | | |
| | Mean Bankfull Width 3.0 | (III) | Maan Water Door | epth N/A | (cm) | |
| | % Riffle | | | th NA | (cm) | |
| | | | | | | % |
| | Evidence of eroding banks, Com | ments on bank | stability . <u>~Note.</u> | well yested | | |
| | Substrate (% cover) | | | 36 | | W.A. |
| | Bedrock | Cobble | Sand | Silt | | Marie |
| | Boulder | | Clay | Siit | | Muck |
| ķ. | | Olavei | Clay | . Man | | Detri |
| (| Cover Types Present (circle): Overhanging Vegetation Wo | ody Debris | anks Deep Pool Boulder Ott | | Aque | tic V |
| F | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse | ody Debris | Boulder Ott | ner | | atic Ve |
| (F | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse 5% Shrobb (2 mall) | ody Debris | Boulder Ott | ner | | itic V |
| F | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse Shobb (small) Adiacent Land Use | ody Debris e shaded, domir | Boulder Ott | ner | | itic V |
| F | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse 5% Shrobb (2 mall) | ody Debris e shaded, domir | Boulder Ott | ner | | itic Vo |
| F | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse Shobb (small) Adjacent Land Use GGICULTURE Earlion | ody Debris e shaded, domir | Boulder Ott | ner | | itic V |
| () F 7 | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse Sho Shrobs (small) Adjacent Land Use GGILCULTURE Earliton Fish Habitat Potential | ody Debris e shaded, domir) ુલ્ફ્ક્ટ્રિક ્રિઝે | Boulder Oth | ner | | itic V |
| () F 7 | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse Shrobb (amail) Adjacent Land Use Agriculture, Earlton Fish Habitat Potential Critical Habitat (spawning or nurs | ody Debris e shaded, domir) ુલ્ફ્ક્ટ્રિક ્રિઝે | Boulder Oth | ner | | itic V |
| F C | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse Shrobb (amail) Adjacent Land Use Agriculture Earlton Fish Habitat Potential Critical Habitat (spawning or nurs | e shaded, domir) ુલક્ક્રિક ૧૧૦ ૧૧૦ ભોતા | Boulder Oth | ner | | itic Vo |
| F F C | Riparian Zone Riparian Cover (% of watercourse Signature | e shaded, domir e shaded, domir e shaded, domir | Boulder Oth | ner | | itic Vi |
| | Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercourse Shrobb (amail) Adjacent Land Use Agriculture Earlton Fish Habitat Potential Critical Habitat (spawning or nurs | e shaded, domir e shaded, domir e shaded, domir | Boulder Oth | ner | | itic V |

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McCallum Drain 51-3

RESSMENT FORM WB



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Station # 51-3 | | Project Name | | | |
|--|---|--|-----------------------|-------------|---------------------|
| Watercourse Name <u>Un Kno</u> | | Project # | 1619607 | | |
| Photos 636-id 637:015 63 | 8= 4/5 | Field Staff | NB,MI | | |
| Date 2012 06 06 | | Time 16: | 00 | | |
| Weather conditions in previous | | | | | |
| GPS Coordinates (Zone) /7 | T 1477 21 | 24 | 18E4210 | 56 | Datum NANS |
| Descriptive Location A+ a | corner of Elast | on Rd & To | ownsend | Line i | |
| SE colver. | | | | | |
| Water Quality | | | | | 1 W. 1. L. VCI |
| Dissolved Oxygen (mg/L) | pH_ | Cond | uctivity (µS | S/cm) VD0 | 1. He water to YSI |
| Water Temperature (°C) | | Air Temperatu | re (°C) | | |
| Time in situ measurements take | en | | | | |
| Watercourse Dimensions & N | lorphology | | | | |
| Mean Watercourse Width by | MERCHANIST STREET, AND ASSESSMENT OF THE STREET | Maximum Poo | l Depth | Dy | (cm) |
| Mean Bankfull Width ५. ४ | | Mean Water D | | 07 | _(cm) |
| % Riffle | % Pool | | | Run | % Fla |
| Evidence of eroding banks, Cor | | | I books. | | |
| | | | | | |
| Substrate (% cover) | | | | | |
| Bedrock | Cobble | Sand_ | 20 | Silt | Muck |
| Boulder | Gravel | Clay | 80 | Мал | Detritus |
| | | | | | RCG 97 pl |
| In water Caree | | | | | |
| In-water Cover | Hadassid Bast | | | | |
| Cover Types Present (circle): Overhanging Vegetation W | Undercut Bank oody Debris | | Pool Wa Other | atercress | Aquatic Veg |
| Cover Types Present (circle): | oody Debris | Boulder | Other | | Aquatic Veg |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount | oody Debris | Boulder | Other | | Aquatic Veg |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasons | rsery areas, groundwal, permanent) | Boulder t vegetation, m | Other | | Aquatic Veg |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasons | rsery areas, groundwal, permanent) | Boulder t vegetation, m | Other | | Aquatic Veg |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasons Why Note any fish observations Waterbody Notes Natural Watercourse Tra | rsery areas, groundwal, permanent) | Boulder t vegetation, m ater upwelling | othersature or eases) | arly succes | Aquatic Veg sional) |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasons Note any fish observations Waterbody Notes | rsery areas, groundwal, permanent) | Boulder t vegetation, m ater upwelling | othersature or eases) | arly succes | Aquatic Veg sional) |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasons Why Note any fish observations Waterbody Notes Natural Watercourse Tra | rsery areas, groundwal, permanent) apezoidal Channel Dugout Pond | Boulder t vegetation, m rater upwelling: Grass Domina | othersature or eases) | arly succes | Aquatic Veg sional) |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasona Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) | rsery areas, groundwal, permanent) apezoidal Channel Dugout Pond | Boulder t vegetation, m rater upwelling: Grass Domina | othersature or eases) | arly succes | Aquatic Veg sional) |
| Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nur Migratory Obstructions (seasona Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) | rsery areas, groundwal, permanent) apezoidal Channel Dugout Pond | Boulder t vegetation, m rater upwelling Grass Domina ons, etc. | Othersature or eases | arly succes | Aquatic Veg sional) |



RAPID ASSESSMENT

| FORM FOR AQUATIC HABITAT 15-1 |
|--|
| Project # 160960709 Field Staff KE + MF Date Now. 25 2011 Time 11:10 INC, 300 M RAD FOF DOLMASS |
| Air Temperature (°C) 4° |
| Maximum Pool Depth (cm) Mean Water Depth 5 (cm) LOO % Run % Flat k stability |
| Boulder UC Clay Cobble Marl Sand Detritus |
| Boulder 70 Clay Cobble Marl S0 Sand Detritus |
| Banks Deep Pool Vascular Plants Morraller Boulder Other |
| ninant vegetation, mature or early successional) |
| |
| oundwater upwellings) |

Page ___of__

| Water Ten | Oxygen (r | ma/1) 12.4 | | | | |
|--|---|--|---|--|---|---------------|
| Water Ten | mperature | | 12 | pH 8,15 C | and water it . (Olam | , one |
| | | ···g/ =/ | 1 2 | | onductivity (μS/cm rature (°C) | 1) 002 |
| | conditions | in previous 24 | 4 hrs | | A Drence | apt |
| Watercou | ırse Dime | nsions & Mo | rphology | | | |
| | tercourse \ | | (m) | Maximum I | Pool Depth 🗇 | (cm |
| | kfull Width | 1 4 | (m) | Mean Wate | | (cm |
| % | | | % Pool | 100 % F | Run | % Flat |
| _our | of eroding | banks, Comm | | ank stability <u>S</u> | Hep, sligh | nt eros |
| Substrate | - Upstre | am (% cover) |) | | | |
| | drock | Silt | | Boulder | 40 Clay | Q Cob |
| Mu | ick | (OGrav | vel _ | Marl | Sand | Det |
| | - Downs | tream (% cov | ver) | | | |
| Da | | | | | | |
| 4041 | drock | Silt | | Boulder | Clay | Cob |
| Mu | drock | | vel _ | Boulder Marl | <u>/</u> Clay <u>≥</u> Sand | Cob |
| 4041 | drock ick | Silt | vel _ | | | |
| In-water C Cover Type | drock ick C over ies Presen | Silt One of the control of the cont | vel _ _ Undercu | Marl | Sand | Det |
| In-water C Cover Type | drock ick C over ies Presen | Silt | | Marl ut Banks Dee | Sand | |
| In-water Cover Type Over Riparian Z | drock lick Cover les Presen erhanging Zone | Silt One of the second | Undercu Woody I | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Det |
| In-water Cover Type Over Riparian Z | drock lick Cover les Presen erhanging Zone | Silt One of the second | Undercu Woody I | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Det |
| In-water Cover Type Over Riparian Z | drock lick Cover les Presen erhanging Zone | Silt One of the second | Undercu Woody I | Marl ut Banks Dee | Sand Proposition Proposition | Det |
| In-water Cover Type Over Riparian Z Riparian Cover Ups Dov | drock lick Cover les Presenterhanging Zone Cover (% of stream_ wnstream_ | Silt One of the second | Undercu Woody I | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Det |
| In-water Cover Type Over Riparian Z Riparian Cover Ups Down Adjacent Li | drock lock lock lock locy locy locy locy locy locy locy locy | Silt Grave It (circle): Vegetation f watercourse | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Det |
| In-water Cover Type Ove Riparian Z Riparian C Ups Dov Adjacent L | drock lick Cover les Present erhanging Zone Cover (% of stream_ wnstream_ and Use stream_ stream_ | Silt One of the second | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Det |
| In-water Cover Type Ove Riparian Z Riparian C Ups Dov Adjacent L | drock lock lock lock locy locy locy locy locy locy locy locy | Silt Grave It (circle): Vegetation f watercourse | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Detriblants M |
| In-water Cover Type Ove Riparian Z Riparian C Ups Dov Adjacent L | drock lick Cover les Present erhanging Zone Cover (% of stream_ wnstream_ and Use stream_ wnstream_ wnstream_ wnstream_ | Silt Grave It (circle): Vegetation f watercourse | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou | Sand Proposition Proposition | Det |
| Riparian C Ups Dov Adjacent L Ups Dov Fish Habit | drock lick Cover les Presenterhanging Zone Cover (% of stream_ wnstream_ and Use stream_ wnstream_ wnstream_ wnstream_ tat Potenti | Silt Official Silt Silt Fraction Silt Silt Fraction Fracti | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou pminant vegetation | Sand Pool Vasculder Other n, mature or early | Det |
| Riparian C Cover Type Ove Riparian C Ups Dov Adjacent L Ups Dov Fish Habit Critical Habit | drock lick Cover les Presenterhanging Zone Cover (% of stream_ wnstream_ and Use stream_ wnstream_ wnstream_ wnstream_ tat Potenti | Silt Official Silt Silt Fraction Fracti | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou | Sand Pool Vasculder Other n, mature or early | Det |
| Riparian Z Riparian C Ups Dov Adjacent L Ups Dov Fish Habit Critical Hab | drock lick Cover les Presen erhanging Zone Cover (% of stream wnstream and Use stream wnstream wnstream tat Potenti | Silt Official Silt Silt Fraction Fracti | Undercu Woody I shaded, do | Marl ut Banks Dee Debris Bou pminant vegetation | Sand Pool Vasculder Other n, mature or early | Det |
| Riparian Z Riparian C Ups Dov Adjacent L Ups Dov Fish Habit Critical Hab | drock lock lock lock lock locy locy locy locy locy locy locy locy | Silt Grave It (circle): Vegetation f watercourse A A A A ial whing or nurse | Undercu Woody I shaded, do Scatte Lot S | Marl ut Banks Dee Debris Bou pminant vegetation → ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ | Sand Pool Vasculder Other n, mature or early | Det |
| Riparian Cover Type Over Riparian Cover Riparian Co | drock lock lock lock lock locy locy locy locy locy locy locy locy | Silt Official Silt Silt Fraction Fracti | Undercu Woody I shaded, do Scatte Lot S | Marl ut Banks Dee Debris Bou pminant vegetation → ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ | Sand Pool Vasculder Other n, mature or early | Det |
| Riparian C Cover Type Ove Riparian C Ups Dov Adjacent L Ups Dov Fish Habit Critical Habit Ups Dov Migratory C Ups | drock lick Cover les Presenterhanging Zone Cover (% of stream_ wnstream_ wnstream_ tat Potential bitat (spawstream_ wnstream_ wnstream_ Cobstruction | Silt Grave It (circle): Vegetation f watercourse A A A A ial whing or nurse | Undercu Woody I shaded, do Scatte Lot S | Marl ut Banks Dee Debris Bou pminant vegetation → ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ | Sand Pool Vasculder Other n, mature or early | Det |

Field Notes QA/QCed by

Haney Grain 15-1

| Project Name | Station N | Number 15-1 |
|----------------------------------|------------------------------------|--|
| Project Number 1609601 | o 0 9 Pass No | . (if applicable) |
| Photos 493=12 494=1 | | yymmdd): 2012 06 04 |
| | edar Point Line - 300m p | |
| | | |
| UTM coordinates 475 | 11 482 | (Austr) |
| Fishing Method (circle one): | Backpack Boat | Unit Model/Make Le 12 - |
| Sampling Method (circle one): | even habitat trans | |
| Effort (Electrofishing Seconds): | 210 Number of Netters: | Number of Anodes: |
| Settings | AND A | The contract of the contract o |
| Frequency (Hz) 60 | Voltage (volts) 700 Current (Amps) | Power (Watts) |
| Station Information | | |
| Length of Stream Surveyed (m) | ~120 m | |
| Station Characteristics: | | Average: 0.75 |
| | | Average: 0.15 |
| | 5.50 b.20 | |
| Water Clarity/Colour: dec | | |
| Temperature (°C) 13.3 | | vity (uS/cm) 9// |
| | e Dissolved Oxy | ygen (mg/L) 9,95 |
| Species | Number of Fish | Comments (i.e. age, disease, etc): |
| | | |
| BRST | o im- | (3) |
| Crk chub | | 0 |
| | | |
| ar was Dave | | (1) |
| 3K. Nose Dace | | 0 |
| 3K. Nose Dace | | (D) |
| 3K. Nose Dace | | |
| 3K. Nose Dace | | |
| 3K. Nose Dace | | |
| | | |
| Note: Watercress | | |
| | | |
| | | |
| Not: Watercress | | |
| | | |
| | | |
| | | |
| | precent | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 12-3

Page of

| Project Station # 12 3 Photos Taken 9 GPS Coordinates Descriptive Locatio | | F | ield Staff K | 96076 2526 40F | eder i |
|---|--|-----------------|------------------|----------------------|-------------|
| Water Quality | | | | | |
| Dissolved Oxygen | | pH 81 | 17 Conduct | ivity (μS/cm) _ | 719 |
| Water Temperature | | A | ir Temperature | (°C) 6° | |
| Weather conditions | in previous 24 hrs | cold, su | nny | | |
| Watercourse Dime | | logy | | | - |
| Mean Watercourse | , -, -, -, \ | | laximum Pool D | | (cm) |
| Mean Bankfull Widt % Riffle | | n) M 5 Pool | lean Water Dep | | (cm) |
| Evidence of eroding | | on bank stahi | lity & Run | Ctable | Flat |
| | | , or barn olabi | | signa | 400 |
| Substrate - Upstra | eam (% cover) W | ide ul m | eg jassur | red | |
| Bedrock | Silt | | oulder 2 | 30 Clay | Cobb |
| Muck | Gravel | | lari | Sand | 70 Detri |
| Substrate - Downs | stream (% cover) (| darche in | I Neg. a | ssured | |
| Bedrock | Silt | B | oulder | O Clay | Cobb |
| Muck | Gravel | | larl | Sand S | O Detri |
| In-water Cover | | | | | water |
| Cover Types Prese | nt (circle): U | ndercut Banks | Deep Poo | l Vascular | Plants nig |
| Overhanging | The respondence of the same of | oody Debris | Boulder | Other | Tarres play |
| Riparian Zone | | minimal | | | |
| Riparian Cover (% o | of watercourse share | ded. dominant | vegetation, mati | ire or early sur | ccessional |
| Upstream | 5 lo noma | rtree | | are or earry suc | 20033IONA |
| Downstream | 15% hping | an trees |) | | |
| Adjacent Land Use | A | 1.11 | | | |
| Upstream Downstream | AS NE | C | | | |
| | NELLE WILLY REPORT | | | | |
| Fish Habitat Poten | Account of the Control of the Contro | | | | |
| Critical Habitat (spa Upstream | NONE . | eas, groundwa | iter upweilings) | | |
| Downstream | | und water | / nout | Qualer | ren |
| Migratory Obstruction | | | (II) | C VYANT / C | 10/5 |
| Upstream | do in a | mover | | | |
| Downstream | | | | | |
| Note any fish observ | vations NV | | | | |
| | | | 180 2 | | |
| Other Ushits 4 81.4 | s, incidental Wildl | ife Observation | ons, etc | | |
| Other maditat Note | 7 . 4 | | | | |
| - water (res) - slow flow 4h | 2 m all | Ra I mad | inused of |) | |

Field Notes QA/QCed by ___

Brush Drain 12-2

| Project Name | C.P. | | | S | tation Number | 12-2 | 12.1 HOLEUS |
|---|---|---|----------------|------------|--|--------------------------------|--|
| Project Number | 160960 | 709 | H COM SERVE | | ass No. (if applic | ARISON AND E | of the state of the |
| | 06 = id 50= | | 2 - 0/3 | | The state of the s | 2012 06 | 05 |
| Descriptive Location | | AND REAL PROPERTY OF THE PARTY | | | | Cedar Poin | 200 14 17 |
| UTM coordinates | 473.4 | 565 | easting | 417- | 83 | - northing | zone · <u>/ 7</u> - |
| Fishing Method (circle of Sampling Method (circle) | | Backpa | ack habitat | Boat | | el/Make spot | - \ |
| Effort (Electrofishing Se Settings | econds): / | 26 | Number of | Netters: | <u> </u> | Number of Anode | es: <u>1</u> |
| Frequency (Hz) 60 | <u> </u> | /oltage (volts) | 700 | Current (A | mps) | Power (Watts) | The second secon |
| Station Information | | | | | | | |
| Length of Stream Surve | ALL IN ASIA IS SELECTED. | ~ 40 | | | | | |
| Station Characteristics: | | Vidth (m): Depth (m): | | 50.7 | Average: | 0.07 | |
| | | | Hange 0 | 104 - 0.70 | Average. | 0.07 | |
| Mater Olevity (Colores | Control of the Contro | | | | | | |
| Water Clarity/Colour: | INVASIO IN CONTRACTOR OF THE PERSON OF THE P | tea | _ Wa | | if Measured (m/s | | Time 08:5 |
| Temperature (°C) | 13.30 | | - Wa | C | onductivity (uS/cn | n) 747 | Time 08:5 |
| | INVASIO IN CONTRACTOR OF THE PERSON OF THE P | | Wa | C | | n) 747 | Time 08:5 |
| Temperature (°C) pH | 13.30 | | | C | onductivity (uS/cn | m) 747 L) 7.74 | Time 08:5 |
| Temperature (°C) pH Catch Data | 13.30 5.06 | Number of | | C | onductivity (uS/cn | m) 747 L) 7.74 | 1 |
| Temperature (°C) pH Catch Data Species | 13.30 5.06 | Number of | Fish | C | onductivity (uS/cn | m) 747 L) 7.74 | 1 |
| Temperature (°C) pH Catch Data Species | 13.30 5.06 | Number of | Fish | C | onductivity (uS/cn | m) 747 L) 7.74 | 1 |
| Temperature (°C) pH Catch Data Species | 13.30 5.06 | Number of | Fish | C | onductivity (uS/cn | m) 747 L) 7.74 | 1 |
| Temperature (°C) pH Catch Data Species | 13.30 8.06 RRST YO | Number of | Fish ved- | Dissolv | onductivity (uS/cr | n) 747 L) 774 Comments (| Lo. ago, (disease, etc): |
| Temperature (°C) pH Catch Data Species | 13.30 8.06 3.85T YO | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cn | n) 747 L) 774 Comments (| Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish ved- | Dissolv | onductivity (uS/cr | n) 747 L) 774 Comments (| Lo. ago, (disease, etc): |
| Temperature (°C) pH Catch Data Species Nomerous Note: Ver | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |
| Temperature (°C) pH Catch Data Species Nomerous Note: Very | 13.30 3.06 3.06 3.06 3.06 4.10 | Number of y obse | Fish aved. | Dissolv | onductivity (uS/cr | (Comments of | Very |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT /2-

| Project | 18 | Project # 160960709 |
|--|--|---|
| Station # 12-1 | | |
| | 5-441 | Field Staff |
| Sold in the lateral control of the lateral co | | Date Nov. 25 2011 |
| GPS Coordinates _ | 7 4775090 4172 | |
| Descriptive Location | ed- Cedar Point | une, 500 m west of |
| Water Quality | | |
| Dissolved Oxygen (n | | |
| Water Temperature | | Air Temperature (°C) // |
| Weather conditions i | in previous 24 hrs | d, sunny |
| Watercourse Dimer Mean Watercourse V | nsions & Morphology | Maximum Bool Donth 20 (m) |
| Mean Bankfull Width | | Maximum Pool Depth 30 (cm) |
| % Riffle | (m) (0 0 % Pool | Mean Water Depth 20 (cm) |
| | banks, Comments on bar | We stability Run% Flat |
| S LA In I | le 4 1992 | in Stability |
| | | 1 eco malexim blu cul |
| | am (% cover) that | M WCE 14 CONTROLL & |
| Bedrock | Silt | BoulderClayCobbl |
| Muck | Gravel | MarlSand <u>30</u> Detrit |
| Substrate - Downst | tream (% cover) thick | astes immediately d/s then e |
| Bedrock | 20 Silt | Boulder 70 Clay Cobb |
| Muck | Gravel | Mari Sand Detrit |
| In-water Cover | | |
| m-water Cover Cover Types Present | t (circle): Undercut | Beete Deep Beet Marie 1 |
| Overhanging | The state of the s | |
| Overlanging | Vegetation Woody D | ebris Boulder Other |
| Riparian Zone | | |
| 1/14a11a11 ZU118 | watercourse shaded, do | minant vegetation, mature or early successional) |
| | 06 roman m | |
| Riparian Cover (% of Upstream 3 | 500,000 | |
| Riparian Cover (% of Upstream <u>3</u> Downstream_ | 2010 NOMAN Y | ees . |
| Riparian Cover (% of Upstream 3 | 50°10 opman to | |
| Riparian Cover (% of Upstream3 Downstream_ Adjacent Land Use Upstream | As Eelds | |
| Riparian Cover (% of Upstream_3 Downstream_ Adjacent Land Use | As helds | |
| Riparian Cover (% of Upstream_3 Downstream_ Adjacent Land Use Upstream_ Downstream_ | As helds | |
| Riparian Cover (% of Upstream_3 Downstream_ Adjacent Land Use Upstream_ Downstream_ | As helds | |
| Riparian Cover (% of Upstream_3 Downstream_ Adjacent Land Use Upstream_ Downstream_ Fish Habitat Potenti Critical Habitat (spaw | ial voling or pursery areas, gro | ouրdwatęr upwellings) / Ո |
| Riparian Cover (% of Upstream_3 Downstream_ Adjacent Land Use Upstream_ Downstream_ Fish Habitat Potenti Critical Habitat (spaw Upstream_ | ial voing or nursery areas, graphs of the source of the so | ouրdwatęr upwellings) / Ո |
| Riparian Cover (% of | ial vining or nursery areas, grand areas, gr | ouրdwatęr upwellings) / Ո |
| Riparian Cover (% of | ial vining or nursery areas, grander possible grander ns (seasonal, permanent) | oundwater upwellings) durite upwelling |
| Riparian Cover (% of | ial vining or nursery areas, grand areas, gr | oundwater upwellings) durite upwelling |
| Riparian Cover (% of | ial vining or nursery areas, graphs since grown ns (seasonal, permanent) | oundwater upwellings) durite upwelling |
| Riparian Cover (% of | ial vining or nursery areas, graphs since grown ns (seasonal, permanent) | oundwater upwellings) durite upwelling |
| Riparian Cover (% of | ial vining or nursery areas, graphics of the grown ns (seasonal, permanent) A D D D D D D D D D D D D D D D D D D | oundwater upwellings) waster upwelling er? |
| Riparian Cover (% of | ial vining or nursery areas, graphs of the grown ns (seasonal, permanent) ations none in finite of the grown ations none | oundwater upwellings) Marker upwellings Mer ? Bervations, etc. |
| Riparian Cover (% of | ial vining or nursery areas, graphs some grown ins (seasonal, permanent) ations nove ins Incidental Wildlife Obs | oundwater upwellings) Marker upwelling Mer? Bervations, etc. |
| Riparian Cover (% of | ial vining or nursery areas, graphs of the grown ns (seasonal, permanent) ations none in finite of the grown ations none | oundwater upwellings) New? Servations, etc. Cuess Cannel, but Epen 8 md/s |

Brown Dain 12-1

| Project Number 16096 | | _ Station | Number | [2 - 1 |
|---|-------------------|--|--|---------------------------------|
| | 0709 | Pass No | o. (if applicable) | L. Syl. Cole. House |
| | 1=uls 505-d/5 | er terminal and the second | THE RESERVE OF THE PARTY OF THE | 20 00 510 |
| | d. Cedar Point | - Rd - 500 | | |
| TM coordinates 4: | 7.5090 | 41726 | 3 • | erthing zone / 7 |
| ishing Method (circle one): ampling Method (circle one): | Backpack | | Unit Model/Make | pot) |
| ffort (Electrofishing Seconds): | 220 Nu | mber of Netters: | Numl | per of Anodes: / |
| requency (Hz) 60 | Voltage (volts) 2 | UO Current (Amps) | Powe | r (Watts) |
| tation information | | | | |
| ength of Stream Surveyed (m) | ~ 150 | | | |
| ation Characteristics: | | nge 0.3.0.7 | Average: | 5 |
| | | nge 0.05-0.10 | | 0.07 |
| | | | | |
| ater Clarity/Colour: | ea . | Water Velocity if Mea | | N/A Time 08: |
| | 2.65 | Conduct | ivity (uS/cm) | 752 |
| | 08 | Dissolved Ox | ygen (mg/L) | 812 |
| atch Data | | | | |
| pecles | Number of Fish | | C | omments (i.e. age, disease, etc |
| RST | | | <u>ව</u> | |
| | | | | |
| 1. 1. () | F BRST V | 104 observ | red the | oughout |
| Note: Schools a | thick w a | quatic ves. | Hardt | fish /see |
| Note: Schools o | TILL M | D O | THAT US IS | |
| Note: Schools of Channel | thick wa | | | |
| Note: Schools of Channel | tod | | | |
| Note: Schools of Channel | | | | |
| Note: Schools of Channel | | | | |
| Note: Schools of Channel | | | | |
| Note: Schools of Channel | | | | |
| Note: Schools of Channel | | | | |
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| Note: Schools of Channel | | | | |



Brush Drain WIND FARM WATERBODY RAPID ASSESSMENT FORM WB

| Station # 14-3 | | Project Name | 0.0 | |
|---|---|--|------------------------------------|---|
| Watercourse Name wook Cree | E . | Project # 100 | | |
| Photos | | Field Staff | THIK | |
| Date July 4 20 | 12 | Time BUL | 0 | |
| Weather conditions in previous | 24 hrs T-Ste | | | |
| | E 41670 | | 4775730 Da | tum/17/4083 |
| Descriptive Location 800 | m west o | A FULL K | a | |
| | | | | <u>/ </u> |
| Water Quality | | 1 - / | du reac | 1 excep |
| Dissolved Oxygen (mg/L) | 102 04 | 8,03 conduct | ivity (µS/gm) | ice prob |
| Water Temperature (°C) | | Air Temperature | (°C) 837 | g - 1000 |
| Time in situ measurements tak | | All Temperature | (0) | |
| Time in situ measurements tak | | | | |
| Watercourse Dimensions & I | | | | |
| Mean Watercourse Width 2 | <u>'5 (m)</u> | Maximum Pool D | epth <u>20</u> (cn | n) |
| Mean Bankfull Width | (m) | Mean Water Dep | th $2P$ (cn | n) |
| % Riffle | 100 % P | | % Run | % Flat |
| Evidence of eroding banks, Co | mments on bank s | stability | | |
| stable i veg | | | | |
| Substrate (% cover) | | | | |
| Bedrock | Cobble | 40 Sand | Silt | Muck |
| Boulder | Gravel | (60 Clay | Siit Marl | Detritus |
| boulde! | araver | Olay | NICE INC. | 200111111 |
| In-water Cover | | | I | V9 parla |
| Cover Types Present (circle): | Undercut B | anks Deep Poo | Watercress A | Aduatic Ved |
| Overhanging Vegetation V | | | ther | Quita s |
| | | | | |
| Riparian Zone | | | | |
| Riparian Cover (% of watercou | ırse shaded, domir | nant vegetation, mat | ure or early succession | al) Pro |
| | | | | <u>KCC</u> |
| Adjacent Land Use | | | | |
| | | | | |
| Flob Hobitet Detected | | | | |
| Fish Habitat Potential | | | | |
| Critical Habitat (spawning or number of the Section of | disery areas, grou | nuwater upwellings) | materiouste | du |
| Microstony Chatructions (2000) | not normanant) | 1021-01 | The action | |
| Migratory edistructions (season | nai, permanent) | | | |
| Note any fish observations | | | | |
| INULE ALLY HALL ODSELVATIONS | | The second secon | | |
| Cathood book s | tickle hack | MARCHIER CMIL | | |
| Note any fish observations Fath Pad , brook 8 | Time back, | crek chub | | |
| Waterbody Notes | | | | |
| Waterbody Notes | | | | ed Tile |
| Waterbody Notes | | | | ed Tile |
| | | | | ed Tile |
| Waterbody Notes | Frapezoidal Chann) Dugout Po | gel Grasse ond Dominate | od Swale Buri ed by Aquatic Veg | |
| Waterbody Notes Natural Watercourse | Frapezoidal Chann) Dugout Po | gel Grasse ond Dominate | od Swale Buri ed by Aquatic Veg | |
| Waterbody Notes Natural Watercourse | Frapezoidal Chann) Dugout Po | gel Grasse ond Dominate | od Swale Buri ed by Aquatic Veg | |
| Waterbody Notes Natural Watercourse | Frapezoidal Chann) Dugout Po | gel Grasse ond Dominate | od Swale Buri ed by Aquatic Veg | |
| Waterbody Notes Natural Watercourse | Frapezoidal Chann) Dugout Po tal Wildlife Obser | grasse Dominate Dominate Cond | od Swale Buri ed by Aquatic Veg | |
| Waterbody Notes Natural Watercourse | Frapezoidal Chann) Dugout Po tal Wildlife Obser | gel Grasse ond Dominate | od Swale Buri ed by Aquatic Veg | |

Brush Drain 14-3

| | | Fishing Ro | ecord and | Catch Results | (passive collection | on methods) Page(of |
|------------------------|---------------------------------------|-----------------|------------|---|------------------------|---|
| Project Number | er) (06 | 29607 | 99 | | Station Number | 14-3 |
| Project Name: | | P | | | Lift / Haul / Pass No. | |
| Waterbody Na | | | | | Date (yyyymmdd): | July 4 2012 |
| Field Staff: | KE | torc | | | | <u> </u> |
| Fishing Metho | d (check one) an | d Gear Specs: | | Trap Net Hoop Net Minnow Trap Other (specify) | dip net | Sizes: |
| Descriptive Lo | cation of Station | 800 | mu | est of | fuller R | d |
| UTM Coordina | ales: | Zone V7 | Easting | 416799 | Northing 4 | 1775730 |
| SET: Date: | | | LIFT: Date | | Total Netting Hours | (approx.) |
| Time: | | | Time: | | | 3 dipoet ban |
| Supporting N Depth (m) | (m): leasurements (r Temp. (°C) | ecorded at time | | Min: Cond. (µS/cm) | 7:14 | _3 dip net hau Already efshee @ 12-1 |
| Deput (III) | 20.42 | 1.62 | 8,03 | 837 | 111116 () 1 2 (| |
| | | | | | | tch Data on Separate Sheet?: Y/IC Measurements on Separate Sheet? Y/IC |
| Catch Data | | | | | | |
| Mesh Size | Species | | Number | | | Comments (i.e. age, disease, etc.) |
| | Fathead | minnoi | 5 30 | 5 | | Jan. |
| | Brook St | ickleka | 10 10 | Os possibil | y 10,005. | dur 2 404 |
| | Creek | chub | 39 | 5 | | A |
| | | | | | | |



Field Notes Authored by N. R. A.

WIND FARM WATERBODY RAPID ASSESSMENT FORM

WB 12-3

Brush brain Project Name (Par 10) 17 Station # \2-Watercourse Name Brush Ivan Project # 1609 6010 Photos 1/2/4 1/22 Field Staff MR Time Bil Date 1863 12 Weather conditions in previous 24 hrs (a)n- lastove. GPS Coordinates (Zone)0416975 E 4775312 Datum Descriptive Location contline, Just welfor **Water Quality** Dissolved Oxygen (mg/L) 9.68 pH 7,83 Conductivity (μS/cm) 525 Air Temperature (°C) 11°C Water Temperature (°C) __ Time in situ measurements taken 1311 Watercourse Dimensions & Morphology Maximum Pool Depth 40 Mean Watercourse Width 20 (m) Mean Water Depth 20 (m) Mean Bankfull Width & % Run % Flat % Pool % Riffle Evidence of eroding banks, Comments on bank stability Stell hast less that I Substrate (% cover) Muck Sand Cobble Bedrock **Detritus** Boulder Gravel Clay **In-water Cover** Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg (Woody Debris) Boulder Other Overhanging Vegetation Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 10% Rlow ash. How though Adjacent Land Use **Fish Habitat Potential** Critical Habitat (spawning or nursery areas, groundwater upwellings) Snar Migratory Obstructions (seasonal, permanent) Note any fish observations None **Waterbody Notes** Natural Watercourse____ Trapezoidal Channel V Grassed Swale Buried Tile_ Dominated by Aquatic Veg____ Surficial Drainage (i.e. furrows) Dugout Pond Other Habitat Notes, Incidental Wildlife Observations, etc.

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Field Notes QA/QCed by _

South Boundary Dain 512
SSESSMENT FORM

WB



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Descriptive Location | |
|--|--|
| Photos 633 id 634 is 634 is 635 id 634 is 635 id 634 is 655 id 635 id 63 | on |
| Date | on |
| GPS Coordinates (Zone) Descriptive Location Townsend Line ~ 15D west of Kinnaird Rd South Side along (d. Connects with 51-1 Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width βγ (m) Mean Bankfull Width Mean Water Depth | on |
| Descriptive Location Townsend Line — 150 West of Kinnaird Rd South Side along (d. Connects with 51-1 Water Quality Dissolved Oxygen (mg/L) — pH — Conductivity (μS/cm) Too day Water Temperature (°C) — Air Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width Page (m) Maximum Pool Depth — (m) Mean Bankfull Width — (m) Mean Water Depth — (m) | on |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width Pro (m) Mean Bankfull Width Mean Water Depth | |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width Pro (m) Mean Bankfull Width Mean Water Depth | 49 X2t |
| Watercourse Dimensions & Morphology Mean Watercourse Width (m) Maximum Pool Depth (m) Mean Water Depth (m) Mean Water Depth (m) | , 40 X2t |
| Watercourse Dimensions & Morphology Mean Watercourse Width $\frac{D}{2}$ (m) Mean Bankfull Width $\frac{D}{2}$ (m) Mean Water Depth (m) | 40 X2t |
| Watercourse Dimensions & Morphology Mean Watercourse Width $\frac{p_{\gamma}}{q_{i,b}}$ (m) Mean Bankfull Width (m) Mean Water Depth (m) | |
| Watercourse Dimensions & Morphology Mean Watercourse Width $\frac{p_{\uparrow \uparrow}}{Q_{\downarrow , b}}$ (m) Mean Bankfull Width (m) Mean Water Depth (m) | |
| Mean Watercourse Width (m) Maximum Pool Depth (m) Mean Water Depth (m) | |
| Mean Watercourse Width ρ_{γ} (m) Maximum Pool Depth (m) Mean Water Depth (m) | |
| Mean Bankfull Width 4,0 (m) Mean Water Depth | (cm) |
| | Paragraphy Cartholic Indicators Commission of Commission Co. |
| | % Flat |
| Evidence of eroding banks, Comments on bank stability | |
| 요즘 선생님 (1995년) 12 전 12 | |
| Substrate (% cover) | |
| BedrockCobbleSand20 Silt | Muck |
| Boulder Gravel Clay 80 Mari | Detritus |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early succession of the state of the | onal) |
| Hojaceni Land Ose | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) | |
| Uy | |
| lote any fish observations | |
| Note any fish observations | |
| | |
| Vaterbody Notes | |
| Vaterbody Notes | ried Tile |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Bu | ried Tile |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Bustificial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg | _ Dry |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Busticial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg | Dry |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Bu | |
| Vaterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Busting Distriction | _ Dry |
| Vaterbody Notes latural Watercourse Trapezoidal Channel Grassed Swale Bustificial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM

WB

| and the State of t | | Directors A |) | P. | |
|--|----------------------------|-----------------|---------------|-------------------------|--------------------|
| Station # 6 \ Y Watercourse Name mcallum + 5 | 30 malor | Project Project | | 600709 | |
| Photos | 1 | | aff KET | | |
| Date July 4 2012 | | Time | :30pm | | TING YOU THE STEEL |
| Weather conditions in previous 24 hrs | T-RAO | | | unny | |
| GPS Coordinates (Zone) F | 4210 | 09 | | | Datum N/10 83 |
| Descriptive Location 900 - Waster Kinn | and Rd 2 | 250 m N | Joh Pawks | | |
| | | | | | |
| Water Quality | | | | de | |
| Dissolved Oxygen (mg/L) | _ № | | Conductivity | (µS/cm) | |
| Water Temperature (°C) | | | perature (°C) | | |
| Time in situ measurements taken | | | | | |
| Watercourse Dimensions & Morpholo | oav | \ / | | | |
| Mean Watercourse Width (m | | Maximu | m Pool Dept | 1 | _(cm) |
| Mean Bankfull Width 3:5 (m | | | ater Depth_ | | _(cm) |
| % Riffle | % Poo | | arci popui_ | % Run | _(011) % Fla |
| Evidence of eroding banks, Comments | | | | | |
| | | / | | | |
| Substrate (% cover) | | | | | |
| | bble | 20 5 | Sand | Silt | Muck |
| | avel | 800 | Clay | Marl | Detritus |
| Cover Types Present (circle): Un Overhanging Vegetation Woody De Riparian Zone | ebris | Boulder | Other | | Aquatic Veg |
| Riparian Cover (% of watercourse shad | ed, domina | nt vegeta | tion, mature | or early succes | sional) |
| 20% War Nape | in su | muy | Shru | ns ex | |
| Adjacent Land Use | | | | | |
| /// | | | | | |
| Fish Habitat Potential Critical Habitat (spawning or nursery are | eas, ground | lwater up | wellings) | | |
| Migratory Obstructions (seasonal, perm | OVER TWO IS NOT THE OWNER. | | | | |
| Bloke a field of a constitute | | | | | |
| Waterbody Notes | | / | | | |
| Natural Watercourse Trapezoid Surficial Drainage (i.e. furrows) D | | | | wale oy Aquatic Veg_ | Buried TileDry |
| Other Habitat Notes, incidental Wildli | fe Observa | | c. | 4 McCa | llum Dra |
| | | | | | |
| | | | TK | | |

51-1 South Bonday Black - 1 WB



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Station # 5)- | | |
|--|--|-----------------------------|
| | Project Name Ceder Por | wh. |
| Vatercourse Name South Boundary Dyam-1 | Project # 16096001 | |
| Photos 631-632 | Field Staff More Foodla, A | Jaffan Buriett |
| 2010 (01/01 | Time (5.44) | |
| Weather conditions in previous 24 hrs Opp | | |
| GPS Coordinates (Zone) 17T E 421700 | N 4771963 | Datum NAPS |
| Weather conditions in previous 24 hrs Oppt GPS Coordinates (Zone) 177 E 421700 Descriptive Location Toward Lie 180 m west all | - kinnaid Kd on South sid | e of Rd |
| | | |
| Water Quality | | Dry |
| Dissolved Oxygen (mg/L)pH_ | Conductivity (μS/cr | n) |
| Water Temperature (°C) | Air Temperature (°C) | |
| Time in situ measurements taken | | |
| Watercourse Dimensions & Morphology | | |
| Mean Watercourse Width 07 (m) | Maximum Pool Depth # | <u>^7 (cm)</u> |
| Mean Bankfull Width 2.0 (m) | Mean Water Depth | ý (cm) |
| % Riffle % Po | ool% Ru | in% Flat |
| Evidence of eroding banks, Comments on bank s | tability | |
| | | |
| Substrate (% cover) | Seed 20 | Silt Muck |
| Bedrock Cobble | Sano. | |
| Boulder Gravel | Clay 80 | Marl Detritus |
| Overhanging Vegetation Woody Debris Riparian Zone | | |
| Riparian Cover (% of watercourse shaded, domin | ant vegetation, mature or earl | y successional) |
| 10% party open - seatered 1/105, | | |
| Adjacent Land Use | | |
| //4 | | |
| | | |
| | | |
| | ndwater unwellings) | |
| | ndwater upwellings) | |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, grour Migratory Obstructions (seasonal, permanent) | | |
| Critical Habitat (spawning or nursery areas, grour Migratory Obstructions (seasonal, permanent) | ndwater upwellings) | |
| Critical Habitat (spawning or nursery areas, grour Migratory Obstructions (seasonal, permanent) Note any fish observations | | |
| Critical Habitat (spawning or nursery areas, ground Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes | | |
| Critical Habitat (spawning or nursery areas, ground Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel | el Grassed Swale_ | Buried Tile |
| Critical Habitat (spawning or nursery areas, ground Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel | el Grassed Swale_ | Buried Tile |
| Critical Habitat (spawning or nursery areas, grour Migratory Obstructions (seasonal, permanent) Note any fish observations | el Grassed Swale_ ond Dominated by Aqua | Buried Tile atic Veg Dry |
| Critical Habitat (spawning or nursery areas, ground Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Po | el Grassed Swale_ ond Dominated by Aqua | Buried Tile atic Veg Dry |
| Critical Habitat (spawning or nursery areas, ground Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Possible Course (i.e. furrows) | el Grassed Swale_ ond Dominated by Aqua | Buried Tile atic Veg Dry |

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WIND FARM WATERBODY RAPID ASSESSMENT FORM

South Boundary Wram - 2 NWB 51-5

| Stantec | 2 L |
|--|--|
| Station # 51-5 | Project Name Cedar Point Project # 16096 0709 |
| Watercourse Name 50 of Boundary Dran-2 | Project # 160960709 Field Staff Mac Farell - Nath Burnett |
| Photos — | Field Staff has Farely - Nathan Burnett |
| Date 2012/06/06 | Time 15:55 |
| tat itt i i i i i i i i i i i i i i i i | nu 🛨 . |
| GPS Coordinates (Zone) 177 E 4214 | 190 N 4772014 Datum NA083 |
| Descriptive Location 350 m wester kinn | 490 N 4772014 Datum NAO83 und Kd., South of Townsed Line |
| | 7,64 |
| Water Quality | [[] [[] [[] [] [[] [[] [] [] [[] [] [] [|
| Dissolved Oxygen (mg/L) p | HConductivity (µS/cm) |
| Water Temperature (°C) | Air Temperature (°C) |
| Time in situ measurements taken | |
| Watercourse Dimensions & Morphology | Maximum Pool-Denth (cm) Tried |
| Mean Watercourse Width(m) | THE ANTI-OCCUPATION OF THE PROPERTY OF THE PRO |
| Mean Bankfull Width (m) | Mean Water Depth(cm) |
| | 6 Pool% Run% Flat |
| Evidence of eroding banks, Comments on bar | nk stability |
| Substrate (% cover) | |
| Bedrock Cobble_ | Sand Silt Muck |
| Boulder Gravel _ | |
| | |
| In-water Cover | Annalia Van |
| Cover Types Present (circle): Undercur | t Banks Deep Pool Watercress Aquatic Veg |
| Overhanging Vegetation Woody Debris | Boulder Other |
| Riparian Zone | |
| Rinarian Cover (% of watercourse shaded, do | minant vegetation, mature or early successional) |
| The analysis of the analysis o | |
| Adjacent Land Use | |
| Agreement | |
| | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, gr | roundwater upwellings) |
| now | |
| Migratory Obstructions (seasonal, permanent) | |
| Note any fish observations | |
| | |
| Waterbody Notes | |
| Natural Watercourse Trapezoidal Cha | annel Grassed Swale Buried Tile |
| Surficial Drainage (i.e. furrows) Dugou | t Pond Dominated by Aquatic Veg Dry |
| | CA - Cold |
| Other Habitat Notes, Incidental Wildlife Ob | servations, etc. |
| | |
| | |
| | |
| Field Notes Authored by Field | d Notes QA/QCed by |



Field Notes Authored by

James Creek Wrain

| RAPID ASSESSMENT FORM FOR AQUATIC HABITAT | 5 |
|--|------|
| Stantec | NE |
| Project Project # 169960709 Station # 13-1 Field Staff KE+M= Photos Taken 469-468 Descriptive Location Lakeshave Rd 400 m who for Vance | - Dr |
| Vater Quality Dissolved Oxygen (mg/L) 12.72 pH 8.14 Conductivity (μS/cm) 706 Vater Temperature (°C) 7.25 Air Temperature (°C) 6 Veather conditions in previous 24 hrs Cold + SWM | |
| Watercourse Dimensions & Morphology Mean Watercourse Width 5 (m) Maximum Pool Depth 5 (cm) Mean Bankfull Width 6 (m) Mean Water Depth 6 (cm) Wean Riffle 6 Pool 6 Run 6 Flat Widence of eroding banks, Comments on bank stability 6 A Decimal St | |
| Bedrock Silt Boulder Colay Cobble Muck Gravel Marl Sand | |
| ubstrate - Downstream (% cover) thick cathouls Bedrock Silt Boulder Clay Cobble Muck Gravel Marl Sand Detritus | |
| n-water Cover over Types Present (circle): Undercut Banks Deep Pool Vas cular Pla nts Overhanging Vegetation Woody Debris Boulder Other | als |
| iparian Zone iparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream Downstream Upstream Upstream Downstream Downstream | |
| ish Habitat Potential ritical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream igratory Obstructions (seasonal, permanent) Upstream | |
| Downstreamote any fish observations | |
| ther Habitat Notes, Incidental Wildlife Observations, etc. tile dain inputs valercress 10 m up takeshore (South side), m de la laborhore (South side), m de la |) ru |

Field Notes QA/QCed by ___

Page of

Jams Creek Dirain

| Project Name C.P. | | | Station Number | er)2-[| Table Committee |
|--|--|-------------------------------|--|---|-----------------|
| Project Number 160960 | 1709 | ny amandron'i | Pass No. (if ag | oplicable) / | A Language |
| Approximate to produce the control of the product of the control o | -d/5 502= | 1/5 | | ndd): 2012 66 | 04 |
| | to the College of the | | n west of | | |
| UTM coordinates 47: | 77015 | easting | 415351 | nerthing | zone 17-T |
| Fishing Method (circle one): Sampling Method (circle one): | Backp | habitat | Boat Unit M transect | Model/Make LR | 12 |
| Effort (Electrofishing Seconds): Settings | ~60 | Number of N | letters:t | Number of Anode | 38: <u>Ī</u> |
| Frequency (Hz) 60 | Voltage (volts) | 700 | Current (Amps) | Power (Watts) | |
| Station Information | | | | | |
| ength of Stream Surveyed (m) | Row C- 4.0 m | nuls + alk | | | |
| Station Characteristics: | Width (m): | and the state of the state of | | | |
| | TTRACT (116). | Hange 0,5 | - b. Average | ge: 0.6 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): | Range o.s | | ge: 6 12 (m/s): 4/A S/cm) / 2\[\frac{17}{2} | Time 16:50 |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a (alau?d | Range but | Average Average For Velocity if Measured Conductivity (u. | ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | Time 16:50 |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a Calpuled 28 | Range but | Average Average For Velocity if Measured Conductivity (u. | ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range but | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |
| Temperature (°C) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Depth (m): a coloured 89 .,22 Number of | Range bild | er Velocity if Measured Conductivity (use Dissolved Oxygen (| ge: 6 12 (m/s): 6/A S/cm) / 8/17 mg/L) 10.83 | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

James Creek Drain

| Project Station # 14-1 Photos Taken 449-453. | Project # 1009 6 0 7 0 9 Field Staff KC + WF Date Nov. 25 2911 |
|---|---|
| GPS Coordinates 17 477 6511 417735 Descriptive Location Faller Rd 2 | Time 12:45 pm 50 m South of Pr |
| Water Quality | 760 |
| Water Temperature (°C) 8 75 Weather conditions in previous 24 hrs | |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width \(\sqrt{m} \) Mean Bankfull Width \(\sqrt{m} \) \[\sqrt{m} \) \[\sqrt{Riffle} \(\sqrt{m} \) \[\sqrt{m} \) | Maximum Pool Depth (5 (c) Mean Water Depth 7 (c) % Flat |
| Evidence of eroding banks, Comments on bank | |
| Substrate - Upstream (% cover) thick u | 1 RCG |
| BedrockSilt Muck Gravel | BoulderClayC |
| | |
| Substrate – Downstream (% cover) ———————————————————————————————————— | L WI RCG Boulder 20 Clay C |
| MuckGravel | MarlSand _SO D |
| In-water Cover | |
| Cover Types Present (circle): Undercut B Overhanging-Vegetation Woody De | Market State Committee of the Committee |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domi | inant vegetation, mature or early succession |
| Downstream 20° 10 noman | tiels |
| Adjacent Land Use | |
| Downstream 10 helds | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, grou | undwater upwellings) |
| Upstream 1010 | |
| | |
| Migratory Obstructions (seasonal, permanent) | ev 7 |
| Upstream An in Summ | |
| Upstream ON SUMA | |
| Upstream An in Summ | |
| Upstream ON SUMA | rvations, etc. |

James Creek Drain 14-

| Project Name < | C.P. | | Station Number _ | 14-1 | |
|--|--|-----------------|--|------------------------------------|----------------------|
| Project Number 160 | 960709 | | Pass No. (if applica | able) | C. The second |
| A THE RESIDENCE AND A SECOND CONTRACTOR OF THE PARTY OF T | =id Sio =uls | 511=0/5 | Date (yyyymmdd): | 2012 06 | 05 |
| | | | m south. | | |
| | | | | NE WALL WALL OF LAND | manu datev ga |
| UTM coordinates | 4776511 | - easting | 417835 | northing Fasol | zone />T |
| Fishing Method (circle one) | : B | ackpack Bo | at Unit Mode | | |
| Sampling Method (circle on | e): even | habitat | transect and | spot . | |
| Effort (Electrofishing Secon | ds): /// | Number of Nette | ers: | Number of Anode | s: / |
| Settings | | | | | |
| Frequency (Hz) 60 | Voltage (vo | olts): 700 Cu | rrent (Amps) | Power (Watts) | _ |
| Station Information | | | | | |
| Length of Stream Surveyed | (m) ~ 60 | | | | |
| Station Characteristics: | Width (m): | Range 0.40 | -0.50 Average: | 0.45 | |
| | Depth (m): | Range 0.03 | -0.05 Average: | 0.04 | |
| Vater Clarity/Colour: | tea colour | Water | Velocity if Measured (m/s | s): <u>N/A</u> | Time 09:2 |
| Water Clarity/Colour: Temperature (°C) pH Catch Data | 13.22 804 | | Velocity if Measured (m/s Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 785 | Time 09:20 |
| Temperature (°C) pH Catch Data | 13.22 | | Conductivity (uS/cn | n) 785 10.06 | Time <u>09 : 2 (</u> |
| Temperature (°C) pH Catch Data | 13.22 | | Conductivity (uS/cn | n) 785 10.06 | |
| Temperature (°C) pH Catch Data Species | 13.22 8.04 Numb | | Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 735 L) 70 0 6 Comments (L | |
| Temperature (°C) pH Catch Data Species | 13.22 8.04 Numb | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 735 L) 70 0 6 Comments (L | |
| Temperature (°C) pH Catch Data Species | 13.22 8.04 Numb | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 735 L) 70 0 6 Comments (L | |
| Temperature (°C) pH Catch Data Species | 13.22 8.04 Numb | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 735 L) 70 0 6 Comments (L | |
| Temperature (°C) pH Catch Data Species | 13.22 8.04 Numb | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 735 L) 70 0 6 Comments (L | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | 13.22 8.04 Numb | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | n) 735 L) 70 0 6 Comments (L | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |
| Temperature (°C) pH Catch Data Species | Number of the service of the fisher of the f | er of Fish | Conductivity (uS/cn Dissolved Oxygen (mg/l | 1) 785 10.06 Comments (1. | |

Frayne Drain



WIND FARM WATERBODY RAPID ASSESSMENT FORM

5-4

WB

| Station # 5-4 | | Project Name | | | |
|--|------------------------------|--|--------------------------------|------------------------|----------|
| Watercourse Name onthouse La | ale Huran-E | CONTRACTOR OF THE PROPERTY OF THE PARTY OF T | 10096070 | | |
| Photos 665=id 666=vls | | Field Staff | NB, ME | | |
| Date 2012 06 07 | | Time 13% | 45 | | |
| Weather conditions in previous 24 I | | | | | |
| GPS Coordinates (Zone) 17T | E 04/8 | 734 | N 4778 | 366 Datu | m NA083 |
| Descriptive Location Thomps | | | + of 5-3 | 4 ~ 12 | m east |
| Water Quality | | | | | |
| Dissolved Oxygen (mg/L) 9.28 | pH | 7.77 Cond | uctivity (µS/cm | 169 | |
| Water Temperature (°C) 16.89 | | Air Temperatu | re (°C) | 196 | |
| Time in situ measurements taken_ | 13:46 | | | | |
| Watercourse Dimensions & Morp Mean Watercourse Width 0 65 Mean Bankfull Width 20 Kiffle Evidence of eroding banks, Comme | (m) (m) <u>%0</u> % Po | Mean Water D ol <u></u> | epth 0.0 |) (cm) | % Flat |
| Substrate (% cover) | | | | | |
| Bedrock | Cobble | Sand | 50 | Silt Zo | Muck |
| Boulder | Gravel | 30 Clay | | Mari | Detritus |
| Riparian Zone Riparian Cover (% of watercourse s % Small Shrvbs, gra Adjacent Land Use Ag, Thempson Li | 5 % 1. | ant vegetation, m | | successional | |
| Fish Habitat Potential Critical Habitat (spawning or nurser | | dwater upwelling | s) | | |
| Migratory Obstructions (seasonal, p | | | | | |
| Note any fish observations Sec | Fishing | steet. | | | |
| Waterbody Notes Natural Watercourse Trape: Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidental W | Dugout Pon | d Domin | sed Swale_ ated by Aquation | Control of the Control | Tile |
| CONTROL DESCRIPTION OF THE PROPERTY OF THE PRO | | and the second s | | | |
| | | | | • | |

Frague Dirain

5-4

(Station Diagram on Back)

| Project Name C | P | | Station Number | 5-4 |
|--|--|--|--|--|
| Project Number 160 | 960709 | en en elde en en 20 en | Pass No. (if applicable | le) (/ Language |
| THE RESERVE OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AN | Control of the Contro | VIS 667 d 5 | AND THE PROPERTY OF THE PARTY O | 2012 06 07 |
| Descriptive Location | | the first of the same of the s | Boom east of 5-3 | The state of the s |
| | of Fulle | | e/Aluero | NOW WE LINE TO A THROUGH HER PARTY OF |
| UTM coordinates | 04187 | 34 easting | 477 8366 | northing zone 17 |
| Fishing Method (circle one) | | Backpack | Boat Unit Model/N | lake LR-12 - |
| Sampling Method (circle or | 18): | even ha | bitat transect of the | spot |
| Effort (Electrofishing Secon | ds): 60 |) Numbe | or of Netters: | Number of Anodes: |
| Settings | The Inches | | | |
| Frequency (Hz) 60 | Voit | tage (volts) 700 | Current (Amps) | Power (Watts) |
| Station Information | | | | |
| Length of Stream Surveyed | (m) Ro | w (2.0 m ols)d | (3) | |
| Station Characteristics: | | | 8.5 - 0.75 Average: | 0.65 |
| | | | | |
| | | | 0.05 - 0.10 Average: | 0.07 |
| Motor Clarity (Calaum | Dep | th (m): Range | 0.05 - 0.10 Average: | |
| Nater Clarity/Colour: | Dep | th (m): Range | 0.05 > 0.10 Average: Water Velocity if Measured (m/s): | N/A Time 13:4 |
| Temperature (°C) | Dep | oth (m): Range | 0.05 > 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) | N/A Time 13:4 |
| | Jea- | oth (m): Range | 0.05 > 0.10 Average: Water Velocity if Measured (m/s): | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species | Jea - 10.89 . 7.77 | oth (m): Range | Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data | Jea - 10.89 . 7.77 | th (m): Range | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species | Jea - 10.89 . 7.77 | th (m): Range | Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:40 769 9.28 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:40 769 9.28 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |
| Temperature (°C) pH Catch Data Species C(K chub | Jea - 10.89 . 7.77 | th (m): Range Number of Fish | 0.05 - 0.10 Average: Water Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 13:4 |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

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| | U | JB JB |

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| | | | 8 |

| GPS Coordinates 17- Descriptive Location | | 90 Time <u>as</u> | | Ran |
|--|------------------------------------|--------------------|------------------------|----------|
| Water Quality | | 708 | | 1101 |
| Dissolved Oxygen (mg Water Temperature (°C | 1/L) 1/1 / 7 | | nductivity (µS/cm) | 978 |
| Weather conditions in | | dy rain | ature (°C) <u>(0</u> ° | |
| Watercourse Dimens | ions & Morphology | | | |
| Mean Watercourse Wi | dth(m) | Maximum F | | (cm) |
| Mean Bankfull Width_ | <u>3. (m)</u> | Mean Wate | | (cm) |
| % Riffle | 30 % Pool | 70%R | un% | Flat |
| Evidence of eroding ba | | ank stability | | |
| Substrate - Upstrean | (% cover) takes | d | | |
| Bedrock | Silt | Boulder | 20 Clay | Cobb |
| Muck | Gravel | Marl | Sand | O Detri |
| In-water Cover Cover Types Present (Overhanging V | | | | Plants K |
| | egolduon woody | Debilo Dou | dei Otilei | |
| Riparian Zone Riparian Cover (% of w | vatercourse shaded d | ominant vagatation | moture or early and | |
| Upstream 2 | Consessioned, un | | | |
| Downstream | Ob Tipovious | + TYCO (| ash, sumac; | Jero |
| Adjacent Land Use | 1 (1) | | | |
| Upstream Downstream | As heldo | | | |
| | | | | |
| Fish Habitat Potential Critical Habitat (spawni | | roundwater unwell | | |
| Upstream / | | iroundwater upweii | ings) | |
| Downstream / t | | | | |
| Migratory Obstructions | (seasonal, permanen | l) | | |
| Upstream | los in sur | mer? | | |
| Downstream | | | | |
| Note any lish observati | ons 1010 | | | |
| Note any fish observati | ions <u>ne re</u> | | | |
| | 可能 成果原外///REA/(TEND) (TEND) (TEND) | | | |

Abird next 15 m u/s m shouls next to wB. (near sumach

Fraymy Drah 4-3

| Project Number 16 09 6 00 9 Pass No. (if applicable) / Photos 53 = id 532 = v/5 533 = t/5 Date (yyyymmdd): 2012 06 05 Descriptive Location On Thompson Line 300 m cast of Rawlings. UTM coordinates 4778314 easting 420290 northing zone / Shing Method (circle one): Backpack habitat transect spot habitat transect spot Number of Retters: Number of Acodes: Settings requency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range 0.10 - 0.12 Average: 0.11 Water Clarity/Colour: +ca Water Velocity if Measured (m/s): \(\text{V} / A \) Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 2.73 Catch Data | Project Name C | P | Station Number | 4-3 |
|--|---------------------------|----------------------|---------------------------------------|--|
| Photos \$31-id \$32-uls \$33-el/s Date (pryymmrdd): 2012 06 05 Descriptive Location On Thompson Ln ~ 300 m cast else of Rawlings. JTM coordinates 4778314 -easting 420290 northing zone / Shiring Method (circle one): Backpack Bodi transect is spot Short (Electrofishing Seconds): Number of Retters: Number of Acodes: Station Information angth of Stream Surveyed (m) Station Characteristics: Width (m): Range 0.10-0.12 Average: 0.11 Vater Clarity/Colour: 12 | | | | |
| Descriptive Location On Thompson Lin ~ 300 m cast of Rawlings The coordinates 4778314 - easting 420290 - morthing zone / string Method (circle one): In the coordinates ampling Meth | Photos 53 | 1=id 532=uls 533=9 | Date (yyyymmdd): | A CONTRACTOR OF THE PARTY OF TH |
| Setting Method (circle one): Backpack Boat Unit Model/Make Setting Seconds | Descriptive Location | In Thompson Ln ~ | 300m east | of Rawlings. |
| Backpack Bod Unit Model/Make Spot | | | Control of the same | |
| Settings Frequency (Hz) Voltage (voits) Voltage (voits) Current (Amps) Power (Waits) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range 1.5 Depth (m): Range 0.10 - 0.12 Average: O.11 Water Clarity/Colour: Temperature (°C) 15.53 Conductivity (uS/cm) Ph 7.96 Cartholourity (uS/cm) Ph 7.96 Number of Fleth Comments (Le. age, disease, and the fight in culvust of stream of strea | UTM coordinates | 4778314 - easting | 420290 | northing zone 13 |
| Ampling Method (circle ond): Sectings Transect spot Number of Metters: Number of Metters: Number of Metters: Number of Anodes: Number of Metters: Number of Met | shing Method (circle one) | : Bardosack | Boat I Init Model/N | aka - |
| Rifort (Electrofishing Seconds): Settings Frequency (Hz) Voltage (volts) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Depth (m): Range Dissolved Oxygen (mys): Power (Watts) Number of Adodes: | | | | |
| Settings Frequency (Hz) Voltage (volts) Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range O.10 - O.12 Average: I. S Depth (m): Range O.10 - O.12 Average: O.11 Water Clarity/Colour: Temperature (°C) 15.53 Conductivity (uS/cm) 77.1 Temperature (°C) 7.96 Dissolved Oxygen (mg/L) Species Number of Fish Comments (La. age, disease, etc.) BRST IIII Could not fish. Thick to cattail and very shallow. Could not fish in culvut at unclus bridge because too small. Four brook St.ckleback observed (Range) Coulvert upen y s. | | | | 1 1 1 1 |
| Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range 1.5 Average: 1.5 Depth (m): Range 0.10 - 0.12 Average: 0.11 Water Clarity/Colour: Lea Water Velocity if Measured (m/s): N/A Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Catch Data Species Number of Fish Comments (i.e. aga, disease, and state of the s | | ds): Number of | Netters: | Namber of Agodes: |
| Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range 1.5 Average: 1.5 Depth (m): Range 0.10 - 0.12 Average: 0.11 Vater Clarity/Colour: 1ea Water Velocity if Measured (m/s): N/A Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Catch Data Species Number of Fish Comments (Le. aga, disease, a | | Voltage (unite) | Ourront (Amore) | Charles (Maria) |
| Depth (m): Range 1.5 Average: 1.5 Depth (m): Range 0.10 - 0.12 Average: 0.11 Water Clarity/Colour: tea Water Velocity if Measured (m/s): N/A Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Catch Data Species Number of Fish Comments (i.e. age, disease, e) Could not fish. Thick to cattail and very shallow. Cald Ast fish in culvut a under bridge because too small. Four brook Stulleback observed & culvet open ys. | | | Content faults) | rowat (TValls) |
| Station Characteristics: Width (m): Range 1.5 Average: 1.5 Depth (m): Range 0.10 - 0.12 Average: 0.11 Water Clarity/Colour: †ea Water Velocity if Measured (m/s): N/A Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Setch Data Species Number of Fish Comments (i.e. age, disease, and not fish. Thick to cattail and very shallow. Carlet 1.6 Could not fish. Thick to cattail and very shallow. Carlet 1.6 Four brook Stulleback observed a culvest open of State 1.6 Four brook Stulleback observed a culvest open of State 1.6 Could not fish. Thick to cattail and very shallow. Carlet 1.6 Four brook Stulleback observed a culvest open of State 1.6 Four brook Stulleback observed a culvest open of State 1.6 Four brook Stulleback observed a culvest open of State 1.6 Depth (m): Range 2.5 Average: 1.5 Aver | | | | |
| Depth (m): Range 0.10-0.12 Average: 0.11 Vater Clarity/Colour: tea Water Velocity if Measured (m/s): N/A Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Satch Data Species Number of Fish Comments (Le. age, disease, e) BRST 1111 (4) Could not fish. Thick to caffail and very shallow. Could not fish in culvut a under bridge because too small. Four brook St.ckleback observed (a) culvert opening S- | | | | |
| Nater Clarity/Colour: tea Water Velocity if Measured (m/s): N/A Time 12 Temperature (°C) 15.53 Conductivity (uS/cm) 771 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Catch Data Species Number of Fish Comments (Le. sge, disease, e BRST 1111 (B) Could not fish. Thick to cattail and very shallow. Cauld Not fish in culvut a under bridge because too small. Four brook Stickleback observed (B) culvert upen y S. | Station Characteristics: | | | |
| Temperature (°C) 15.53 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Species Number of Fish Comments (i.e. ego, disease, e BRST IIII (B) Could not fish. Thick to cattail and very shallow. Could Not fish in culvet a under bridge because too small. Four brook stickleback observed (a) culvert upon y s. | | nebru (w): Hange C |).10 - 0.12 Average: _ | 0.11 |
| Temperature (°C) 15.53 pH 7.96 Dissolved Oxygen (mg/L) 8.73 Atch Data Rectes Rectes Rest IIII 4 Could not fish. Thick to cattail and very shallow. Could not fish in culvet a under bridge because too small. Four brook stickleback observed a culvest opening s. | Vater Clarity/Colour: | tea · W | /ater Velocity if Measured (m/s): | N/A Time /2: |
| Rectes BRST 1111 (B) Could not fish. Thick to cattail and very shallow. Cald Not fish in culvert a under bridge because too small. Four brook stickle back observed (B) culvert openings. | Temperature (°C) | 15.53 | Conductivity (uS/cm) | The second secon |
| BRST 1111 (B) Could not fish. Thick to cattail and very shallow. Cald Not fish in culvet a under bridge because too small. Four brook studieback observed @ culvert uponings. | | 7.96 | Dissolved Oxygen (mg/L) | 8.73 |
| BRST 1111 (B) Could not fish. Thick to cattail and very shallow. Could not fish in culvert a under bridge because too small. Four brook, stickleback observed @ culvert opening s. | | | : : : : : : : : : : : : : : : : : : : | |
| Could not fish. Thick to cattail and very shallow. Could not fish in culvet or under bridge because too small. Four brook stickleback observed @ culvert openings. | | | | Comments (i.e. age, disease, et |
| Four brook stickleback observed @ culvert opening s. | N I | 0 / / / | | |
| Four brook stickleback observed @ culvert opening s. | | | I and very sh | allow. Could |
| | not fish in | culvet o under | bridge because | too small. |
| | Four brook | Stickleback observed | a culvert uper | nings. |
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| | | | | |
| | sh Measurements on Sepa | ırate Sheet? Y/N | | |
| eld Staff: Notes By: MF | | | Notes By: | |
| | ish Measurements on Sepa | | Notes By: | (Station Diagram on Ba |



| Stantec | RAPID ASSESSMENT FORM FOR AQUATIC HABITAT |
|---|--|
| Project | |
| Water Temperat | en (mg/L) 12.02 pH 8.0 Conductivity (µS/cm) 809 ure (°C) 9:03 Air Temperature (°C) 10° ons in previous 24 hrs COLD + SUDAN |
| Mean Watercour Mean Bankfull W % Riffle | Collin |
| Substrate - Ups Bedrock Muck | Silt Boulder Clay Cobble Gravel Marl Sand Detritus |
| Substrate – Dov Bedrock Muck | wnstream (% cover) thick cottable trateries Silt Boulder 20 Clay Cobble Gravel Marl Sand 80 Detritus |
| In-water Cover Cover Types Pre Overhang | sent (circle): Undercut Banks Deep Pool Vascular Plants Cattauls |
| Riparian Zone Riparian Cover (9 Upstream Downstrea Adjacent Land Us Upstream Downstream | se A hields |
| Upstream Downstrea Migratory Obstrud Upstream | pawning or nursery areas, groundwater upwellings) n o thed am ground water upwell, no possible ctions (seasonal, permanent) |
| | ervations nonle |
| other Habitat No — water ures — trickle fl | ow though cattall fired, incised channel |
| ield Notes Authored by | RE Field Notes QA/QCed by TV Page \ of \ |

Wadsworth Drain (-1

| Project Name | | Station Number | 6-1 |
|---|------------------------------------|--|--|
| Project Number 1609 | 60709 | Pass No. (if applicable |) 16/1/26_ (Britis) |
| | 526= 0/5 527= 0/5. | Date (yyyymmdd): | 2012 06 05 |
| Descriptive Location On R | awlings Rd ~ 800; | m south of P | roof Ln |
| JTM coordinates 477 | 6341 casting | 414 813 | _nerthing zone /> |
| Fishing Method (circle one): Sampling Method (circle one): | Backpack Be even habitat | oat Unit Model/M | ake LR-12 - |
| Effort (Electrofishing Seconds): | 100 Number of Net | ners: / / | Number of Anodes: |
| Settings Frequency (Hz) <u>60</u> | Voltage (volts) 700 C | urrent (Amps) | Power (Watts) |
| tation information | | | |
| ength of Stream Surveyed (m) | - 15m (under bri | A STATE OF THE PERSON NAMED IN COMMENTS OF THE PERSON NAMED IN | |
| Station Characteristics: | Width (m): Range 1,5/ | | 1,5 |
| | Depth (m): Range 0.0 | 5-0.15 Average: _ | 6.07 |
| Vater Clarity/Colour: | | | |
| valer Clarity/Colour. | c. Water | Velocity if Measured (m/s): | Time / 🖒 🔾 |
| Temperature (°C) 14. | | Conductivity (uS/cm) | 8/6 Time / (5): 3 |
| Temperature (°C) 14. | | | |
| Temperature (°C) 14. pH 8 | 02 | Conductivity (uS/cm) | 816 |
| Temperature (°C) 14. pH 8 | | Conductivity (uS/cm) | 816 |
| Temperature (°C) 14. 8 atch Data | 02 | Conductivity (uS/cm) | 816 |
| Temperature (°C) 14. pH 8. atch Data pecies | 02 | Conductivity (uS/cm) | 816 |
| Temperature (°C) pH 8 atch Data pecies No Catch | 02 | Conductivity (uS/cm) | 816 |
| Temperature (°C) 14. pH 8. atch Data pecies No Catch | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 8/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) 14. pH 8. atch Data pecies No Catch | Number of Fish | Conductivity (uS/cm) | 8/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) 14. pH 8. atch Data pecles No Catch No Fish Abserved | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) 14. pH 8. Satch Data species No Catch No fish Absured | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) 14. pH 8. Satch Data species No Catch No fish Absured | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) pH 8 atch Data pecies No Catch No Fish Abserved | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) 14. pH 8. atch Data pecles No Catch No Fish Abserved | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) 14. pH 8. atch Data pecles No Catch No Fish Abserved | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) pH 8 Catch Data Species No Catch No Fish Absured | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) pH 8 Catch Data Species No Catch No Fish Abserved | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) pH 8 Catch Data Species No Catch No Fish Abserved | Number of Fish | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |
| Temperature (°C) pH 8 Catch Data Species No Catch No Fish Absured | Number of Fish + watercress v/s | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 2/6 10.12 Comments (i.e. age, disease, etc): |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 6-2

| Photos Taken GPS Coordinates Descriptive Locat | | Field Staff Date To Time The property of the | West of | Rant |
|--|--|--|------------------------------------|------------------|
| Water Quality Dissolved Oxyger Water Temperatu | n (mg/L) <u>10,9</u> ure (°C) <u>7,87</u> | pH <u>7. 14</u> Co | nductivity (µS/cm)^aature (°C)(0 ^ | 707 |
| Weather condition | ns in previous 24 hrs | cold & sunny | | fati servent a l |
| Watercourse Dir | mensions & Morpholog | у / | | |
| Mean Watercours Mean Bankfull Wi | idth U (m) | Maximum F Mean Wate | r Depth / 0 | (cm) |
| % Riffle | ing banks, Comments or | | | Flat |
| Evidence of erodi | ing banks, Comments of | Dank Stability | tible a veg | |
| Substrate _ Uns | tream (% cover) Yhu | ele cattails | | |
| Bedrock | Silt | Boulder | 80 Clay | Cobble |
| Muck | Gravel | Mari | Sand 8 | Detritu |
| Substrate - Dow | vnstream (% cover) $\#$ | ack cattails | | |
| Bedrock | Silt | Boulder | 20 Clay | Cobble |
| Muck | Gravel | Marl | Sand _8 | Detritu |
| In-water Cover Cover Types Pres | sent (circle): | ercut Banks Dee | - Deal Vertice | Plants Cat |
| | | dy Debris Boul | p Pool Vaecular F der Other | aanis (ook |
| Riparian Zone | | | | |
| | % of watercourse shaded | l, dominant vegetation | , mature or early suc | cessional) |
| Upstream_ | 6.1 | | | |
| Downstrea | | | | |
| Adjacent Land Us Upstream_ | As hold | | | |
| Downstrea | am | | | |
| Fish Habitat Pote | ential | | | |
| THE RESERVE AS A PROPERTY OF THE PARTY OF TH | pawning or nursery areas | s, groundwater upwell | ings) | |
| Upstream_ | MANNE | | | |
| Downstrea | | | | |
| Upstream | ctions (seasonal, perman | | | |
| Downstrea | | umnes | | |
| Note any fish obse | ervations none | | | |
| | | | | |
| | tes, Incidental Wildlife | Observations, etc. | | |
| | harrel Hickly | 1000 | - 11 - 22-11 | 1 // |

Wadsworth Drain 6-2

| Project Name | C.P. | | | Sta | tion Number _ | 6-2 | | |
|--|--------------------------|----------------------|--------------|-------------------------------------|---|---------------------------------|-------------------|----------|
| Project Number | 160960 | 709 | | Pas | ss No. (if applic | able) | | (* |
| | d 5162 U | | ds 518=0 | | | | 06 05 | |
| Descriptive Location | On Proo | film. | .600 | m we | ist of | Rawling | s Rd | |
| JTM coordinates | 4776 | 341 | -easting | 414 | 813 | northing Exercise | zone | Contract |
| Fishing Method (circle or Sampling Method (circle | [분호] [HT의 [HT] VOLUES: | Backp | ack habitat | Boat | Unit Mode transect | | R.a | - |
| Effort (Electrofishing Sec lettings | onds): 80 | | Number of N | Vetters: | <u>/ </u> | Number of An | nodes: / | |
| requency (Hz) <u>60</u> | Vo | Itage (voits) | 700 | Current (Am | ps) | Power (Watts | _ | |
| ength of Stream Survey | | 15m | Denge 4.0 | <u></u> | | ." | | |
| Station Characteristics: | | dth (m): pth (m): | Range 7.2 | 1.6. 05-0.10 | Average: | 1.4 | _ | |
| | De | | | | | | | |
| Temperature (°C) | 13.77 7.92 | | | iter Velocity if Con | Measured (m/s ductivity (uS/cn d Oxygen (mg/ | n) <u>878</u> | | 10.1 |
| Temperature (°C) pH atch Data | ten 13.77 | | _ Wa | iter Velocity if Con | Measured (m/s ductivity (uS/cn | n) <u>878</u> L) <u>6,59</u> | | / 0 : / |
| Temperature (°C) pH atch Data pecies | ten 13.77 | Number of | _ Wa | iter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6.59 Commen | ts (i.e. age, dis | |
| Temperature (°C) pH atch Data pecies | 13.77 7.92 BRST 06 | Number of | _ Wa | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6.59 Commen | ts (i.e. age, dis | |
| Temperature (°C) pH atch Data pecies | 13.77 7.92 BRST Ob | Number of | _ Wa | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6.59 Commen | ts (i.e. age, dis | |
| Temperature (°C) pH atch Data pecies | 13.77 7.92 BRST Ob | Number of | Fish under b | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6,55 Commen | ts (i.e. age, dis | |
| Temperature (°C) pH atch Data pecies | 13.77 7.92 BRST Ob | Number of | Fish under b | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6,55 Commen | ts (i.e. age, dis | |
| Temperature (°C) pH catch Data pecies | 13.77 7.92 BRST Ob | Number of | Fish under b | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6,55 Commen | ts (i.e. age, dis | |
| Temperature (°C) pH catch Data | 13.77 7.92 BRST Ob | Number of | Fish under b | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6,55 Commen | ts (i.e. age, dis | |
| pH pH pecies | 13.77 7.92 BRST Ob | Number of | Fish under b | ter Velocity if Con Dissolve | Measured (m/s ductivity (uS/cn d Oxygen (mg/l | n) 878 L) 6,55 Commen | ts (i.e. age, dis | |



| Too shallow to Ash Wads worth ? | -5-5 |
|--|------|
| Drain | WB |
| D FARM WATERBODY RAPID ASSESSMENT FORM | |

| | Wadsub | | | | | |
|--|---------------------|------------------------|----------------------------------|-----------|--------------|-----------|
| Station # 5-5 | | Project Nam | ne C.P. | | | |
| Watercourse Name | W M bada Hum L. | Project # | 1609607 | 09 | | |
| Photos 668=1d 669 - aast | 670= west | Field Staff _ | NB,MF | | | |
| Date 2017 06 07 | | | .54 | | | |
| Weather conditions in previous | | | | | | |
| GPS Coordinates (Zone) 17 | | 94 | N 4778 | 357 | Datun | n NA 183 |
| Descriptive Location | Thompson Li | ne ~ 700 r | n west o | FRAU | ling | ٢, |
| Runs parallel to | | | | | | |
| Water Quality | | | | | 100 | Shallou |
| | | Co | aderation the Lucka | | 100 | 0 |
| Dissolved Oxygen (mg/L) | | A's Tool | deuctivity (µ5/C | (III) | | |
| Water Temperature (°C) | | Air tempera | ature (°C) | xloc | 100,700 | |
| Time in situ measurements tak | en | | | | | |
| Watercourse Dimensions & I | Morphology | | | | | |
| Mean Watercourse Width D. | (m) و | Maximum P | ool Depth D | .04 | (cm) | |
| Mean Watercourse Width ©. (Mean Bankfull Width 2.0) | (m) | Mean Water | Depth 0 | 0.02 | (cm) | |
| % Riffle | IDO % PO | ool | % R | un | | % Fla |
| Evidence of eroding banks, Co | | | | | And Military | |
| None | | | | | | |
| | | | | | | |
| Substrate (% cover) | | | . 110 | | | |
| Bedrock | | Sand | | | 20 | _Muck |
| Boulder | Gravel | 40 Clay | | Marl | | _Detritus |
| Riparian Zone Riparian Cover (% of watercou 3% 3mall shrubs) Adjacent Land Use ag Thomps Fish Habitat Potential | terrucos. | | | ly succes | sional) | |
| Critical Habitat (spawning or nu | ırsery areas, grour | idwater upweili | ngs) | | | |
| Migratory Obstructions (seasor | ol normanant) | | | | | |
| wigiatory Obstructions (seasor | iai, permanent) | times. | | | | |
| Note any fish observations | 1000 | -1(1100) | | | | |
| Trote any lish observations | ~ 6/4 | (K) | | | | |
| Waterbody Notes Natural Watercourse T Surficial Drainage (i.e. furrows) Other Habitat Notes, Incident Could not fish | Dugout Po | nd Don vations, etc | rassed Swale_ ninated by Aqua | atic Veg_ | | Dry |
| | | | | | | |
| | | | | | | |
| | | | -V | | | |
| Field Notes Authored by WY | Field Note | s QA/QCed by | | | | |
| | | | | | | |



| 1.12 |
|--|
| Section 1985 |
| WIND FARM WATERBODY RAPID ASSESSMENT FORM |
| Wads up Ah Spair |
| 보고 있는 사람들이 보 고 있는데 1000 1000 전략 등 보냈다. 1200 전략 1 |
| Station # 5-7 Project Name C.P |
| Watercourse Name Wads Worth Project # 1009 60709 |
| Photos 1118-1120 Field Staff Kr LMB |
| Date <u>Sec 3 2012</u> Time <u>2175pm</u> |
| Weather conditions in previous 24 hrs COOL GPS Coordinates (Zone) 17 E 0419 258 N 4777567 Datum |
| Descriptive Logation |
| Raulin's, south of thompton |
| 보통사용하다 중심경기 하다 🔾 등 기가 본 시간 회사는 시간 회사를 보는 것이 되는 사람들이 모든 사람들이 모든 사람들이 되었다. 교육 기계를 모든 기계를 다 되었다. |
| Water Quality Dissolved Oxygen (mg/L) 9.48 pH 7.80 Conductivity (μS/cm) 72.5 |
| Water Temperature (°C) Air Temperature (°C) |
| Time in situ measurements taken 12 5 2 |
| |
| Watercourse Dimensions & Morphology |
| Mean Watercourse Width (m) Maximum Pool Depth (cm) Mean Bankfull Width (m) Mean Water Depth (cm) |
| % Riffle% Pool% Run% Flat |
| Evidence of eroding banks, Comments on bank stability |
| steep, stable ever |
| 가게 제상되었다면서 가게 가득했다는 하는 무슨 모든데 하면 보고 있는데 그는 사람들이 얼마나 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 보고 있는데 제 이 사람들이 제 이 사람들이 하는데 |
| Substrate (% cover) Bedrock Cobble Sand 40 Silt Muck |
| Boulder Gravel VO Clay Marl Detritus |
| |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg |
| Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Vég Overhanging Vegetation Woody Debris Boulder Other |
| |
| Riparian Zone |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) |
| Adjacent Land Use |
| Adjacent Land Goo |
| |
| Fish Habitat Potential |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| Nicestan Obstructions (consonal permanent) |
| Migratory Obstructions (seasonal, permanent) |
| Note any fish observations |
| me |
| |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile |
| Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry |
| Definition by Addition of the Control of the Contro |
| Other Habitat Notes, Incidental Wildlife Observations, etc. |
| |
| |
| |
| Field Notes Authored by K |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 5-2

| Stantec |
|---|
| Project Project # 14,0960789 |
| Station # 5-2 Field Staff KE + MF |
| Photos Taken 496 - 499 GPS Coordinates 17 4776341 414813 Time 2:57 pm |
| Descriptive Location |
| Water Quality not enough to sample |
| Dissolved Oxygen (mg/L) pH Conductivity (µS/cm) |
| Water Temperature (°C) Air Temperature (°C) Weather conditions in previous 24 hrs |
| Watercourse Dimensions & Morphology try pool @ the drainage |
| Mean Watercourse Width (m) Maximum Pool Depth (cm) |
| % Riffle% Peol% Run% Flat |
| Evidence of eroding banks, Comments on bank stability Stable + veg |
| Substrate - Upstream (% cover) + led |
| BedrockSiltBoulderClayCobble |
| MuckGravelMarlSandDetritus |
| Substrate - Downstream (% cover) lots at veg - |
| Bedrock Silt Boulder Clay Cobble Muck Gravel Marl Sand 80 Detritus |
| In-water Cover Marl Sand Detritus |
| Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Lathaul |
| Overhanging Vegetation Woody Debris Boulder Other |
| Riparian Zone |
| Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) |
| Upstream D°/2 |
| Adjacent Land Use |
| Upstream 5 held 5 |
| Fish Habitat Potential |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| Upstream <u>nonce</u> |
| Downstream |
| Upstream |
| Downstream |
| Note any fish observations Nove |
| Other Habitat Notes, Incidental Wildlife Observations, etc. |
| - the drainage into incised channel it mixed rattouls + |
| - east clearly instroad dutch not as invised |
| - west housed or connects to us a c-1, dras of standy |
| Field Notes Authored by Page of Page |
| -borderline WB, but culvert @ 5-1 connected |
| |

Beth Check Orah

| Project Name C.P. | | Station Number 5- | 2 |
|---|-------------------|--|---------------------------------|
| Project Number 16096 | 0709 | Pass No. (if applicable) | Commen |
| | 10:W 521=E | Date (yyyymmdd): 2016 | 2 06 05 |
| Descriptive Location | Proof line ~500m | west of Rawling | on South |
| | of rd within dit | | |
| | 76341 easting | 414813 -nort | hing zone / 7 7 |
| | | | |
| Fishing Method (circle one): | | Boat Unit Model/Make | / |
| Sampling Method (circle one): | even habitat | transect spo | 2 |
| Effort (Electrofishing Seconds): | Number of N | etters: Number | of Anodes: |
| Settings | | | |
| Frequency (Hz) | Voltage (volts) | Current (Amps) Power (\) | Vatts) |
| Station Information | | | |
| Length of Stream Surveyed (m) | | | |
| Station Characteristics: | Width (m): Flange | Average: | |
| | Depth (m): Range | Average: | |
| Matan Olasha Olasa | / | | |
| Vater Clarity/Colour: Temperature (°C) | Wat | er Velocity if Measured (m/s): Conductivity (uS/cm) | Time 10:30 |
| Produporature (C) | | Dissolved Oxygen (mg/L) | |
| Catch Data | | | |
| Species | Number of Fish | Com | ments (i.e. age, disease, etc): |
| | | | |
| No tishing - | DRY | | |
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| | | | |
| sh Measurements on Separate Si | heet? Y(N) | | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 5-1

| Stantec | | | 124 |
|--|--|---|-----------------------|
| Project C.P | Project | 1# 160960 | 709 |
| Station # _ 5 - [| Field S | | F |
| Photos Taken 501 - 507 GPS Coordinates 17 47763 | | POV 25 20 |) [] |
| Descriptive Location Prop 4 | 11 91901) IIMe_ | 2:05 pm | - of Rautins: |
| | | 2001 00001 | - of Rawling: |
| Water Quality | 910 | | 72.0 |
| Dissolved Oxygen (mg/L) 11.9 Water Temperature (°C) 9 | $\frac{1}{2}$ pH $\frac{1}{4}$ | _ Conductivity (μS/mperature (°C) | (cm) $\frac{732}{}$ |
| Weather conditions in previous 24 | hrs cold 7 () | mperature (°C) <u>(</u> ルハハル・ | |
| | | anny. | |
| Watercourse Dimensions & Mor Mean Watercourse Width | | / Pool Donah | O () |
| Mean Bankfull Width | | um Pool Depth Water Depth _ | (cm) (cm) |
| % Riffle | 2 % Pool 20 | % Run | % Flat |
| Evidence of eroding banks, Comm | ents on bank stability | stable + v | es |
| | | | 0 |
| Substrate – Upstream (% cover) | thed to cal | vert | |
| BedrockSilt | Boulde | | |
| MuckGrav | elMarl | San | d <u>40</u> Detritus |
| Substrate – Downstream (% cov | er) RGG + ca | Hails | |
| BedrockSilt | Boulde | er <u>20</u> Clay | / Cobble |
| MuckGrav | elMarl | San | d 80 Detritus |
| n-water Cover | | | 1.1 |
| Cover Types Present (circle): | Undercut Banks | | cular Plants catal |
| Overhanging Vegetation | Woody Debris | Boulder Oth | erRC |
| Riparian Zone | | | |
| Riparian Cover (% of watercourse | shaded, dominant veget | ation, mature or ea | rly successional) |
| Upstream 0/5 | | | |
| Adjacent Land Use | | | |
| Upstream | elds | | |
| Downstream_/ / | 000 | | |
| Fish Habitat Potential | | | |
| Critical Habitat (spawning or nurse | ry areas, groundwater u | pwellings) | |
| Upstream poscible | AND THE PARK HALL SHOW ASSESSED THE CONTRACT HIS CONTRACT | in out @ | 1/5 culvert |
| Downstream / no restaurations (accepted) | | | |
| Aligratory Obstructions (seasonal, Upstream | |) | |
| Downstream O | a Summer! | | |
| lote any fish observations wor | 2 | | |
| | | | |
| Other Habitat Notes, Incidental V | Vildlife Observations <i>a</i> | etc | |
| 1 - a 4 A / 1 | elvest & tole | drainese | |
| d/s 1st 15 m shick n | 1. RCG, then o | attails | 22.110.01 |
| mainly standing v | ater in incused | channel, | neglyble How |
| ield Notes Authored by | Field Notes QA/QCed | by JK | Page of |
| | ו ופוט וזיטנסט עריעניפט ו | | Page of |

Beith Creek Praty

| 5 | 1 |
|---|---|
| 0 | |

| Project Name | C.P. | (Index of the last | | St | ation Number _ | 5-1 | SALTION ? |
|--|----------|--|---------------------|-------------|--|--|---|
| Project Number | 1609607 | 09 | e ili ililia sala i | | uss No. (if applica | THE RESERVE OF THE PARTY OF THE | Sky Abmeny |
| Photos 522 | -12 523= | 1/5 culu 52 | 24=4/5. | | | 2012 06 | nick which |
| Descriptive Location | On Pro | of Lin w | 1.2 Km | west | OF Ray | Wings | |
| UTM coordinates | 47763 | 41 | easting | 414 9 | 813 | northing | zone <u>/ -/ -</u> -/ -/ -/ -/ -/ -/ -/ -/ -/ -/ -/ -/ -/ |
| Fishing Method (circle or | ne): | Back | pack | Boat | Unit Model | /Make | |
| Sampling Method (circle | one): | even | habita | | transect res | spot | |
| Effort (Electrofishing Sec Settings | conds): | · · · | Number of | Netters: | / | Number of Anode | s . |
| Frequency (Hz) | | Voltage (volts) | | Current (An | nps) | Power (Watts) | |
| Station Information | | | | | 41 | | |
| ength of Stream Survey | red (m) | | | | | | |
| Station Characteristics: | | Width (m): | Range | | Average: | | |
| | | Depth (m): | Range | | Average: | | |
| Water Clarity/Colour: Temperature (°C) pH Catch Data | /_ | | | Cor | f Measured (m/s) nductivity (uS/cm ed Oxygen (mg/L |) | Time 10:25 |
| pecies | | Number o | f Fish | | | Comments (L | e. age, disease, etc): |
| | | | | | | | |
| No fishing. | - Drd | | | | | | |
| | | | | | | | |
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WIND FARM WATERBODY RAPID ASSESSMENT FORM

Beith creek Drain
5-6
ESSMENT FORM WB

| | | | | m we |
|--|--------------|-------------------|---------------------|--|
| Stantec | | | | |
| Station # 5-6 | | Project Name _ | CIP. | |
| Watercourse Name unname | | Project # | 0096070 | 9 |
| Photos | | Field Staff | + (V- | |
| Date 2011 3 201 | | Time 6 | 50 200 | |
| Weather conditions in previous 24 hrs | T-51 | | SUPM | ets a remarkation of the second of the |
| | = 4183 | 9(M) | N HATTON | ₩ Datum |
| ar o ocordinates (=one) | | o Pant | A FAM | O ~ |
| Descriptive Location Thompso | ar are |) (00) | CITY POVING | |
| Water Quality | | | de | |
| Dissolved Oxygen (mg/L) | pH_ | Condu | ictivity (µS/cn/) | |
| Water Temperature (°C) | | Air Temperatur | | |
| Time in situ measurements taken | | | | |
| Timo w one moderation and taxon. | | / | | |
| Watercourse Dimensions & Morpho | | | | MAI |
| Mean Watercourse Width | (m) | Maximum Pool | Depth \ | (cm) |
| Mean Bankfull Width | (m) | Mean Water De | epth | (cm) |
| % Riffle | % Po | ol | %\Ban | % Flat |
| Evidence of eroding banks, Comment | s on bank st | tability | | |
| | | | | |
| | | | | |
| Substrate (% cover) | 0-66 | 110 0 | O:IL | |
| | Cobble | YO Sand_ | Silt | |
| Boulder | Gravel | Leo Clay_ | Mai | rl Detritus |
| In-water Cover | | | | whouls |
| Cover Types Present (circle): | Indercut Ba | nks Deep P | ool Watercress | Aquatic Veg |
| Overhanging Vegetation Woody | Debris | Boulder | Other | |
| Riparian Zone | | | | |
| Riparian Cover (% of watercourse sha | aded, domin | ant vegetation, m | ature or early succ | cessional) |
| Adjacent Land Has | | | | |
| Adjacent Land Use | | | | |
| Fish Habitat Potential | | | | |
| Critical Habitat (spawning or nursery | areae groun | dwater unwelling | e) | |
| Critical Habitat (spawning or nursery | areas, groun | idwater upweiling | 5) | |
| Migratory Obstructions (seasonal, per | rmanent) | | | |
| Note any fish observations | | | | |
| mre | | | | |
| | | | | |
| Waterbody Notes | idal Obsessi | 1 1/0 | and Curals | During Tile |
| Natural Watercourse Trapezo | | | sed Swale | BY GOLDEN THE WARRY STOCKERS |
| Surficial Drainage (i.e. furrows) | Dugout Pol | na Domin | ated by Aquatic Ve | eg Dry |
| Other Habitat Nates Inclined 1988 | dide Ober | | | |
| Other Habitat Notes, Incidental Wil | ante Ubser | /ations, etc | | |
| | | | | |
| | | | | |

____ Field Notes QA/QCed by _

Field Notes Authored by



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| Baith | CreekD | van G | 5-2 |
|-------|--------|-------|-----|
| 29.,, | | W | B |

| Station # 5-3 | Project Name |
|---|-------------------------------------|
| Watercourse Name unknown | Project # 160960709 |
| Photos 662=1d 663=313 664=d6. | Field Staff NB, MF |
| Date 2012 06 07 | Time 13 06 |
| | recipitation |
| | 325 N 4778378 Datum (VAV8) |
| Descriptive Location On Thompson Line | m 400m east of Fuller Rd. Watucours |
| runs under toad. | |
| Water Quality | |
| Dissolved Oxygen (mg/L) 6.2 pH_ | 7.87 Conductivity (µS/cm) 846 |
| Water Temperature (°C) 19.09 | Air Temperature (°C) 19°c |
| Time in situ measurements taken 13:06 | |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 23,63 0 (m) | Maximum Pool Depth 0,60 (cm) |
| Mean Bankfull Width 4,0 (m) | Mean Water Depth O. 20 (cm) |
| % Riffle 50 % P | |
| Evidence of eroding banks, Comments on bank | |
| | |
| Substrate (% cover) | |
| Bedrock Cobble | Sand 50 Silt Zo Muck |
| Boulder Gravel | 30 Clay Marl Detritus |
| Riparian Zone Riparian Cover (% of watercourse shaded, domin | |
| Migratory Obstructions (seasonal, permanent) | |
| law levels. | |
| Note any fish observations wany. Fished | see sheet |
| Waterbody Notes Natural Watercourse Trapezoidal Channoursicial Drainage (i.e. furrows) Dugout Po Other Habitat Notes, Incidental Wildlife Obser | ond Dominated by Aquatic Veg Dry |
| Carlo Capital (Color) Indiania (Trialia Obool | |
| | |
| | |
| Field Notes Authored by NB Field Not | tes QAQCed by |
| ried Not | .co certification |

Beith Creek Drain

(Station Diagram on Back)

| Project Name $C.P.$ | | Station Number | 5-3 |
|--|-------------------------|--|--|
| Project Number 16096 | 0709 | Pass No. (if applicab | le) |
| | 663=0 5 664=d/5. | | 2012 0607 |
| | mpson Line 1400 | | The second secon |
| | | | White telephone of the parties |
| JTM coordinates 4/8 | 2325 easting | 4778378 | northing zone / |
| ishing Method (circle one): ampling Method (circle one): | Backpack Bo | eat Unit Model/N transect con | Make CR12 - |
| ffort (Electrofishing Seconds): | /DO Number of Nett | ers: | Number of Anodes: |
| ettings | | | |
| requency (Hz) 60 | Voltage (volts) 700 Cu | errent (Amps) | Power (Watts) |
| tation information | | | |
| ength of Stream Surveyed (m) | Row (2.0 m u/s+d/s p | lus 10m in culue | t) 14m total |
| tation Characteristics: | Width (m): Range 2.0 | - 3.0 Average: | 2.5 |
| | | | 0.15 |
| | Deput (III). Harige 0.7 | -030 Average: | 0.10 |
| Later Clark Colours | | | |
| | tea Water | Velocity if Measured (m/s): | ω/4 Time 13:2 |
| Temperature (°C) /8 | tea. Water | Velocity if Measured (m/s): Conductivity (uS/cm) | N/4 Time 13:2 |
| Temperature (°C) /8 | tea Water | Velocity if Measured (m/s): | N/4 Time 13:2 |
| Temperature (°C) /8 pH 7- atch Data | tea. Water | Velocity if Measured (m/s): Conductivity (uS/cm) | N/4 Time 13:2 |
| Temperature (°C) /8 | tea. Water 3.08 | Velocity if Measured (m/s): Conductivity (uS/cm) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 2 K Chub | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 7 k chub | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3 k chub Eathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3 k chub Eathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3 k chub Eathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 2 k chub Fathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 2 k chub Fathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3r K chub Fathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3r K chub Fathead Min Best | Water Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3 k chub Eathead Min Best | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 2 k chub Fathead Min Best | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3r K chub Fathead Min Best | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3r K chub Fathead Min Best | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 2r k chub Feathered Min | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |
| Temperature (°C) pH 7- atch Data pecies 3r K chub Fathead Min Best | Number of Fish | Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | ν/4 Time 13:2 346 6.21 |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 9-2 WB

| - | - |
|-------|------|
| S Pen | mhac |
| | ntec |

| CO | |
|--|--|
| Project P | Project # <u>\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \</u> |
| Station # 9-2 | _ Field Staff KETMF |
| Photos Taken | Date 29, 2011 |
| GPS Coordinates 1 477499 2 428 | [812] Time 9:25 |
| Descriptive Location Coder form | - five, I kin east of |
| Libraria, 100 m | into weed by (nowth) |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Weather conditions in previous 24 hrs | pH_7.89 Conductivity (µS/cm) 433 Air Temperature (°C) 4 |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 408 (m) | Maximum Pool Depth 71.5 + (em) |
| Mean Bankfull Width 8 (m) | Mean Water Depth (S) |
| % Riffle% Po | ol <u>(00</u> % Run% Flat |
| Evidence of eroding banks, Comments on | bank stability |
| Stable + neg | |
| Substrate - Upstream (% cover) | and a deep, assumed |
| BedrockSilt | Boulder |
| Muck Gravel | Marl Sand So Detri |
| Sub-tanta Danistani (0/ as) | word & deep, assured |
| Substrate – Downstream (% cover) ———————————————————————————————————— | |
| BedrockSilt Muck Gravel | Boulder Cobb Marl Sand Detri |
| Graver | MarlSand _>O Detri |
| In-water Cover | |
| | rcut Banks Deep Pool Vascular Plants |
| Overhanging Vegetation Wood | y Debris Boulder Other |
| Riparian Zone | |
| | dominant vegetation, mature or early successional |
| Upstream 90% dec. | upallet |
| Downstream 30% | |
| Adjacent Land Use | |
| Upstream well of | |
| Downstream (NOOLD & | AS |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas | groundwater unwellings) |
| Upstream A MAC | , groundwater apwennigs) |
| Downstream 1007 | |
| Migratory Obstructions (seasonal, permane | ent) |
| Upstream In Col | iane. |
| Downstream | |
| Note any fish observations 10000 | 图14.1114在主意是创新的。如何可能是对自己的最后提供的。 |
| | |
| Other Habitat Notes, Incidental Wildlife | Observations atc. |
| Two dos Houne of | bot of Files |
| -leaf Her I'm & Prints | as we work aroused brused in |
| Con Marie De La Constantina | Acold the season |
| -estremely ready, most | new mere churie |
| | Field Notes QA/QCed by Tk Page of |

Stantec Consulting Ltd - Electrofishing Record

Sastawardah 9-2 creekpage 1 or 1

| Stantec | Stantec Co | isulung Lu | a Eloudoi | isining necord | and Calcii A | eauta |
|---|-------------|--|-------------------|--|------------------|--|
| Project Name | C P | | | Station Number | 9-2 | ACIBIN. |
| Project Number) | 609607 | 29 | | Pass No. (if applica | able) | TOO MANAGEMENT AND A STATE OF THE STATE OF T |
| Photos 60 | 5=id 606 | · U/5 607= | 9/5 | Date (yyyymmdd): | 2012 66 | 06 |
| Descriptive Location | Off Ceo | lar Point | tlni | | of Kinne | |
| | ~100 m | into wo | odlot (| north | | votis riberi es |
| UTM coordinates | 477.49 | 792 | sting | 122812 | northing | zone 177 |
| | | e de la companya del companya de la companya del companya de la co | | | VMake NOR 18 | 2 |
| Fishing Method (circle of | | Backpack | Boat habitat | | | |
| Sampling Method (circle | | even | rabial | transect des | spot | X.Z |
| Effort (Electrofishing Sec | conds): 2 | <u>86 Nu</u> | mber of Netters: | <u>/</u> | Number of Anodes | 1/ |
| Settings | | 7 | | | | |
| Frequency (Hz) 60 | Vol | tage (volts) | OU Currer | t (Amps) | Power (Watts) | |
| Station Information | | | | | | |
| Length of Stream Survey | | 100 | | | | |
| Station Characteristics: | | | nge 1.0-1. | AND THE RESERVE OF THE PARTY OF | 1.1 | |
| | Del | oth (m): Rai | nge <u>0.03-0</u> | ./O Average: | 0.05 | |
| Water Clarity/Colour: | tea | | Water Velo | city if Measured (m/s | : N/A | Time /3:02 |
| Temperature (°C) | 17.58 | | | Conductivity (uS/cm | 618 | |
| | 0 1111 | | . DL | | 1 001/ | |
| ana ar garan ay pHana. Catab Data | 8.44 | | , Li | solved Oxygen (mg/L | 10.84 | |
| Catch Data | 8.99 | | | sowed Oxygen (mg/L | | |
| Catch Data Species | 8.94 | Number of Fish | | sorved Oxygen (mg/L | | age, disease, etc): |
| Species Cik hub | 8.94 | | | (3) | | age, disease, etc): |
| Catch Data Species | 8.94 | | | (3) | | age, disease, etc): |
| Catch Data Species Cik chub Tohn Ol | | Number of Fish | | (3) (0) | Comments (Le | age, disease, etc): |
| Catch Data Species Cik chub John Of | | Number of Fish | | cd Hirough | Comments (Le | age, disease, etc): |
| Catch Data Species Cik Aub Tohn Of | | Number of Fish | | (3) (0) | Comments (Le | age, disease, etc): |
| Species Cik chub Tohn Ol | | Number of Fish | | (3) (0) | Comments (Le | age, disease, etc): |
| Catch Data Species Cik chub Tohn Ol | | Number of Fish | | (3) (0) | Comments (Le | age, disease, etc): |
| Species Cik chub Tohn Ol | | Number of Fish | | (3 () | Comments (Le | age, disease, etc): |
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| Catch Data Species Cik Aub Tohn Of | | Number of Fish | | (3 () | Comments (Le | aga, disoasa, etc): |
| Catch Data Species Cik hub John Ol Many Yoy | BRST + | Number of Fish | | (3 () | Comments (Le | ago, disoaso, etc): |
| Catch Data Species Cik Aub John Ol Many Yoy Tish Measurements on S | BRST + | Number of Fish | | cd through | Comments (Le | age, disease, etc): |



WIND FARM WATERBODY RAPID ASSESSMENT FORM Spishwandon creek

| Water Course Name Schands Project # 1000 707 Field Staff Time 1 200 707 Field Staff Field Sta | Watercourse Name Sasharanda Gelle Photos 9696 7 9701 Date July 25 201 7 Weather conditions in previous 24 hrs GPS Coordinates (Zone) E 122 Descriptive Location North of Ceder Ph. Lim, | Project # 100 Field Staff Time 2 2 2 2 3 | 160709 100709 100709 100709 100709 100709 | hum A A D E |
|--|--|--|--|-------------|
| Photos 314 970 Field Staff Date 11M 2 207 Time Water conditions in previous 24 hrs GPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (Zone) FE 1241 N 4337 Datum 48 SPS Coordinates (PC) Air Temperature (PC) Maximum Pool Depth (Cm) Mean Bankfull Width (Cm) Mean Water Depth (Cm) Mean Wate | Photos 9196 7 9701 Date July 25 201 7 Weather conditions in previous 24 hrs GPS Coordinates (Zone) FE | Field Staff Time N Y |)5379 Dat | tum A H A E |
| Date JUM 2 20 To Weather conditions in previous 24 hrs JAPS Coordinates (Zone) F | Weather conditions in previous 24 hrs Weather conditions in previous 24 hrs Descriptive Location North of Ceder Plane, | Time 2.30) | 0 S 379 Dat | tumAHAE |
| Water Conditions in previous 24 hrs GPS Coordinates (Zone) Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width Mean Bankfull Width Mean Bankfull Width Mean Bankfull Width Mean Bankfull Width Mean Water Depth Me | Weather conditions in previous 24 hrs Conditions in previous 24 hr | TO NY |))5379 Day | hum A la DE |
| Descriptive Location Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width Selfiffe Wean Watercourse Width Selfiffe Wean Water opith Water of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Boulder Gravel Cobble Sand Silt Muck Bedrock Boulder Gravel Cobble Sand Silt Muck Detritus Watercourse Pool Watercourse Width Wean Water Depth | GPS Coordinates (Zone) TE 45220 Descriptive Location North of Ceder Pt Line, | 1 (30° N) + 1.2 km | 1)5339 Dat | tum AM DE |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Water Course Dimensions & Morphology Mean Watercourse Width Mean Bankfull Width Mean Water Depth Mean Wa | Descriptive Location North of Ceder Ph. Line, | (300mN) 1.2 km | 175339 Dat | tum AMA |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Air Temperature (°C) Water Depth Water Depth Wean Water Depth Water D | Descriptive Location North of Ceder Ph. Line, | (300mN) 1.2Km | west or A any car | LUIII/ |
| Dissolved Oxygen (mg/L) Water Temperature (°C) Mair Temperature (°C) Mair Temperature (°C) Mair Temperature (°C) Mair Temperature (°C) Maximum Pool Depth Mean Watercourse Width Mean Water Depth Mean Water Depth Mean Water Depth Mean Water Opph Mean Water (*C) Substrate (*C) Substrate (*C) Substrate (*C) Substrate (*C) Bedrock Boulder Gravel Gravel Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aduatic Veg Overbarging Vegelation Woody Debris Boulder Other Riparian Zone Riparian Cover (*C) Adjacent Land Use Watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Waterbody Notes Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Dominated by Aquatic Veg Dry Other Habitat Notes, incidental Wildlife Observations, etc. Done Add Down A County (*U.S.M.*) Other Habitat Notes, incidental Wildlife Observations, etc. Done Add Down A County (*U.S.M.*) | | | | y Rd. |
| Dissolved Oxygen (mg/L) Water Temperature (°C) Mair Temperature (°C) Mair Temperature (°C) Mair Temperature (°C) Mair Temperature (°C) Maximum Pool Depth Mean Watercourse Width Mean Water Depth Mean Water Depth Mean Water Depth Mean Water Opph Mean Water (*C) Substrate (*C) Substrate (*C) Substrate (*C) Substrate (*C) Bedrock Boulder Gravel Gravel Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aduatic Veg Overbarging Vegelation Woody Debris Boulder Other Riparian Zone Riparian Cover (*C) Adjacent Land Use Watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Waterbody Notes Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Dominated by Aquatic Veg Dry Other Habitat Notes, incidental Wildlife Observations, etc. Done Add Down A County (*U.S.M.*) Other Habitat Notes, incidental Wildlife Observations, etc. Done Add Down A County (*U.S.M.*) | Water Quality | t M | | |
| Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Waimum Pool Depth (cm) Water Cepth (cm) Water Cepth (cm) Water Cepth (cm) Substrate (% cover) Bedrock Boulder Gravel Cobble Gravel Cobble Gravel Colay Marl Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Vegy Overhanging Vegebation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Covyer (% of watercourse shaded, dominant vegetation, mature or early successional) Other Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Wigratory Obstructions (seasonal, permanent) Other Habitat Notes, incidental Wildlife Observations, etc. Dome Advance Other Habitat Notes, incidental Wildlife Observations, etc. | | Conductivity | / (μS/cm) | |
| Watercourse Dimensions & Morphology Mean Watercourse Width | | | | |
| Watercourse Dimensions & Morphology Mean Watercourse Width (5 (m) Mean Water Depth (cm) Wean Bankfull Width (m) Wean Water Depth (cm) Water Cowler (cm) Water Cover (cm) Bedrock (cm) Bedrock (cm) Water Cover (cm) Bedrock (cm) Water Cover (cm) Bedrock (cm) Water Cover (cm) Water Cover (cover) Woody Debris Boulder (cover) Water Cover (cover) Woody Debris Boulder (cover) Water Cover | | | | |
| Mean Watercourse Width (m) Maximum Pool Depth (cm) Mean Bankfull Width (m) Mean Water Depth (cm) % Riffle % Pool Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock Gravel Gravel Glay Marl Detritus in-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanding Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) **Character Cover** **Cover** **Cover* **Cover** **Cover** **Cover** **Cover** **Cover* **Cover** **Cover** **Cover* **Cover* **Cover* **Cover** **Cover* **Cover* **C | | | 1,00 | |
| Mean Bankfull Width | | A | _ 009 | |
| ## Riffle | | | | |
| Substrate (% cover) Bedrock Boulder Gravel Clay Marl Detritus Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Circle Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Fish observations Waterbody Notes Note any fish observations Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, incidental Wildlife Observations, etc. | | AND THE RESIDENCE OF THE PARTY | | |
| Substrate (% cover) Bedrock Boulder Gravel Clay Marl Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aduatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Purple Waterbody Notes Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. | | | _% Run | |
| Bedrock Gravel Gravel Glay Mari Detritus in-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. Sunce Augustic Veg Sunature Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. | Evidence of eroding banks, Comments on bank st | tability | | |
| Bedrock Gravel Gravel Glay Mari Detritus in-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. Sunce Augustic Veg Sunature Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. | Substrate (% cover) | | | |
| in-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. | Bedrock Cobble Cobble | Y Sand | | Muck |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. | Boulder Gravel | OO Clay | Marl | Detritus |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc - None Ay Slavonal or result of January (unswe) | Riparian Zone | | | al) |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc - None Ay Slavonal or result of January (unswe) | 000 | | | |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc | Adjacent Land Ose | | | |
| Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. Slasmal or result of drawnt (unsur) | Fish Habitat Potential | | | |
| Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc - bone dy Slasonal or result of drought (unsue) | nn | idwater upwellings) | | |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc bone dry Slasonal or result of drought (unsure) | Sparal | | | |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc -bone dry Slasonal or result of drought (unsure) | Note any fish observations | | | |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc - bone dry Slasonal or result of drought (unsure) | | | | |
| Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc -bone, dry Slasonal or result of drought (unsure) | Waterbody Notes | The state of the s | Swale Buri | ed Tile_ |
| Other Habitat Notes, Incidental Wildlife Observations, etc. -bone, dy Slasonal or result of drought (unsue) | Waterbody Notes Natural Watercourse Transzoidal Channe | Grassed S | | |
| -bone dry seasonal or result of drought (unsue) | Natural Watercourse Trapezoidal Channe | the state of the s | | עע |
| -bone dry seasonal or result of drought (unsue) | Waterbody Notes Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Po | the state of the s | | _ DIY |
| | Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Police | nd Dominated | | _ Dry |
| | Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Potential Notes, Incidental Wildlife Observations | nd Dominated | | |
| | Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Political Drainage (i.e. furrows) Dugout Political Political Notes, Incidental Wildlife Observation of Standard Wildlife Observation of | nd Dominated | |) Dry |

G:\01609\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

| Stantec | Shashavarda crek |
|---|--|
| Project | Project # 1(0960709 Field Staff KE + MF Date Par 29 2011 TTSY 422024 Time 9 200 MRUVA, 500 M 8044h 0F 4hom |
| Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Weather conditions in previo | 10.9.3 Air Temperature (°C) 40 |
| Watercourse Dimensions of Mean Watercourse Width | & Morphology (m) Maximum Pool Depth (m) Mean Water Depth (m) Mean Water Depth (m) Wean Water Depth (m) Wat |
| Substrate – Upstream (% c Bedrock Muck | cover) tubust, assumed Silt toler Boulder Cobble Gravel Marl Sand So Detritus |
| Substrate – Downstream (* Bedrock Muck | % cover) tubel assured Silt ydeep Boulder 20 Clay Cobble Gravel Marl Sand 20 Detritus |
| n-water Cover Cover Types Present (circle) Overhanging Vegetat | AND MADE TO A DESCRIPTION OF THE PROPERTY OF T |
| Riparian Zone Riparian Cover (% of watero Upstream Downstream Adjacent Land Use Upstream Downstream | ourse shaded, dominant vegetation, mature or early successional) Noncomposition from (Ash from the successional) |
| UpstreamPiles | nursery areas, groundwater upwellings) |
| Migratory Obstructions (seas Upstream | manent |
| Other Habitat Notes, Incide | ental Wildlife Observations, etc. |

Field Notes Authored by Field Notes QA/QCed by _____

Page ____of_|

Spishwandah

3-1

(Station Diagram on Back)

Page of Stantec Consulting Ltd - Electrofishing Record and Catch Results 3-1 **Project Name** Station Number 60960709 **Project Number** Pass No. (if applicable) Date (yyyymmdd): 2012 **Photos** 546:015 547-0 06 05 of Thompson **Descriptive Location** 422024 **UTM** coordinates 4777754 perthing zone Backpack Fishing Method (circle one): **Boat** Unit Model/Make Sampling Method (circle one): (even habitat transect 15:271 330 **Number of Netters:** Effort (Electrofishing Seconds): **Number of Anodes:** Settings 800 Frequency (Hz) 60 Voltage (volts) **Current (Amps)** Power (Watts) Station Information Length of Stream Surveyed (m) ~ 100 Station Characteristics: Width (m): Range 2.0 - 2.7-5 Average: 25 Depth (m): Range 0.25 - 0.60 Average: 0.40 Water Clarity/Colour: lea Water Velocity if Measured (m/s): Time 14:15 Temperature (°C) .05 Conductivity (uS/cm) 707 Dissolved Oxygen (mg/L) 10.74 **Catch Data Species** Number of Fish Comments (i.e. age, disease, etc): (23) chuh 32 (33) untrose Min 3 Pum Okin Sced Side 13 7) 121450 104. nhotos: 548-557 Fish Measurements on Separate Sheet? (N) NB. WF Field Staff: Notes By:



| MIND LYVIN INVIEVD | ODY RAPID ASSESSMENT FORM |
|--|--|
| Stantec | Shashwanda 3 - 3 |
| 3-2 | Project Name CP |
| Station # | Project # 1(009(00)09 |
| Photos 115-117 | Field Staff ICC +WB |
| Pate <u>Sec 5 2017</u> | Time 1201 |
| Veather conditions in previous 24 hrs GPS Coordinates (Zone) 17 T E 043 | 22097 N 4777439 Datum |
| GPS Coordinates (Zone) 17 Y E 043 Descriptive Location | AND IT IN A 1/1/1) Datum |
| Vater Quality | 11 797 Conduction (Storm) 463 |
| ple vater Temperature (°C) しってし ple vater Temperature (°C) しょとし | H7.9,7 Conductivity (μS/cm)4.5.5 Air Temperature (°C)5° |
| ime in situ measurements taken 12:03 | 3 pm |
| Vatercourse Dimensions & Morphology | |
| Mean Watercourse Width 2: (m) | Maximum Pool Depth(cm) |
| lean Bankfull Width (m) | Mean Water Depth (cm) |
| | Pool% Run% Flat |
| Evidence of eroding banks, Comments on ban | nk stability |
| Substrate (% cover) | |
| | 30 Sand 20 Silt Muck |
| | |
| Boulder 50 Gravel _ | 이 전문 보다 전문에 가면 가면 본다른 중 대학교는 공기를 가면 함께 보고 그렇게 하는 것이 되게 되었다. |
| Boulder 50 Gravel n-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris | Banks Deep Pool Watercress Aquatic Veg |
| n-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris | Banks Deep Pool Watercress Aquatic Veg |
| n-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone | Banks Deep Pool Watercress Aquatic Veg Boulder Other |
| n-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor | Banks Deep Pool Watercress Aquatic Veg |
| n-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone | Banks Deep Pool Watercress Aquatic Veg Boulder Other |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor diagent Land Use | Banks Deep Pool Watercress Aquatic Veg Boulder Other |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) OALC ASN 40% |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) OALC ASN 40% |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor diagent Land Use | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) Onle Ash 40% roundwater upwellings) Breot Fourt |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grown and a supplied of the control of | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) Onle Ash 40% roundwater upwellings) Breot Fourt |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground of the company o | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) Onle Ash 40% roundwater upwellings) Sheep to round |
| Cover Types Present (circle): Undercut Diverhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, green to be a first of the course of the cour | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) Out As 1 40% roundwater upwellings) Breot Fourt annel Grassed Swale Buried Tile |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground of the company o | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) Out As 1 40% roundwater upwellings) Breot Fourt annel Grassed Swale Buried Tile |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grown of the country of | Banks Deep Pool Watercress Aquatic Veg Boulder Other |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grown of the country of | Banks Deep Pool Watercress Aquatic Veg Boulder Other minant vegetation, mature or early successional) Out As 1 40% roundwater upwellings) Breot Fourt annel Grassed Swale Buried Tile |
| Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, dor Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grown of the country of | Banks Deep Pool Watercress Aquatic Veg Boulder Other |

Deep + Soft Substrate IIMINO ITOMITY.



Field Notes Authored by M

Jashvandacr di WIND FARM WATERBODY RAPID ASSESSMENT FORM



Station # 2-6 Project Name C.O. Watercourse Name Shashwand ancit Project # 160960709 Photos 671=1d 672=0/5 673=0/5 Field Staff NB, MF Date 2012 04 07 Time 14:10 No precio 0422036 Weather conditions in previous 24 hrs GPS Coordinates (Zone) 17T E Descriptive Location @ Corner of Thompson & Kinnaid **Water Quality** pH <u>8.29</u> Conductivity (μS/cm) <u>647</u> Dissolved Oxygen (mg/L) 10.38 Air Temperature (°C) 21°c Water Temperature (°C) 20.51 Time in situ measurements taken 14:2% Watercourse Dimensions & Morphology Mean Watercourse Width 4.5 (m) Maximum Pool Depth_ _(m) Mean Water Depth 0.60 m (cha) Mean Bankfull Width % Riffle 100 % Pool % Flat Evidence of eroding banks, Comments on bank stability Substrate (% cover) Cobble Sand___ Bedrock Muck Gravel_ Boulder **Detritus In-water Cover** Cover Types Present (circle): **Undercut Banks** Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 10% trees, shoubs Adjacent Land Use Pasture, Thompson Line **Fish Habitat Potential** Critical Habitat (spawning or nursery areas, groundwater upwellings) Spawn, noisein, foracini. Migratory Obstructions (Seasonal, permanent) Note any fish observations **Waterbody Notes** Natural Watercourse V Trapezoidal Channel Grassed Swale **Buried Tile** Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg ✓ Other Habitat Notes, Incidental Wildlife Observations, etc.

Field Notes QA/QCed by ___ W:\resource\internal info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

| | Sewhandah 2-6 Creek Page 1 of |
|---|--|
| Stantec Stan | tec Consulting Ltd - Electrofishing Record and Catch Results |
| Project Name C.O. | Station Number 2-6 |
| Project Number 11,091 | Pass No. (if applicable) |
| | 1 672=0\5 673=d 6 Date (yyyymmdd): 2017 06 07 |
| Descriptive Location (| Cornel of Thompson + Kinnaird on Sw Corner |
| UTM coordinates | 42.2.036 easting <u>4778243</u> northing zone <u>13</u> |
| Fishing Method (circle one): Sampling Method (circle one): | Backpack Boat Unit Model/Make even habitat transect con spot |
| Effort (Electrofishing Seconds): Settings | Number of Netters: Number of Anodes: |
| Frequency (Hz) 70 | Voltage (volts): 900 Current (Amps) Power (Watts) |
| Station Information | |
| Length of Stream Surveyed (m) Station Characteristics: | |
| | Width (m): Range $\frac{4.5}{0.30}$ Average: $\frac{4.5}{0.10}$ |
| Water Clarity/Colour: Temperature (°C) pH Catch Data | Water Velocity if Measured (m/s): $\sqrt{\mu}$ Time 14 3. $\sqrt{6.5}$ Conductivity (uS/cm) $\sqrt{47}$ Dissolved Oxygen (mg/L) $\sqrt{10.37}$ |
| Species | Number of Fish Comments (i.e. age, disease, etc): |
| 0 | |
| Civing Kin seed | |
| 1008 OF 104 | cyclinidal observed |
| was at yay | - C9/11-11000 10-22-0-0-0 |
| Very limited substrate: | to where we could ABh Very dup + soft |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| Fish Measurements on Separate | a Sheet? VN |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 9-1

| | Stantec |
|-------|--|
| | Project Project # 100100 709 Station # 9 Field Staff K + MF Photos Taken 629 - 634 Date Date Date 9:15 Descriptive Location Codor Point (Lee Nove 2011) Descriptive Location Codor Point (Lee Nove 2011) |
| | Water Quality Dissolved Oxygen (mg/L) 1/5 pH 8/1 Conductivity (μS/cm) 2/0 Water Temperature (°C) 4/0 Weather conditions in previous 24 hrs Color (Color (Local Color (Local C |
| | Watercourse Dimensions & Morphology Mean Watercourse Width 4.5 (m) Mean Bankfull Width 4.5 (m) Mean Water Depth 6 m + (cm) Mean Water Depth 7 m + (cm) Mean Water Depth 8 m + (cm) Mean Water Depth 9 |
| south | Stable 4 NPS Substrate - Upstream (% cover) + Word and Olep, assumed Bedrock Silt Boulder 30 Clay Cobble |
| north | MuckGravelMarlSand _70 Detritus Substrate - Downstream (% cover) + And + Alep ; Assumed BedrockSiltBoulder30 ClayCobble MuckGravelMarlSand _70 Detritus |
| | In-water Cover Cover Types Present (circle): Undercut Banks Overhapging Vegetation Undercut Banks Overhapgin |
| | Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 70 / dec. wood of Downstream 20 / de dec. wood of Adjacent Land Use |
| | Upstream uppallot Downstream / S + nondlot |
| | Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream |
| | Migratory Obstructions (seasonal, permanent) Upstream Downstream |
| | Note any fish observations Wee |
| 0 | Other Habitat Notes, Incidental Wildlife Observations, etc. - Fast Houng though woodlet - als flows through edge of woodlet a then out into Ag fa |
| | Field Notes Authored by KE Field Notes QNOCED by Tk Page 1 of 1 Noted & deally & new flashy system - worldy dubons journe wis curvent carring flow to boil up en extern |

Russel Drain

| Project Name C.P. | | | Station Number | 9-1 | Water Water 19 |
|---|-----------------------|------------------|---|------------------|----------------|
| Project Number 16090 | 60709 | U. 449.4855 | Pass No. (if applica | uble) | ale Temp |
| | | 04=1/5 | | | 76 |
| Descriptive Location <u>Ced</u> | ar Point | Ln ~ IK | Date (yyyymmdd): | Kinnaird | • |
| UTM coordinates 47 | 74930 | easting | 422814 | northing | zone · 1 |
| Fishing Method (circle one): Sampling Method (circle one): | Backpa | Boa habitat | | /Make ER 13 | <u> </u> |
| Effort (Electrofishing Seconds): _ Settlings | 239 | Number of Netter | ns: / | Number of Anodes | : |
| Frequency (Hz) 60 | Voltage (volts) | 700 Cun | rent (Amps) | Power (Watts) | _ |
| Station Information | | | | | |
| Length of Stream Surveyed (m) | ~ 70 | | | | |
| Station Characteristics: | Width (m): | Range 1.75 | - 2.0 Average: | 1.85 | |
| | Depth (m): | Range 0.30- | 0.65 Average: | | |
| | | | | | |
| Mater Classic Caleum | | Mater M | | | - 17. |
| Water Clarity/Colour: +e Temperature (°C) / 5 | a 52 | _ Water V | elocity if Measured (m/s) | 807 | Time 12: |
| Water Clarity/Colour: +e Temperature (°C) /5 | ς 52 Σ5 | | Conductivity (uS/cm | 807 | Time 12: |
| | α 52 25 | | | 807 | Time 12: |
| Catch Data Species | SA 25 Number of | | Conductivity (uS/cm | 807 | |
| Catch Data Species AIRPK (25cm) | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species AIRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species AIRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species AIRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species AIRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species AIRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species AIRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |
| Catch Data Species NRPK (25cm) Crkchub | | | Conductivity (uS/cm Dissolved Oxygen (mg/L | 807 | |



WIND FARM WATERBODY RAPID ASSESSMENT FORM 7-2

| Stantec | | | | WD |
|--|-------------------|--------------------|---|-------------|
| Station # 7 - 2 | | Project Name | CP | |
| Watercourse Name معلمه المعلمة | Cerete 3 Ross Oro | Project # | 1009100709 | |
| Photos 1193 | | | F +JK | |
| Date July 3 20 | 10 | Time 7:10 | | |
| Weather conditions in previous 2 | 24 hrs T-S | torm | | |
| GPS Coordinates (Zone) | + E 421 | 317 | V 4776634 | Datum MP083 |
| Descriptive Location Proof | - Rd | rest of | (innerd) | |
| | | | | |
| Water Quality | | \wedge d | N | |
| Dissolved Oxygen (mg/L) | Hq | Condu | ctivity (µS/cm) | |
| Water Temperature (°C) | | | e (°C) | |
| Time in situ measurements take | | | | |
| | | | | / / |
| Watercourse Dimensions & M | | | - \ | MM |
| Mean Watercourse Width | (m) | Maximum Pool | Mark Carlo Mark Carlos | _(cm) |
| | (m) | Mean Water De | | _(cm) / |
| % Riffle | 10000 | Pool | % Run | % Flat |
| Evidence of eroding banks, Con | iments on bank | stability | | |
| Substrate (% equar) | | | | |
| Substrate (% cover) | Cobble | Sand | Silt | Muck |
| BedrockBoulder | Gravel | 600 Clay | Siit Marl | Detritus |
| Bouldel | Glavei | Clay_ | IVICIII | Detritus |
| Overhanging Vegetation Working Riparian Zone Riparian Coyer (% of watercours | | | ature or early success | sional) |
| Adjacent Land Use | | | | |
| AG | | | | • |
| | | | | |
| Fish Habitat Potential Critical Habitat (spawning or nur | rsery areas, gro | undwater upwelling | s) | |
| Migratory Obstructions (seasona | al, permanent) | | | |
| Note any fish observations | | | | |
| | | | | |
| Waterbody Notes Natural Watercourse Tr | | | | |
| Surficial Drainage (i.e. furrows)_ | Dugout F | ond Domina | ated by Aquatic Veg_ | Dry |
| Other Habitat Notes, Incidenta | al Wildlife Obse | ervations, etc | | |
| | | | | |
| | | | | |
| Field Notes Authored by | Field N | otes QA/QCed by | | |



| Cha | -4 |
|-----|------|
| 1. | ntec |

| | RAPID ASSESSMENT FORM FOR AQUATIC HABITAT Stantec ROSS Drouin Stantec |
|----|--|
| | Project Project # 160760 707 Station # 4-1 Field Staff * F. + ME Photos Taken 535-543 Date Now 05 2011 GPS Coordinates 17 4718270 42 268 Descriptive Location * Thompson No 200 m 1266 of |
| | Water Quality Dissolved Oxygen (mg/L) 857 pH 38 Conductivity (μS/cm) 53 \ Water Temperature (°C) 798 Air Temperature (°C) 6° Weather conditions in previous 24 hrs 600 4 100 |
| | Watercourse Dimensions & Morphology Mean Watercourse Width 2 (m) Maximum Pool Depth 40 (cm) Mean Bankfull Width 6 (m) Mean Water Depth 30 (cm) — % Riffle 70 % Pool 30 % Run 8 Flat Evidence of eroding banks, Comments on bank stability |
| th | Substrate - Upstream (% cover) + word ASSWed ASSWed Boulder Clay Cobble Muck Gravel Marl Sand Detritus |
| h | Substrate - Downstream (% cover) + Substrate - Down |
| | In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants CS Overbanging Vegetation Woody Debris Boulder Other Garbage |
| | Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 40% ash trees no south side Downstream 40% ash a other dec, trees ne cast side Adjacent Land Use Upstream Ag Aclds Downstream |
| | Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream Downstream |
| | Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations |
| | Other Habitat Notes, Incidental Wildlife Observations, etc. - wdl, incident word, story for the straight - US through Reld more red-over along banks |
| | Field Notes Authored by 1/49, Field Notes QA/QCed by TK Page of |

Ross Drain 4-1

| Descriptive Location UTM coordinates Fishing Method (circle one): Sampling Method (circle one): Settings Frequency (Hz) | 587:0/s On Thom 4778290 e): (e) ds): 239 Volta Width | MPSON Backpa | easting Nack habita Number of | #2 Boat at Currer | Date (y) 1268 tran (Amps) | Unit Model | ZOIZ OF KINGS Make FR spot Number of And Power (Watts) 0.80 0.08 | zone <u>17-</u> |
|--|--|------------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------|--|------------------------------|
| Photos 538=id Descriptive Location UTM coordinates Fishing Method (circle one): Sampling Method (circle one): Settings Frequency (Hz) | 587:0/s On Thom 4778290 e): (e) ds): 239 Volta (m) ^ Width Depth Lea | Backpa ven) ge (volts) | easting Nack habita Number of | #2 Boat at Currer | 1268 tran / nt (Amps) | Unit Model/ | Make LA spot Number of And Power (Watts) | zone <u>17-</u> |
| Descriptive Location UTM coordinates Fishing Method (circle one): Sampling Method (circle one): Settings Frequency (Hz) | 0n Thom 4778290 e): (e) ds): 239 Volta (m): ~ Width Depth | Backpa ven) ge (volts) | easting Nack habita Number of | #2 Boat at Currer | 1268 tran / nt (Amps) | Unit Model/ | Make LA spot Number of And Power (Watts) | zone <u>17-</u> |
| Fishing Method (circle one): Sampling Method (circle one): Sampling Method (circle one): Effort (Electrofishing Second Settings Frequency (Hz) | 4778290 a): (e) ds): 239 Volta (m) ^ Width Depth Leq | Backpa ven ge (volts) | easting habita Number of Pool | Boat at f Netters: | trar / nt (Amps) | Unit Model/ nsect Average: | Make HA spot Number of And Power (Watts) | zone <u>/</u>)2 odes: _/ |
| Fishing Method (circle one): Sampling Method (circle one): Settings Frequency (Hz) | e): e ds): 239 Volta (m): Width Depth | Backpa veri ge (volts) | Number of Pour Range | Boat If Netters: Currer | trar | Unit Model/ nsect Average: | Make LR spot Number of And Power (Watts) | e\ :-)& odes: _/ |
| Sampling Method (circle on Effort (Electrofishing Second Settings Frequency (Hz) | e): ds): 239 Volta (m): Width Depth Leq | ge (volts) | Number of 700 Range o Range o | f Netters: Currer | /.O 0.10 | Average: | Number of And Power (Watts) | odes: _/ |
| Effort (Electrofishing Second Settings Frequency (Hz)() Station Information Length of Stream Surveyed Station Characteristics: Water Clarity/Colour: Temperature (°C) | ds): 239 Volta (m): Width Depth | ge (voits) //OO n (m): | Number of 700 Range o Range o | Currer | /.O 0.10 | Average: | Number of And Power (Watts) | |
| Settings Frequency (Hz) Station Information Length of Stream Surveyed Station Characteristics: Water Clarity/Colour: Temperature (°C) | Volta (m) Width Depth | ge (volts) //O | Range o | Currer | nt (Amps) | Average: | O. 80 | |
| Station Information Length of Stream Surveyed Station Characteristics: Water Clarity/Colour: Temperature (°C) | (m) Width Depth | / <i>DO</i> | Range o | 0.6 - / 0.05 - C | 7.0 0.10 | Average: | 0.80 | |
| Station Information Length of Stream Surveyed Station Characteristics: Water Clarity/Colour: Temperature (°C) | (m) Width Depth | / <i>DO</i> | Range o | 0.6 - / 0.05 - C | 7.0 0.10 | Average: | 0.80 | |
| Station Characteristics: Water Clarity/Colour: Temperature (°C) | Width Depth | n (m): | Range 2 |).05 - C | 0.10 | | 0.08 | |
| Station Characteristics: Water Clarity/Colour: Temperature (°C) | Width Depth | n (m): | Range 2 |).05 - C | 0.10 | | 0.08 | |
| Temperature (°C) | Jea | n (m): | | Her I | | Average: | | |
| Temperature (°C) | | | (· v | Nator Vol | | | | |
| Temperature (°C) | | | | | onity if Ma | asured (m/s) | · A)/A | Time 17 : 3 |
| | | | - 4 | Talei Veil | | tivity (uS/cm | 724 | Time/ <u></u> |
| pH | 8.21 | | | Di | 장소((())에면서()()()() [다린() | xygen (mg/L | MARKET MARKET TO A STATE OF THE | |
| Catch Data | | | | | | | | |
| Species | B | lumber of | f Fish | | | | Commen | ts (i.e. age, disease, etc): |
| | | | | | | | | |
| No catch | | | | | | | | |
| No fish obser | ved | | | | | | | |
| | | | | | | | | |
| Lots of cra | ofish / | toads | from | 15 | | | | |
| | / | | / (|) • | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| | | 4 | | | | | | |
| | | | | | ily D _{ro} filia | | | |
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| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Fish Managements on Co- | arate Shoet? Wil | (1) | | | | | Valenta and the | |
| Fish Measurements on Sep Field Staff: | ND, mr | U | | | | Notes By | r. ME | |



| | Ross Drain | 11-11 |
|---------|---|-------|
| A | WIND FARM WATERBODY RAPID ASSESSMENT FORM | 7 9 |
| Stantec | | WD |

| Station # 4 -4 | | Project Name | Codor | Port | |
|--|---------------------------------------|--|-------------------------------|---------------|--|
| Vatercourse Name W Koss D Photos 851 -853 | warn | Project # | 09 60 709 | | |
| Photos 851 -853 | | Field Staff | | | |
| Date 2012/10/04 | 7 | Time 9:17 | im | | |
| Weather conditions in previous | 24 nrs bureach | - wypr. | N | D | atum N4083 |
| GPS Coordinates (Zone) 17 T Descriptive Location | Nah | Who would the Es | Ab a Loring | م المط | atum Natio |
| Descriptive Location Values | by many coards | | | | |
| Water Quality | | N~~ | | | |
| Dissolved Oxygen (mg/L) | pH_ | | ductivity (µS/0 | | |
| Water Temperature (°C) | | Air Temperat | ure (°C) | | |
| Time <i>in situ</i> measurements tak | en | | | | |
| Watercourse Dimensions & N | Morphology | | | | |
| Mean Watercourse Width | (m) | Maximum Po | ol Depth | (0 | m) |
| Mean Bankfull Width | (m) | Mean Water | | | :m) |
| % Riffle | %F | Pool | | un | % Fla |
| Evidence of eroding banks, Co | mments on bank | stability Clay | Sides - 12 | nsect - ww | doentilly |
| Substrate (% cover) | | | i je vije venika | | |
| Bedrock | Cobble | | VO | Silt | Muck |
| Boulder | Gravel | 80 Clay | | Marl | 地 Detritus |
| | | | | | RLG |
| In-water Cover | Maria and E | Parka Door | Real West | ororogo | Aquatic Veg |
| Cover Types Present (circle): | Undercut E | sanks Deep | Pool Wat Other | ercress | Aqualic veg |
| Overhanging Vegetation V | voody Deblis | Douidei | Oulei | | |
| Riparian Zone Riparian Cover (% of watercou 20% Ash Elm trel | rse shaded, dom | inant vegetation, | mature or ea | rty successio | onal) |
| Adjacent Land Lies | A A A A A A A A A A A A A A A A A A A | VIII | | | |
| Adjacent Land Use An Horizon NE - Combe | est | | | | |
| | | | | | |
| Fish Habitat Potential | | | | | |
| Critical Habitat (spawning or nu | ursery areas, grou | undwater upwellin | igs) | | |
| | | | | | |
| Migratory Obstructions (seasor | nal, permanent) | | | | |
| Note any fish observations | | | | | |
| and the second s | | / | | | |
| Waterbody Notes | | | | | |
| | rapezoidal Chani | nel Gra | assed Swale_ | Bu | ried Tile |
| Natural Watercourse T | rapezoidal Chani) Dugout P | PROPERTY AND ADDRESS OF THE PARTY OF THE PAR | assed Swale_ inated by Aqu | | AND THE RESERVE AND ADDRESS OF THE PARTY OF |
| Waterbody Notes Natural Watercourse T Surficial Drainage (i.e. furrows) Other Habitat Notes, Incident |) Dugout P | ond Dom | inated by Aqu | | Married Street, Street |
| Natural Watercourse T Surficial Drainage (i.e. furrows) |) Dugout P | ond Dom | inated by Aqu | | AND THE RESERVE AND ADDRESS OF THE PARTY OF |
| Natural Watercourse T Surficial Drainage (i.e. furrows) |) Dugout P | ond Dom | inated by Aqu | | Married Street, Street |



Stewardson brain 7 - 1 RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 7 - 1

| STEWWASUT | orace |
|-------------------------|--------|
| IENT FORM FOR AQUATIC H | ARITAT |

| Stantec | |
|--|---|
| Project C, I | Project # 160960 709 |
| Station # 7~1 | Field Staff KE + MF |
| Photos Taken 500-565 | Date Nov. 28 2011 |
| GPS Coordinates 17 4776649 420 | 743 Time 3:00 om |
| Descriptive Location Proof Like | , I km east of Rawling |
| | 1 |
| Water Quality | - 79 |
| | pH 7.79 Conductivity (μS/cm) 666 |
| Water Temperature (°C) 67 | Air Temperature (°C) 10° |
| Weather conditions in previous 24 hrs | a 4 lain |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 20 (cm) |
| Mean Bankfull Width 4 (m) | Mean Water Depth 20 (cm) |
| % Riffle <u>' ' (1)</u> % Pool | <u>(ℓ D</u> % Run% Flat |
| Evidence of eroding banks, Comments on ba | INK Stability |
| | ed into small catchment or |
| Substrate - Upstream (% cover) | |
| Bedrock Silt Muck Gravel | Boulder 20 Clay Cobble |
| | MarlSand <u>\$\frac{\frac{1}{20}}\$</u> Detritus |
| Substrate – Downstream (% cover) 🕬 | lled of KCG |
| BedrockSilt | Boulder |
| MuckGravel | MarlSand _ 20 Detritus |
| In-water Cover | |
| | ut Banks Deep Pool Vascular Plants |
| Overhanging Vegetation Woody | Debris Boulder Other |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, de | ominant vegetation, mature or early successional) |
| Upstream 07, | |
| Downstream 80% scattered | d neman trees |
| Adjacent Land Use | |
| Upstream A held | |
| | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, g Upstream | roundwater upweilings) |
| Downstream 110716 | |
| Migratory Obstructions (spasonal, permanent | 0 |
| Upstream the drainage | month to catchivent area 6 |
| Downstream dry in summe | V 3P |
| Note any fish observations | |
| | |
| Other Habitat Notes, Incidental Wildlife Ob | oservations, etc. |
| -uls coatchment area for to | le dravage NB ~ 10 m. |
| -d/s incised channel choked | |
| of the contract of the contrac | () , , , , , , , , , , , , , , , , |
| | |
| ield Notes Authored by | Id Notes QA/QCed by Page of |

stevardson Drain

Stantec Consulting Ltd - Electrofishing Record and Catch Results C.P Station Number **Project Name** Pass No. (if applicable) 160960709 Project Number 541=id 542=id 543=v/5 544=d/s Date (yyyymmdd): 2012 06 05 **Photos** On Proof Ln ~ 1km east of Rawlings **Descriptive Location** 4776649 420743 zone 191 -easting -northing-**UTM** coordinates **Boat** Unit Model/Make Backpack Fishing Method (circle one): habitat transect 15251 Sampling Method (circle one) ever Number of Anodes: Number of Netters Effort (Electrofishing Seconds): **Settings** Power (Watts) **Qurrent (Amps)** Voltage (volts) Frequency (Hz) Station Information Length of Stream Surveyed (m) Range 0.5-0.75 0.6 Average: **Station Characteristics:** Width (m): 0.015 Average: Depth (m): Range 0.01-0.02 Water Velocity if Measured (m/s): Too shallow Water Clarity/Colour: Conductivity (uS/cm) Temperature (°C) Dissolved Oxygen (mg/L) pH **Catch Data** Comments (i.e. age, disease, etc): **Number of Fish Species**

| Fish Measurem | ents on Separate Sheet? Y/N | | |
|---------------|-----------------------------|-------------|---------------------------|
| Field Staff: | NBME | Notes By: W | |
| | | | (Station Diagram on Back) |



| Separate Sep | | | |
|--|--|--|--|
| Clan | | | |

| RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 4-2 |
|--|
| Project $C \cdot P$ Station # $Y - 2$ Photos Taken $5YY - 55D$ GPS Coordinates $17 4776304 420757$ Descriptive Location $18 \times 18 $ |
| Water Quality Dissolved Oxygen (mg/L) 11 9 pH 7.91 Conductivity (µS/cm) 558 Water Temperature (°C) 9.25 Air Temperature (°C) 10 ° Weather conditions in previous 24 hrs 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| Watercourse Dimensions & Morphology Mean Watercourse Width 3 (m) Maximum Pool Depth 40 (cm) Mean Bankfull Width 6 (m) Mean Water Depth 30 (cm) Watercourse Dimensions & Morphology Mean Watercourse Width 40 (cm) Mean Water Depth 40 (cm) Watercourse Dimensions & Morphology Maximum Pool Depth 40 (cm) Mean Water Depth 50 (cm) Watercourse Vidth 6 (cm) Mean Water Depth 70 (cm) Watercourse Vidth 70 (cm) Mean Water Depth 70 (cm) Watercourse Vidth 70 (cm) Mean Water Depth 70 (cm) Watercourse Vidth 70 (cm) Mean Water Depth 70 (cm) Watercourse Vidth 70 (cm) Mean Water Depth 70 (cm) Watercourse Vidth 7 |
| Substrate - Upstream (% cover) + World, assumed Bedrock 20 Silt Boulder 40 Clay Cobble Muck Gravel Marl Sand 40 Detritus |
| Substrate - Downstream (% cover) Bedrock Silt Boulder 20 Clay Cobble Muck Gravel Marl Sand 80 Detritus |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants PCG Overhanging Vegetation Woody Debris Boulder Other |
| Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Upstream 1006 woodlof - alcuduor Downstream 40% alculus vegetation, mature or early successional) Adjacent Land Use Upstream 45 woodlof Downstream 45 woodlof Downstream 45 woodlof |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Upstream Downstream |
| Migratory Obstructions (seasonal, permanent) Upstream Downstream Note any fish observations Note and the seasonal of the s |
| Other Habitat Notes, Incidental Wildlife Observations, etc. - tile of ditch draining monts - us no in-valer vegt just leaf litter of some woody dutors |
| Field Notes Authored by LE Field Notes QA/QCed by JK Page (of) |

Stewardson brain 4-2

| Project Number 160760709 Pass No. (If applicable) / Photos 554×14 535×15 531×16 Date (tytyymmodd): 2012 0L 05 Descriptive Location UTM coordinates | Project Name | | Station Number <u>4-2</u> | |
|--|----------------------------------|--------------------------|--|-----------|
| Photos 534-14 535-V s 531-45 Date (yyyymmdd): 2012 06 05 Descriptive Location On Thompson Line MKm east of Rowlings Ro. UTM coordinates 477-8304 -eesting 4207-57 -northing zone 17 Fishing Method (circle one): Backpack Boat Unit Model/Make 18 Sampling Method (circle one): even habitat transect spot spot Number of Netters: Number of Anodes: / Settings Frequency (Hz) 60 Voltage (volts) 700 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Rowl (2001/5+d/s) could not fish inside collourt Width (m): Range Average: Water Clarity/Colour: tea Water Velocity if Measured (m/s): N/A Time 12 3: Water Clarity/Colour: Temperature (°C) 144/ Solot Conductivity (uS/cm) 74-2 Dissolved Oxygen (mg/L) 10-93 Number of Fish Comments (I.a. aga, disease, etc) No catch | Project Number 1609(| 20709 | Pass No. (if applicable) | Hallow) |
| Descriptive Location On Thompson Line wilking east of Routings Rol. UTM coordinates 477 8304 easting 420 757 monthing zone 14* Fishing Method (circle one): Backpack Boat Unit Model/Make the following spot sampling Method (circle one): Effort (Electrofishing Seconds): Comment (Amps) Power (Watts) Station (Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Velocity if Measured (m/s): Temperature (°C) 14 41 Conductivity (us/cm) 76 23 Catch Data Number of Fish Comments (La. aga, disease, etc) Number of Fish Comments (La. aga, disease, etc) | Photos 534=id | 535= VIS 531=d5 | | |
| Fishing Method (circle one): Sampling Method (circle one): Sampling Method (circle one): Effort (Electrofishing Seconds): Settings Frequency (Hz) Voltage (volts) Frequency (Hz) Voltage (volts) Frequency (Hz) Current (Amps) Power (Watts) Power (Watts) Frequency (Hz) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Valer Clarity/Colour: Temperature (*C) 14 44 Conductivity (us/cm) Ph 3 17 Dissolved Oxygen (mg/L) Comments (La. age, disease, etc): No catch | | | 1km east of Rawlings Ro |) |
| Sampling Method (circle one): Effort (Electrofishing Seconds): Settings Frequency (Hz) 60 Voltage (volts): 700 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Row (2005 + d) Could not fish inside colourt Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: tea Water Velocity if Measured (m/s): N/A Time 2 3: Temperature (°C) 19 4/ | UTM coordinates | 7778304 - easting Narthy | 420757 northing zone | 17 |
| Effort (Electrofishing Seconds): 60 Number of Netters: Number of Anodes: / Settings Frequency (Hz) 60 Voltage (volts): 700 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Row (200/5+d/5) could not fish in side colourt Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: †ca Water Velocity if Measured (m/s): 1/4 A Time 12.5: Temperature (°C) 1/4 4/1 Conductivity (uS/cm) 7/2 Conductivity (uS/cm) 1/0.03 Catch Data Species Number of Fish Comments (La. age, disease, std): | | | | |
| Settings Frequency (Hz) 60 Voltage (volts): 700 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Row (2.0 1/5 + d) Could not fish in side colourt Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: tea Water Velocity if Measured (m/s): N/A Time 12.3: Temperature (°C) 14.41 Conductivity (uS/cm) 7.2 Conductivity (uS/cm) 7.0 0.3 Catch Data Species Number of Fish Comments (Le. age, disease, etc): | Sampling Method (Circle One): | | transect tight spot | |
| Frequency (Hz) 60 Voltage (volts) 700 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Row (2.01/5 + d/5) could not fish in side culourt Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: tca Water Velocity if Measured (m/s): N/A Time 12.3: Temperature (°C) 14.4/ Conductivity (uS/cm) 7.6.2 pH 8.17 Dissolved Oxygen (mg/L) 10.03 Catch Data Species Number of Fish Comments (La. age, disease, etc): | Effort (Electrofishing Seconds): | Number of | Netters: Number of Anodes: | |
| Length of Stream Surveyed (m) Row (2.0 1/5 + d) 5) could not fish in side colourt Station Characteristics: Width (m): Range | | Voltage (volts) 700 | Current (Amps) Power (Watts) | |
| Station Characteristics: Depth (m): Range Average: | Station Information | | o manda subject | |
| Depth (m): Range Average: Water Clarity/Colour: †ca Water Velocity if Measured (m/s): N/A Time 12.3: Temperature (°C) // 4// Conductivity (uS/cm) 7 2 pH 8.17 Dissolved Oxygen (mg/L) /0.03 Catch Data Species Number of Fish Comments (i.e. age, disease, etc): | | Row (2.0 u/s + d/s) | ould not tish inside color. | |
| Water Clarity/Colour: †ca Water Velocity if Measured (m/s): N/A Time 12.3: Temperature (°C) 14.41 Conductivity (uS/cm) 74.2 pH 8.17 Dissolved Oxygen (mg/L) /0.03 Catch Data Species Number of Fish Comments (a. age, disease, etc): | Station Characteristics: | | | |
| Temperature (°C) pH 8.17 Dissolved Oxygen (mg/L) Catch Data Species Number of Fish Comments (i.e. age, disease, etc): | | Depth (m): Range | Average: | |
| No catch | Temperature (°C) | 14.41 | Conductivity (uS/cm) 7-2 | |
| | | Number of Fish | Comments (i.e. age, disease | se, etc): |
| No till observed | | | | |
| | No tith obser | Ucd | | |
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Stewardson brain WB

| WIND FAR | M WATERBODY | RAPID ASSESS | MENT FORM | 40 |
|---|-----------------------------|------------------------------|---------------------|-------------|
| Stantec Station # 4-5 | d Son Farin | Project Name C'r | 0 0710 | |
| Watercourse Name Service Photos. 103 | MANY BYOUT | | M | |
| Date Nov. 29 2012. | | Time 2130 or | | |
| Weather conditions in previous | | | | |
| GPS Coordinates (Zone) 171 | E 420767 | NY | 118305 Da | túm |
| Descriptive Location Land | ings Road, | south of | Thompson | 1 : |
| Water Quality | | | | |
| Dissolved Oxygen (mg/L) 11. | <u>. 38</u> pH_7. | 8 Conductivity | (μS/cm) 43 | 4-11-11 |
| Water Temperature (°C) | 118 | Air Temperature (°C) | | |
| Time in situ measurements tak | ren <u>a:30 pm</u> | | | |
| Watercourse Dimensions & I | Mombology | | | |
| Mean Watercourse Width 0. | | Maximum Pool Depti | n 10 (cn | a) |
| Mean Bankfull Width | (m) Stanton | Mean Water Depth_ | 7 (cn | |
| | 100 % Peed | wale | % Run | % Fla |
| Evidence of eroding banks, Co | | | | |
| Step but stouble | | | | |
| | | | | |
| Substrate (% cover) | Oshbia | 04 | Silt 100 | Muck |
| Bedrock_ | Cobble | Sand Clay | Silt 100 Mari | Detritus |
| Boulder | Gravel | Clay | IVIQII | Detritus |
| in-water Cover | None | - Door Book | Waterseas | Aquatic Veg |
| Cover Types Present (circle): Overhanging Vegetation | Undercut Bank Woody Debris | s Deep Pool Boulder Other | | Aqualic veg |
| Riparian Zone | | | | |
| Riparian Cover (% of watercou | ırse shaded, dominan | t vegetation, mature | or early succession | al) |
| Adjacent Land Use | | | | |
| | | | | |
| Fish Habitat Potential | | | | |
| Critical Habitat (spawning or n | ursery areas, groundy | vater upwellings) | | |
| mrl | | | | |
| Migratory Obstructions (seaso | | | | 14 |
| Note any fish observations | | | | 0.00 |
| me | | | | |
| | | | | |
| Waterbody Notes | Francisco Observat | / 0 | unda Bud | led Tile |
| Natural Watercourse | rapezoidai Channel | Grassed S | waleBuri | |
| Surficial Drainage (i.e. furrows |) Dugout Pond | Dominated t | y Aquatic veg | _ Dry |
| Other Habitat Notes, inciden | | lone ete | | |
| I TOOK IS SOUTH NOTES INCIDEN | ARI VVIICIII II UDSBIVAT | ILII (26. PILL) | | |

Field Notes Authored by KE

Field Notes QA/QCed by



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

OR AQUATIC HABITAT 2-5

| | RAPID ASSESSMENT FORM FOR AQUATIC HABITAT | a o |
|----------|---|-----|
| . | | WB |
| | 0 | we |

| Project C. | Proje | ct# 160968 | 709 | |
|--|--------------------|---------------------|--|---|
| Station # 2-2 | | Staff Kt + | MF | |
| Photos Taken 69-623 | Date | NOV. 29 | 2011 | |
| GPS Coordinates 17 41)8226 | 422.896 Time | 8:47 | | |
| Descriptive Location | on une. | 1.5 km | west of | |
| - Army camp Ho | () | | | |
| Water Quality | | | | |
| Dissolved Oxygen (mg/L) | PH 8,0 | Conductivity (μ | S/cm) 27(| |
| Water Temperature (°C) | Air Te | emperature (°C) | 40 | |
| Weather conditions in previous 24 h | rs cold a l | ots of a | un | |
| Watercourse Dimensions & Morp | hology | | | |
| Mean Watercourse Width 3,5 | | num Pool Depth_ | 30 (cm) | |
| Mean Bankfull Width 3/8 | | Water Depth_ | 30 (cm) | |
| | | 2% Run | % Flat | |
| Evidence of eroding banks, Comme | | | | |
| stable - veg | | | | |
| Substrate - Upstream (% cover) | tubid ansi | wed | | |
| Bedrock Silt | Bould | ler 20 CI | ay Cobble | |
| MuckGrave | | | and Detritus | |
| Substrate Dewnstraem (9/ 2000) | | sured | | |
| Substrate – Downstream (% cove Bedrock Silt | 10000 | | | |
| | Bould | Mesto I ye in 1991 | | |
| MuckGrave | Marl | S | and Detritus | |
| In-water Cover | | | all all | 4 |
| Cover Types Present (circle): | Undercut Banks | Deep Pool Va | scular Plants | |
| Overhanging Vegetation | Woody Debris | Boulder Of | her | |
| Riparian Zone | | | | |
| Riparian Cover (% of watercourse s | naded dominant veg | tation mature or e | arly successional) | |
| Upstream 50% NO | man tree | Tation, mature or e | arry successionar) | |
| Downstream 5% | 14 11 | | | |
| Adjacent Land Use | 0 | | | |
| Upstream A | lda | | | |
| Downstream | too | | | |
| Fish Habitat Potential | | | | |
| Critical Habitat (spawning or nursery | areas aroundwater | unwellinge) | | |
| Upstream A 2000 | areas, groundwater | upweiiings) | | |
| Downstream / | | | | |
| Migratory Obstructions (seasonal, po | rmanent) | | | |
| Upstream 4.4.4. | | > | | |
| Downstream | SUMMEN | | ales (interes est l'emitte en mille). La les est mille de grant est march | |
| Note any fish observations where | | <u> </u> | | |
| Note any list observations your | | | | |
| | | | | |
| Other Habitat Notes, Incidental W | | etc. | | |
| | west, | | | |
| - incised channel, RCG. | - odtail li | red | | |
| - straught, min Rineu | ī | | | |
| 1 | | | | |
| Field Notes Authored by KE | Field Notes QA/QCe | TK | Page of | |

Lusby brain 2-5

| Project Name | C.P. | | Station Number 之 | -5 |
|---|-------------|-------------------------|---------------------------------------|--|
| Project Number | 1609607 | 09 | Pass No. (if applicab | |
| Photos 5 | 558=id 559 | = 0/5 50= 4/ | | CONTRACTOR OF THE PARTY OF THE |
| Descriptive Location | Camo | Road Road | | A STATE OF THE PARTY OF THE PAR |
| UTM coordinates | 47780 | | <u>422896</u> | nerthing zone / |
| Fishing Method (circle Sampling Method (circ | | Backpack even hab | Boat Unit Model/N itat transect ranse | Make LR 12 - |
| Effort (Electrofishing S Settings | | | | Number of Anodes: |
| Frequency (Hz) 6 | <u>O</u> Vo | oltage (volts): 800 | Current (Amps) | Power (Watts) |
| Station Information | | | | |
| ength of Stream Surv | | ~ 90 | | |
| Station Characteristics | | | 2.5- 2.0 Average: | 275 |
| | De | pth (m): Range | 0.10 - 0.20 Average: | 5.15 |
| Nater Clarity/Colour: | teac | olove | Water Velocity if Measured (m/s): | N/A Time /5:0 |
| | 16.26 | | Conductivity (uS/cm) | |
| Temperature (°C) | | | | 690 |
| pH . | 9.39 | | Dissolved Oxygen (mg/L) | |
| Catch Data | | Number of Fish | |)0.26 |
| Catch Data | 8.39 | Number of Fish | | |
| Catch Data Species Fathead Mn | 8.39 | Number of Fish Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn. | 8.39 | | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 8.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| pH Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| pH Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |
| Catch Data Species Fathead Mn BRST | 9.39 | 1 Adult | Dissolved Oxygen (mg/L) |)0.26 |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 2-3 WB

| Stante | • |
|---------------|---|
| | _ |

| | Project (Project # 140940707 |
|---------|--|
| | NORTH RESIDENCE OF THE PARTY OF |
| | Station # 2-3 Field Staff Ke + MF |
| | Photos Taken 575-58/ Date Movi 28 201/ |
| | GPS Coordinates 17 47790 (2 42758) Time 4:00 pm |
| | Descriptive Location Kinnaurd 1. le com south of Ravenscho |
| | 4 750 m ead no held |
| | Water Quality |
| | Dissolved Oxygen (mg/L) 12, 16 pH 8.0 Conductivity (µS/cm) lole/ |
| | Water Temperature (°C) |
| | Watercourse Dimensions & Morphology |
| | Mean Watercourse Width (m) Maximum Pool Depth (cm) |
| | Mean Bankfull Width (m) Mean Water Depth 30 (cm) |
| | % Riffle% Pool% Run% Flat |
| | Evidence of eroding banks, Comments on bank stability |
| Als o | |
| WAN ! | Substrate – Upstream (% cover) ナルか d Bedrock Silt Boulder リル Clay Cobble |
| reposed | |
| N688175 | |
| auth | Substrate – Downstream (% cover) fund |
| | Bedrock Silt Boulder Cobble |
| ر ال | MuckGravelMarlSand <u>lo</u> Detritu |
| | In-water Cover |
| | Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants Coverhanging Vegetation Woody Debrie Boulder Other |
| | Riparian Zone |
| | Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) |
| | |
| | Downstream 2012 Paran Les I should ! |
| | Adjacent Land Use A A A A A A A A A A A A A A A A A A A |
| | Upstream A A A A A A |
| | Downstream 11 9 100003 |
| | Fish Habitat Potential |
| | Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| | Upstream |
| | Downstream / LUV |
| | Migratory Obstructions (seasonal, permanent) |
| | Upstream Common |
| | Downstream |
| | Note any fish observations Mose |
| | |
| | Other Habitat Notes, Incidental Wildlife Observations, etc. |
| | -nused channel uned with moderate 1806 |
| | rentantrees in empantment |
| Ĺ | nod deix, slow Rlow. |
| | Field Notes Authored by K Field Notes QA/QCed by Page 1 of 1 |

Lusby bravin 2-3
Page / of /

| Project Name | C.P. | | Station Number | 2-3 |
|--|---------------------------|-------------------|-----------------------------------|--|
| Project Number | 60960709 | | Pass No. (if applicat | ole) |
| Photos 5 | 87=1d 588 | 520/5 589= | d/5 Date (yyyymmdd): | 2012 06 06 |
| Descriptive Location | off Ki | nalld | 1.6km South | of Raverisood |
| | + 750m | east int | o field (u/s of | 2-1+2-2) |
| UTM coordinates | 47790 | | | northing zone |
| Fishing Method (circle | one): | Backpack | Boat Unit Model/ | |
| Sampling Method (circ | THE RESERVE AND ASSESSED. | | abitat transect (195) | spot |
| Effort (Electrofishing S | | △ Alimb | er of Netters: | |
| Enon (Electronshing S Settings | 200105) | <u>O</u> Numb | el of reders. | Number of Anodes: |
| Frequency (Hz) 6 |) Volt | age (volts) 700 | Current (Amps) | Power (Watts) |
| Station information | | | 9-99 | |
| Length of Stream Surv | ayed (m) | -60 | | |
| Station Characteristics: | Widt | th (m): Range | 0,3 - 0,5 Average: | 0.4 |
| | Dept | th (m): Range | 0.03-0,07 Average: | 0.05 |
| Water Clarity/Colour: | tra. | | Water Velocity if Measured (m/s): | N/A Time 10 |
| Temperature (°C) | 13.36 | | Conductivity (uS/cm) | Control of the Contro |
| rus, in gain, 🚅 pH 🦡 | 8,12 | | Dissolved Oxygen (mg/L) | |
| Catch Data | | | | |
| Species | | Number of Fish | | Comments (i.e. age, disease |
| No catch | | | | |
| | | | | |
| M | 206-T Alac | wed. | | |
| Many you | BRST Obser | rucd, | offictively | |
| 1 | BRST Observ | to fish | effectively | |
| 1 | BRST Observer Hard | to fish | effectively | |
| 1 | BRST Observ W. Hard | rued; to fish | effectively | |
| 1 | BRST OBSE | rued, to fish | effectively | |
| 1 | BRST Observe Hard | rued, to fish | effectively | |
| 1 | BRST Observer Hard | rued ; to fish | effectively | |
| 1 | BRST OBSE | rued, to fish | effectively | |
| 1 | BRST OBSE | rued, to fish | effectively | |
| 1 | BRST Observer Hard | ived , | effectively | |
| 1 | BRST Observer Hard | rved, to fish | effectively | |
| 1 | BRST OBSE | rued, to fish | effectively | |
| 1 | BRST Observer Hard | ived , | effectively | |
| 1 | BRST Observer Hard | rued, | effectively | |
| Shall of Sha | w Hard | to fish | effectively | |

Lusby Brain 2-2

| Project Name C.P. | | Station Number | 2-2 |
|--|--|---|--|
| Project Number 1609 | 60709 | Pass No. (if applicable |) A / A A A RESTRICTION OF THE PARTY OF THE |
| Photos 584 - id | 585:45 586:45 | Date (yyyymmdd): | CONTROL OF THE PROPERTY OF THE |
| | Kinnaird ~1.5k | | |
| 750 | Im east into field | A CONTRACT OF THE PROPERTY OF | WF YER 4 100 WEEF AT 15 15. |
| UTM coordinates 47 | 7.9290 easting | 422553 | northing zone 17 |
| Fishing Method (circle one): Sampling Method (circle one): Effort (Electrofishing Seconds): Settings Frequency (Hz) Station Information Length of Stream Surveyed (m) Station Characteristics: | Backpack habitat 190 Number of Voltage (volts) 700 700 Width (m): Range o. | Netters: / N Current (Amps) F | spot lumber of Anodes: lower (Watts) 6.55 0.07 |
| | | ater Velocity if Measured (m/s): | Miles for a service of the contract of the con |
| Temperature (°C) | Number of Fish | ater Velocity if Measured (m/s): Conductivity (uS/cm) Dissolved Oxygen (mg/L) | N/A Time 09 4 ∃91 10 23 Comments (i.e. age, disease, etc): |
| Temperature (°C) pH Catch Data Species No Catch | 3.12 | Conductivity (uS/cm) | 791 10.23 |
| Temperature (°C) pH Satch Data Species No calch | Number of Fish OU UDSULVE A | Conductivity (uS/cm) | 791 10.23 |
| Temperature (°C) pH Satch Data Species No Carich | Number of Fish OU UDSULVE A | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 791 10.23 |
| Temperature (°C) pH satch Data pecies No Catch | Number of Fish OU UDSULVE A | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 791 10.23 |
| Temperature (°C) pH Satch Data Species No catch | Number of Fish OU UDSULVE A | Conductivity (uS/cm) Dissolved Oxygen (mg/L) | 791 10.23 |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 2-3

| - | 0.00 | | |
|---|------------|-------------|----|
| | Total Line | te (| • |
| - | r. I | 1 - | L. |
| | | | |

| Project | Project # 140960709 |
|--|---|
| Station # a - > | Field Staff KUTMF |
| Photos Taken 566-570 | Date 1/01/28 2011 |
| GPS Coordinates 17 4779 290 4225 | 3: 4.0 em |
| Descriptive Loçation | |
| Kinnaura 11:5 km sout | th of Raven mood 200 |
| east into field | The record to the state of the |
| Water Quality | |
| Dissolved Oxygen (mg/L) 1.45 pH | 7.95 Conductivity (µS/cm) _555 |
| Water Temperature (°C) 8.42 | Air Temperature (°C) 10° |
| Weather conditions in previous 24 hrs | +Car- |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width (m) | Maximum Pool Depth 50 (cm) |
| . (| |
| | Mean Water Depth (cm) |
| | |
| Evidence of eroding banks, Comments on banks | stability — <u>— — — — — — — — — — — — — — — — — —</u> |
| STAIRLE TUES | |
| Substrate - Upstream (% cover) | |
| Bedrock Silt | BoulderClay Cobble |
| Muck Gravel | Marl Sand 50 Detritus |
| | |
| Substrate - Downstream (% cover)+wbo | 1 |
| BedrockSilt | Boulder <u> </u> |
| MuckGravel | Marl Sand 70 Detritus |
| In-water Cover | |
| | anks Deep Pool Vascular Plants |
| Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Deb | |
| Overnariging vegetation woody Deb | ris Boulder Other |
| Riparian Zone | |
| Riparian Cover (% of watercourse shaded, domin | nant vegetation, mature or early successional) |
| Upstream 160° day of good | 14.72 > 그 아무슨 (19.11) 그는 그 전에 위해되었다. 이 그렇게 하면 하면 되는 것이 되었다면 하는 사람들이 아무지 않는데 얼마나 되었다면 하다. |
| Downstream U/s | " I TEE COM (METY) WOU |
| Adjacent Land Use | |
| Upstream 4 6 6 6 | |
| Downstream 75 A VICAS | |
| Downstiedin | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, ground | ndwater upwellings) |
| Upstream MOMO | |
| Downstream | |
| Migratory Obstructions (seasonal, permanent) | |
| | 7 |
| Downstream Ord Or SUMWEN | |
| Note any fish observations Anne | |
| THOIS ATTY HATT ODDER VALIDITIS TIME | |
| | 1 10 11 |
| | restions at a M make a much so |
| Other Habitat Notes, Incidental Wildlife Obser | valions, etc. 40 has the multiple of, |
| | 2. Or anount wordy debrie |
| Other Habitat Notes, Incidental Wildlife Obser | |
| Other Habitat Notes, Incidental Wildlife Obser- Mused mannel, slow Mon move Reg dls, less ys | |
| Other Habitat Notes, Incidental Wildlife Obser Muse of Mannel, slow Mon. More Reg dls, 1835 US | |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

| DH_7/9 Conductivity (μS/cm)_563 |
|--|
| Conductivity (-Clam) |
| Air Temperature (°C) |
| ld train |
| |
| Maximum Pool Depth (cm) |
| Mean Water Depth 50 (cm) |
| nk stability |
| |
| 20 |
| BoulderClayCobble Marl Sand SD Detritu |
| MarlSand <u>&</u> Detritu |
| ↑^ Boulder <u>२</u> ୭ ClayCobble |
| BoulderClayCobbleMarlSandDetritu |
| 1120 |
| t Banks Deep Pool Vascutar Plants RC |
| Debris Boulder Other |
| |
| minant vegetation, mature or early successional) |
| NELO |
| |
| |
| |
| |
| roundwater upwellings) |
| side green water input no |
| |
| ine ? |
| |
| |
| servations, etc. |
| shallow valley some fact |
| |
| |

Duffy Dain 1-1

| Project Name | C.P. | | Station Number | /-/ Value 1800 |
|---------------------------------------|-------------------|---------------------|--|----------------------------------|
| Project Number | 160960 | 709 | Pass No. (if applie | cable) |
| Photos 5 | | 1=2/5 592=0 | | : 2012 06 06 |
| | | | | of Ravenwood |
| Descriptive Excatori | | more giral | 7001 .5001 K | . OI KAVEVI WOOD |
| UTM coordinates | 477.9 | 944 eastin | 422086 | verthing zone / |
| Fishing Method (circle | e one): | Backpack | Boat Unit Mod | lel/Make K. 2 |
| Sampling Method (cit | rcie one): | even ha | bitat transect is | spot spot |
| Effort (Electrofishing | Seconds): 6 | O Numbe | er of Netters: | Number of Anodes: / |
| Settings | | | | Transpor of Percess. |
| Frequency (Hz) | 60 V | oltage (volts): 700 | Current (Amps) | Power (Watts) |
| Station Information | | | | |
| ength of Stream Sur | rveved (m). | Pow (2000 1/5) | d/s) + inculver + (- | 9m) Total: 12m. |
| Station Characteristic | | | 0.5/0.7 Average: | |
| | | | 0.1 - 0.15 Average: | |
| | | | | |
| Vater Clarity/Colour: | tea | | Water Velocity if Measured (m/ | |
| Temperature (°C) | 15 01) | | | |
| Temperature (°C) | | | Conductivity (uS/c | |
| pH | | | Conductivity (us/ci Dissolved Oxygen (mg/ | BB (|
| Catch Data | | | | (L) <u>10.9.)</u> |
| Catch Data | | <u> </u> | | (L) <u>10.9.)</u> |
| Catch Data Species SRST | 8,37 | <u> </u> | Dissolved Oxygen (mg | (L) <u>10.9.)</u> |
| Pecles Rest Man | 8,37 | <u> </u> | Dissolved Oxygen (mg/ | (4) <u>10 4)</u> |
| Pecles Rest Man | 8,37 | <u> </u> | Dissolved Oxygen (mg | (4) 10 4) |
| Catch Data Species SRST Fallead Mn | 8,37 | <u> </u> | Dissolved Oxygen (mg/ | (4) 10 4) |
| pecies RST Falled Mn | <u>8,3</u> 7 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, et |
| pecies RST Falled Mn | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | (4) 10 4) |
| pecies RST Falled Mn | <u>8,3</u> 7 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, et |
| pecies RST Falled Mn | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, et |
| Pecles Rest Man | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| pecies RST Falled Mn | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| pecies RST Falled My | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| Pecles Rest Man | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| Pecles Rest Man | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| Catch Data Species SRST Fallead Mn | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, et |
| Catch Data Species 3 RST Falled Mo | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| Catch Data Species SRST Fallead Mn | 8.37 YOY BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |
| Catch Data Species SRST Fallead Mn | you BRS-1 | Number of Fish | Dissolved Oxygen (mg/ | Comments (i.e. age, disease, etc |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 24

| Stantec | 11 |
|--|--|
| Project C.Y. | Project # 160960 709 |
| Station # 2 -1 | Field Staff KE + MF |
| Photos Taken | Date NOV. 29 2011 |
| | 3460 Time 8136 |
| Descriptive Location homeon | |
| Army Camp | |
| | |
| Water Quality | 797 |
| Dissolved Oxygen (mg/L) | pH Conductivity (μS/cm) _ 2/8 |
| Water Temperature (°C) (0 1 5 / | Air Temperature (°C) 4° |
| Weather conditions in previous 24 hrs | old - lots of care |
| Watercourse Dimensions & Morphology | |
| Mean Watercourse Width 2.5 (m) | Maximum Pool Depth (cm) |
| Mean Bankfull Width (m) | Mean Water Depth 50 (cm) |
| % Riffle% Poo | |
| Evidence of eroding banks, Comments on b | |
| stable + veg | |
| Substrate - Upstream (% cover) | Led assured |
| Bedrock Silt | Boulder Clay Cobble |
| Muck Gravel | BoulderClayCobbleMariSand & Detritus |
| | |
| Substrate – Downstream (% cover) | rad assured |
| BedrockSilt | Boulder Cobble Cobble |
| MuckGravel | MarlSand _80 Detritus |
| In-water Cover | |
| | cut Banks Deep Pool Vascular Plants 9001 |
| | Debris Boulder Other |
| | |
| Riparian Zone | |
| | dominant vegetation, mature or early successional) |
| Upstream 50°/0 | midel relo |
| Adjacent Land Use | |
| Upstream A | |
| Downstream 9 100 | |
| | |
| Fish Habitat Potential | |
| Critical Habitat (spawning or nursery areas, | groundwater upwellings) |
| Upstream | |
| Downstream / t @ / O | |
| Migratory Obstructions (seasonal, permane | nt) |
| Upstream Downstream | mole |
| Note any fish observations | |
| Note any han observations (ADA) | |
| | |
| Other Habitat Notes, Incidental Wildlife O | |
| - incised amps shed on | annel (some RCG) |
| trad + lot of How di | e to significant ran |
| Straight Cash Alm | |
| Long I rough | σ_{i} |
| Field Notes Authored by KC Fi | ield Notes QA/QCed by Page of |

Duffus brain 2-4

| Project Name CP | | VALL RIVA | Stati | ion Number | 2-4 | |
|--|-----------------|---------------------------------------|-------------------------------|-------------------|---|---------------------------------|
| No. 20 Company of the contract | 160709 | | | No. (if applicab | vandou de races | LL_ Stemany |
| CONTRACTOR OF THE PARTY OF THE | d 562-1/5 | 513=d/5 | | | 2012 06 | 05 |
| | Thompson | | AND THE RESIDENCE TO STATE OF | | Indiplication to be designed in the control of the | Mary Advanced Total A A 12 U.S. |
| | | | 300 1.1 | | | -amp ra |
| JTM coordinates 4 | 778225 | easting | 4234 | 60 | Eagling | zone <u>/</u> / - |
| Fishing Method (circle one): Sampling Method (circle one): | Back | pack habita | Boat It 1 | | lake LR 13 | 2 ~ |
| Effort (Electrofishing Seconds): | 258 | Number of | Netters: | , | Number of Anod | 88: <u>/</u> |
| Settings Frequency (Hz) 60 | Voltage (voits) | 700 | Current (Amp | s) <u>/</u> | Power (Watts) | / |
| Station Information | | | | | | |
| ength of Stream Surveyed (m) | | | <u> </u> | T | | |
| Station Characteristics: | Width (m): | | 5-1.75 | | 1,60 | |
| | Depth (m): | Range 0 | 1.10-0.15 | Average: | 0.13 | |
| Vater Clarity/Colour: | tea colour | , , , , , , , , , , , , , , , , , , , | /ater Velocity if I | Measured (m/s): | NIA | Time 15:2 |
| | 8.14 | | CONTRACTOR OF STREET, SANSON | luctivity (uS/cm) | | |
| | 4 1// | | | | | |
| | 8,17 | | Dissolved | Oxygen (mg/L) | 9.13 | |
| Catch Data | | | Dissolved | Oxygen (mg/L) | | |
| Catch Data | Number o | f Fish | Dissolved | Oxygen (mg/L) | | l.o. age, disease, etc): |
| pecies Crk chuh | Number o | f Flish | Dissolved | Oxygen (mg/L) | | l.e. age, disease, etc) |
| pecies Of Kuchuh | Number o | f Fish | Dissolved | Oxygen (mg/L) | | Le. age, disease, etc): |
| pecies Of Kuchuh | Number o | f Fish | Dissolved | Oxygen (mg/L) | | l.e. age, disease, etc): |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.a. age, disease, etc): |
| pecies Crk chub | Number of (8) | | ob served | Oxygen (mg/L) | | l.e. age, disease, etc) |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.e. age, disease, etc) |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.a. age, disease, etc): |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.e. age, disease, etc): |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.e. age, disease, etc): |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.o. age, disease, etc): |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.e. age, disease, etc) |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.a. ago, disease, etc) |
| eatch Data pecles Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | J.o. age, disease, etc) |
| Catch Data Species Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.a. age, disease, etc): |
| Catch Data Species Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | l.a. age, disease, etc) |
| Catch Data Species Crk chuh BRST | Number of (8) | | | Oxygen (mg/L) | | La. ago, disease, etc) |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT WB.

| Desi | | | | | | |
|---|--|--|--|--|--|-------------------|
| Pron | ect C | ρ. | | Project # / | 60960 70 | 9 |
| | ion #_ 2 -1 | | | Field Staff | KF +M | |
| | tos Taken | 71-574 | | A CONTRACTOR OF STREET AND ADDRESS. | | 24 |
| | Coordinates \ | 1 4-79 270 | 42570 | Date No | W. 28 20 | 2/1 |
| | CERTAIN COMPANY OF THE PROPERTY OF THE PROPERT | | 100010 | Time _ 2 | DO pm | |
| Desi | criptive Location | 1 10 1 | 1 / 10 100 | LU 00 | 2 -1 1/2- | |
| | innaire | | 1.5 cm | south | 1 ot ra | versuo |
| Wate | er Quality | part inte | s held | | | |
| | olved Oxygen (r | ma/L) 11.2' | 4 54 | 7.02 00 | nductivity (µS/cm | 1522 |
| | er Temperature | | ₹, bi'_ | The second secon | CARL STREET, S | 1) 300 |
| | ther conditions | | ore cold | Air Tempera | iture (°C) | |
| vv Ga | | iii pievious 24 i | "S CONVE | Train | | |
| Wate | ercourse Dime | nsions & Morp | hology | | | |
| | n Watercourse \ | Committee of the Control of the Cont | _(m) | Maximum P | ool Depth | (cm) |
| Mea | n Bankfull Width | 4 | (m) | Mean Water | | 2 (cm) |
| | % Riffle | 40 | _% Pool | 60%R | | % Flat |
| | ence of eroding | banks. Comme | | | 1 0 | 99 |
| | | | | | | |
| | | | 1 1 1 - 0 | | | |
| Subs | strate – Upstre | | TWE | | | |
| 9_ | Bedrock | Silt | | _Boulder | SO Clay | Cobble |
| | Muck | Grave | | Marl | Sand | Detritus |
| Sub | strate – Downs | tream (% cove | et 1 1 | | | |
| Sub | Bedrock | Silt | ושיפוטיד ויי | Boulder | SO Clay | Cobble |
| | Bedrock | Grave | | CONTRACTOR STUDY S | | Cobble |
| | IVIUCK | Grave | | Marl | Sand | SO Detritus |
| In-w | ater Cover | | | | | . 1/6 |
| | atel Covel | | | | | |
| | | t (circle): | Undercut Ba | nks Dee | Pool Vascu | lar Plants I'He |
| | er Types Presen Overhanging | | Undercut Ba | | Pool Vascu der Other | lar Plants 1144 |
| Cove | Overhanging | | Undercut Bar Woody Debri | | Pool Vascu der Other | lar Plants 1144 e |
| Cove | or Types Presen Overhanging rian Zone | Vegetation | Woody Debri | is Boul | der Other_ | lar Plants little |
| Cove | or Types Presen Overhanging rian Zone rian Cover (% of | Vegetation f watercourse s | Woody Debri | is Boul | Pool Vascu der Other_ , mature or early | |
| Cove | r Types Presen Overhanging rian Zone rian Cover (% of Upstream | Vegetation f watercourse s 3 0 % > CV | Woody Debri Wheel haded, domina | ant vegetation | der Other_ | |
| Ripa Ripa | r Types Presen Overhanging rian Zone rian Cover (% of Upstream Downstream | Vegetation f watercourse s 3 0 % > CV | Woody Debri | is Boul | der Other_ | |
| Ripa Ripa | r Types Presen Overhanging rian Zone rian Cover (% of Upstream Downstream cent Land Use | Vegetation f watercourse s 3 0 % > CV | Woody Debri Wheel haded, domina | ant vegetation | der Other_ | |
| Ripa Ripa | r Types Presen Overhanging rian Zone rian Cover (% of Upstream Downstream cent Land Use Upstream | Vegetation f watercourse s 3 0 % > CV | Woody Debri Wheel haded, domina | ant vegetation | der Other_ | |
| Ripa Ripa | r Types Presen Overhanging rian Zone rian Cover (% of Upstream Downstream cent Land Use | Vegetation f watercourse s 3 0 % > CV | Woody Debri Wheel haded, domina | ant vegetation | der Other_ | |
| Ripa Ripa Adjad | r Types Presen Overhanging rian Zone rian Cover (% of Upstream Downstream cent Land Use Upstream Downstream | watercourse s | Woody Debri Wheel haded, domina | ant vegetation | der Other_ | |
| Ripa Ripa Adjad | rian Zone rian Cover (% of Upstream_Downstream_Dent Land Use Upstream_Downstr | regeration f watercourse s 30°/- CV According to the second se | Haded, domina | ant vegetation | , mature or early | |
| Ripa Ripa Adjad | rian Zone rian Cover (% of Upstream Downstream Downstream Downstream Downstream Downstream Downstream Downstream Habitat Potent Land Use | regeration f watercourse s 30°/- CV According to the second se | Haded, domina | ant vegetation | , mature or early | |
| Ripa Ripa Adjad | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ cent Land Use Upstream_ Downstream_ Downstream_ Habitat Potent rial Habitat (spaw) Upstream_ | regeration f watercourse s 30°/- CV According to the second se | Haded, domina | ant vegetation | , mature or early | |
| Ripa Ripa Adjad | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ Cent Land Use Upstream_ Downstream_ Downstream_ Habitat Potent cal Habitat (spaw Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ | ial | haded, domina | ant vegetation | , mature or early | |
| Ripa Ripa Adjad | rian Zone rian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Habitat Potent al Habitat (spaw Upstream_ Downstream_ | ial | wood Debri | ant vegetation | , mature or early | |
| Ripa Ripa Adjad | rian Zone rian Zone rian Cover (% of Upstream Downstream Downstream Downstream Downstream Habitat Potent al Habitat (spaw Upstream Downstream Upstream Downstream Downstream Upstream | ial vning or nursen | haded, domina | ant vegetation | , mature or early | |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ Habitat Potent al Habitat (spaw Upstream_ Downstream_ Downstream_ atory Obstruction Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ | ial vning or nursen | wood Debri | ant vegetation | , mature or early | |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ Habitat Potent al Habitat (spaw Upstream_ Downstream_ Downstream_ atory Obstruction Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ Downstream_ | ial vning or nursen | wood Debri | ant vegetation | , mature or early | |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream Downstream Downstream Downstream Downstream Habitat Potent al Habitat (spaw Upstream Downstream Upstream Downstream Downstream Upstream | ial vning or nursen | wood Debri | ant vegetation | , mature or early | |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Habitat Potent ral Habitat (spaw Upstream_ Downstream_ Downstream_ Downstream_ atory Obstruction Upstream_ Downstream_ any fish observe | ial vning or nursery (seasonal, partitions were | wood Debri He haded, domina an an ermanent y areas, groun | ant vegetation | mature or early | successional) |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Habitat Potent ral Habitat (spaw Upstream_ Downstream_ Downstream_ Downstream_ atory Obstruction Upstream_ Downstream_ any fish observe | ial vning or nursen in (seasonal, pations were in the control of t | wood Debri He haded, domina an an ermanent y areas, groun | ant vegetation | , mature or early | successional) |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Habitat Potent ral Habitat (spaw Upstream_ Downstream_ Downstream_ Downstream_ atory Obstruction Upstream_ Downstream_ any fish observe | ial vning or nursen in (seasonal, pations were in the control of t | wood Debri | ant vegetation | mature or early | successional) |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream Downstream Downstrea | ial vning or nursery to the ations when the ations where at the ations where ation | wood Debri haded, domina and the condent y areas, groun ermanent) | ant vegetation | mature or early | successional) |
| Ripa Ripa Adjad Fish Critic | rian Zone rian Zone rian Cover (% of Upstream Downstream Downstrea | ial vning or nursery to the ations when the ations where at the ations where ation | wood Debri haded, domina and the condent y areas, groun ermanent) | ant vegetation | mature or early | successional) |
| Ripal Ripal Adjac Adjac Migra Note | rian Zone rian Zone rian Cover (% of Upstream Downstream Downstrea | ial vning or nursen in (seasonal, pations were in the control of t | wood Debri haded, domina an an transported y areas, groun ermanent) Company y areas, groun | ant vegetation | mature or early ings) | successional) |

Duffus brain 2-1

| Project Name C.P. | | Station Number | 2-1 |
|--|--|---|----------------------------|
| Project Number 160960 | 709 | Pass No. (if applicable | |
| | 5=15 576=015 | | 20120666 |
| | inaid Rd - 1.5 Km | South of Rave | 15wood -750 m |
| into f | | | e di pina ana rega da di s |
| UTM coordinates 477.9 | | 22570 | northing zone 17 |
| Fishing Method (circle one): | Backpack Boat | Unit Model/Ma | ike rock is - |
| Sampling Method (circle one): | even habitat | transect open. | spot |
| Effort (Electrofishing Seconds): | 200 Number of Netters | s: / N | lumber of Anodes: |
| Settings | | | 1 X X - 4 N |
| Frequency (Hz) 60 | Voltage (volts) $\frac{700}{}$ Curre | ent (Amps) P | ower (Watts) |
| Station Information | | | |
| ength of Stream Surveyed (m) | ~ 90 | | |
| | THE PROPERTY OF THE PROPERTY O | Average: | 1.75 |
| | Depth (m): Range 0.10- | 0.20 Average: | 0.15 |
| Nater Clarity/Colour: tea | Water Ve | locity if Measured (m/s): | N/A Time 09:30 |
| | | | |
| Temperature (°C) 13,82 | | Conductivity (uS/cm) | 906 |
| | | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data | | | 10.82 |
| PH 9.15 Catch Data Species | | Dissolved Oxygen (mg/L) | |
| catch Data Species Fathead Mn | | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn | | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redlerly dace | | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redlerly dec | Number of Fish | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redley dec Crkchub BRST | | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redlerly dec | Number of Fish | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redley dec Crkchub BRST | Number of Fish | Dissolved Oxygen (mg/L) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redledly dec Crkchub BRST Rimpkinseed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redley dec Crkchub BRST | Number of Fish | Dissolved Oxygen (mg/L) | 10.82 |
| Species Fathead Mn Cent Mud Mn Nth Redleelly deco Crkchub BRST Pumpkinseed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| pH 3.15 Catch Data Species Fathead Mn Cent Mud Mn Nth Redladly dec CIK chub BRST Rimpkinseed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| potes Fathead mn Cent Mud mn Nth Redleelly deco Crkchub BRST Pumpkin seed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| potes Fathead mn Cent Mud mn Nth Redleelly deco Crkchub BRST Pumpkin seed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redleelly deco Crkchub BRST Rumpkinseed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| Catch Data Species Fathead Mn Cent Mud Mn Nth Redleelly deco Crkchub BRST Rumpkinseed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |
| potes Fathead mn Cent Mud mn Nth Redleelly deco Crkchub BRST Pumpkin seed | Number of Fish | Dissolved Oxygen (mg/L) (1) (24) (3) | 10.82 |



| | | | | w/2 |
|--|--|--|--------------------|----------------------|
| WIND FAR | M WATERBOD | Y RAPID ASSESS | MENT FORM | 2-7 |
| Stantec | | DY RAPID ASSESS | tus Dr | ain ' |
| tation # 2-7 | | Project Name | P | |
| latercourse Name huffus | bran | Project # LLOS | 60709 | |
| hotos 1113-1114 ate Dec. 3 2012 | | Field Staff KE | - 1012 | |
| /eather conditions in previous | 24 hrs ram | , =/=================================== | | |
| PS Coordinates (Zone) | | N | | Datum |
| Vater Quality | | | | (O |
| Dissolved Oxygen (mg/L) 12 Vater Temperature (°C) 2 Time in situ measurements tak | | 7.44 Conductivity Air Temperature (°C) | (μS/cm) <u>49</u> | |
| | | | | |
| Vatercourse Dimensions & Mean Watercourse Width | viorphology | Maximum Pool Dept | 1 30 | _(cm) |
| Mean Watercourse Width Mean Bankfull Width 5 | (m) | Mean Water Depth_ | 25 | _(cm) |
| % Riffle _ | % Po | 001 | _% Run | % Fla |
| vidence of eroding banks, Co | mments on bank s | stability | | |
| Substrate (% cover) | | | | |
| Bedrock | Cobble | Sand | | Muck |
| Boulder | Gravel | 50 Clay | Mari | <u>Detritus</u> |
| | | | | |
| n-water Cover | Undered De | naka - Daan Baal | Metaveree | Action log |
| n-water Cover Cover Types Present (circle): Overhanging Vegetation V | Undercut Ba Voody Debris | anks Deep Pool Boulder Other | Watercress | Aquatic Veg |
| Cover Types Present (circle): Overhanging Vegetation | Undercut Ba Voody Debris | anks Deep Pool Boulder Other | Watercress | Aquatic /eg |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercou | Voody Debris Irse shaded, domir | Boulder Other | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercou | Voody Debris | Boulder Other | | |
| Cover Types Present (circle): Overhanging Vegetation V Riparian Zone Riparian Cover (% of watercounts of watercounts) Adjacent Land Use | Voody Debris Irse shaded, domir | Boulder Other | | |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or no | Voody Debris Irse shaded, domir | Boulder Other | | |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or not possible) Migratory Obstructions (season | Voody Debris Irse shaded, domir O (V) Ursery areas, grou | Boulder Other | | |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or not | Voody Debris Irse shaded, domin (Compared to the compared to | Boulder Other nant vegetation, mature ndwater upwellings) | or early succes | sional) |
| Riparian Zone Riparian Zone Riparian Cover (% of watercounts) Riparian Zone Riparian Zone Riparian Zone Riparian Zone Riparian Zone Riparian Cover (% of watercounts) Riparian Cover (% of watercounts) Riparian Cover (% of watercounts) Riparian Zone Riparian Zone Riparian Cover (% of watercounts) Riparian Cover (| voody Debris urse shaded, domin vec ursery areas, grouinal, permanent) | Boulder Other | or early succes | sional) |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of the second | Voody Debris Irse shaded, domin Irse shaded, | Boulder Other nant vegetation, mature ndwater upwellings) el Grassed S | or early succes | sional) Buried Tile |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of the second | Voody Debris Irse shaded, doming the last of the last | Boulder Other nant vegetation, mature ndwater upwellings) el Grassed Sond Dominated by | wale | Buried Tile |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of watercounts) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or not watercounts) Alignatory Obstructions (season watercounts) Note any fish observations Vaterbody Notes Natural Watercourse | Voody Debris Irse shaded, doming the last of the last | Boulder Other nant vegetation, mature ndwater upwellings) el Grassed Sond Dominated by | wale | Buried Tile |
| Cover Types Present (circle): Dverhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of the content of the content of the circle) Riparian Zone Riparian | voody Debris urse shaded, domin ursery areas, groun nal, permanent) Trapezoidal Chann) Dugout Po | Boulder Other nant vegetation, mature ndwater upwellings) el Grassed Sond Dominated by | waley Aquatic Veg_ | Buried Tile |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 1-3 WB

| Hombos | | | |
|--------|--|--|--|

| | Water Quality Dissolved Oxygen (mg/L) 11.85 pH フルビ Conductivity (μS/cm) <u></u> タリ |
|---|--|
| ř | Dissolved Oxygen (mg/L) 1/85 pH 1/85 Conductivity (μS/cm) 8/1 Water Temperature (°C) 9/91 Air Temperature (°C) |
| | Weather conditions in previous 24 hrs cold 4 raw |
| | Watercourse Dimensions & Morphology |
| | Mean Watercourse Width (m) Maximum Pool Depth (cr |
| Į | Mean Bankfull Width (m) Mean Water Depth (cm |
| i | % Riffle (100 % Pool % Run % Flat |
| | Evidence of eroding banks, Comments on bank stability |
| • | |
| 1 | Substrate - Upstream (% cover) The attack |
| | BedrockSiltBoulderClayCol MuckGravelMarl Sand LOODet |
| | 10.00 |
| , | Substrate - Downstream (% cover) HWWW COUTAILS |
| | Bedrock Silt Boulder Clay Col |
| | MuckGravelMarlSand <u>(OD</u> Det |
| 1 | n-water Cover |
| (| Cover Types Present (circle): Undercut Banks Deep Pool Vascular Plants |
| | Overbanging Vegetation Woody Debris Boulder Other |
| 1 | Riparian Zone |
| | Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early succession |
| | Upstream |
| | Downstream U 10 |
| - | Adjacent Land Use |
| | Upstream As helds |
| | Downstream 7 7 0 |
| | Fish Habitat Potential |
| y | Critical Habitat (spawning or nursery areas, groundwater upwellings) |
| (| Upstream none |
| (| |
| | Downstream / bot Downstructions (seasonal permanent) |
| | Migratory Obstructions (seasonal, permanent) |
| | Migratory Obstructions (seasonal, permanent) Upstream |
| | Migratory Obstructions (seasonal, permanent) |

walden Drawn 1-3

| | C.P. | | | Station Nun | nber 1-3 | SECTION ACTION |
|---|--|-----------------|-------------|---|----------------|--------------------------|
| Project Number | 1609603 | 109 | | Pass No. (if | applicable) | A Standary |
| | 6:1d 599 m | | ed (4 | | nmdd): 2012 66 | artisif (be |
| Descriptive Location | A STATE OF THE PARTY OF THE PAR | | | | Army Camp | |
| UTM coordinates | 479.0 | 279 | casting . | 423504 | nerthing | zone <u>1</u> 7 |
| Fishing Method (circle o | one): | Backp | ack | Boat Uni | t Model/Make | |
| Sampling Method (circle | e one): | even | habitat | transec | t stan spot | |
| Effort (Electrofishing Se | econds): | | Number of N | etters: | Number of Anod | es: |
| Settings Frequency (Hz) | | /oltage (volts) | | Current (Amps) | Power (Watts) | |
| Station Information | | | | | 1. A. 1. | |
| Length of Stream Surve | yed (m) | / | | | | |
| Station Characteristics: | | Vidth (m): | Range | | rage: | |
| | | Depth (m): | Range | Ave | rage: | |
| Vater Clarity/Colour: Temperature (°C) pH | | | _ Wat | er Velocity if Measure Conductivity Dissolved Oxyge | (uS/cm) | Time //:0 |
| Catch Data | | | | | | |
| Species | | Number of | Fish | | Comments (| (Le. age, disease, etc): |
| | - 1 | 1 | | · · · · · · · · · · · · · · · · · · · | | |
| No tishing . | Too Sh | 4/0m (| 0.03m) | and choke | d w ra Hai | |
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| | | And the second | | | | |
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WIND FARM WATERBODY RAPID ASSESSMENT FORM

Mud Creekwa 531

| rds, ag Feld | Station # 53-\ | | | | ct Name | | | |
|--|--|------------|---------------------------|------------|-------------------|--------------|----------------|--|
| Date 20:2 0. 0. 0. 1 Time 14:27 Weather conditions in previous 24 hrs No precious 24 hrs No precious 25 per previous 24 hrs No precious 24 hrs No precious 25 per previous 25 per previous 26 per precious 26 per previous 26 | | | | Proje | ect # | 096070 | 9 | |
| Weather conditions in previous 24 hrs. No. Orice (APS Coordinates (Zone) 137 E 1943 24 N 1938/73 Datum M#08 Descriptive Location 10. Thomospan Link ~ 17 km each of Prima Cerry Rd. Water Quality Dissolved Oxygen (mg/L) 12.11 pH 3.51 Conductivity (µS/cm) 56.5 Water Temperature (°C) 22.25 Air Temperature (°C) 2.75 Water Temperature (°C) 22.15 Air Temperature (°C) 2.75 Water Temperature (°C) 22.15 Air Temperature (°C) 2.75 Water Temperature (°C) 22.15 Air Temperature (°C) 2.75 Water Temperature (°C) 2.15 (m) Maximum Pool Depth 2.50 (cm) Water Water Width 5.0 (m) Maximum Pool Depth 2.05 (cm) Water Water Course Width 1.50 (m) Mean Water Depth 2.15 (cm) Water Bankfull Width 5.0 (m) Mean Water Depth 2.15 (cm) Water Bankfull Width 5.0 (m) Mean Water Depth 2.15 (cm) Water Bankfull Width 5.0 (m) Mean Water Depth 2.15 (cm) Water Bankfull Width 5.0 (m) Mean Water Depth 2.05 (cm) Water Course (% cover) Bedrock 5 Cobble 2.0 Sand 2.5 Silt Muck Boulder 1.0 Gravel 4.0 Clay Man Detritus In-water Cover Bedrock 5 Cobble 2.0 Sand 2.5 Silt Muck Boulder 1.0 Gravel 4.0 Clay Man Detritus In-water Cover Cover Typea Present (clrcle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhangling Vegetation Woody Debris Boulder Other Riparian Zone (% of watercourse shaded, dominant vegetation, mature or early successional) Woody Debris Boulder Other Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg V Dry Dther Habitat Notes, Incidental Wildlife Observations, etc. | Prioris Glasia Gaosais | 621:0 | 15 | | | | | |
| GPS Coordinates (Zone) 137 E 1943333 N 9738173 Datum N#08 Descriptive Location Do Thompson Live 12km each of Drang Carry Rd. Water Quality Dissolved Oxygen (mg/L) 1211 pH 8.51 Conductivity (µS/cm) 56.5 Water Temperature (°C) 212.5 Air Temperature (°C) 2.2 % Time in situ measurements taken 13.30 Watercourse Dimensions & Morphology Mean Watercourse Width / 5 (m) Mean Water Depth 0.30 m (cgs) | Weather conditions in pr | nious 2 | 4 hm | IIME | 14:2 | + | | |
| Descriptive Location 1 hompken Lick 2 km 201 of Point 2 km | GPS Coordinates (7one) | 12-C | 4 nrs No Or | 200 | | 11 /12 0 0 | 10.0 | A BIDA |
| Water Quality Dissolved Oxygen (mg/L) 2.14 5.5 Conductivity (µS/cm) 56.5 Water Temperature (°C) 2.14 5.5 Air Temperature (°C) 2.72 \(\text{V} \) Time in situ measurements taken 15.20 Maximum Pool Depth 0.72 \(\text{V} \) Mean Waterourse Dimensions & Morphology Mean Waterourse Width 5.00 (m) Mean Water Depth 0.15 \(\text{V} \) (289) 0 | Descriptive Location | 1000 | Dean link of | 0/3/7 | 0016 | | | |
| Dissolved Oxygen (mg/L) 12.14 pH 3.5 Conductivity (µS/cm) 56.5 Water Temperature (°C) 22.2 Air Temperature (°C) 22.2 Time in situ measurements taken 15.30 Maximum Pool Depth 0.30 (cmf) Mean Watercourse Width 1.5 (m) Mean Water Depth 0.15 (cmf) Mean Bankfull Width 5.0 (m) Mean Water Depth 0.15 (cmf) Muck Mean Water Depth 0.15 (cmf) Muck Mean Water Depth 0.15 (cmf) Muck Maximum Pool Depth 0.15 (cmf) Muck Muck | | A TAUNY | TSON LINE | ILKIN | E40+0 | Hem | (amp) | (d), |
| Water Temperature (°C) 312.35 Time in situ measurements taken 18.30 Watercourse Dimensions & Morphology Mean Watercourse Width 1.5 (m) Mean Bankfull Width 5.0 (m) Mean Bankfull Width 5.0 (m) Mean Bankfull Width 5.0 (m) Mean Water Depth 0.30 (cm) I | | 0 | | | | | | |
| Water Temperature (°C) 312.35 Time in situ measurements taken 18.30 Watercourse Dimensions & Morphology Mean Watercourse Width 1.5 (m) Mean Bankfull Width 5.0 (m) Mean Bankfull Width 5.0 (m) Mean Bankfull Width 5.0 (m) Mean Water Depth 0.30 (cm) I | Dissolved Oxygen (mg/L) | 12. | 14 pH | 8.51 | Condu | ctivity (uS | (cm) 56 | 5 |
| Watercourse Dimensions & Morphology Mean Watercourse Width 1.5 (m) Maximum Pool Depth 0.30 (cm) Mean Bankfull Width 5.0 (m) Mean Water Depth 0.15 (cm) O | Water Temperature (°C) | 24 | .55 | | | | | |
| Mean Watercourse Width So | Time in situ measuremen | ts taken | 15:30 | | | | | |
| Mean Bankuli Width S.D. (m) Mean Water Depth C.I.S. (200) % Riffle 30 % Pool minut Scent minut minut Scent minut min | Watercourse Dimension | 18 & Mo | rphology | 3.17 | | | | |
| C | Mean Watercourse Width | 15 | (m) | Maxi | mum Pool | Depth_0 | .30 m | em) |
| Substrate (% cover) Bedrock Scobble 20 Sand 35 Silt Muck Boulder 10 Gravel 40 Clay Marl Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) | | | | | Water De | pth | 0.15 m | |
| Substrate (% cover) Bedrock S Cobble 20 Sand 35 Silt Muck Boulder 10 Gravel 40 Clay Mari Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 10 Source Acces Adjacent Land Use This Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Spawning Coloring Notes Migratory Obstructions (seasonal, permanent) Note any fish observations 20 Esh Notes Natural Watercourse Trapezoidal Channel Grassed Swale Burjed Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. | | | | | 283 | | | |
| Bedrock 5 Cobble 20 Sand 35 Silt Muck Boulder 10 Gravel 40 Clay Mari Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 10 | Evidence of eroding balik | s, comm | nents on Dank | stability | _W1 no | (560, | st ou of | 15 side |
| Bedrock 5 Cobble 20 Sand 35 Silt Muck Boulder 10 Gravel 40 Clay Mari Detritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 10 | Substrate (% cover) | | | Č | | | | |
| Boulder O Gravel 40 Clay Mari Detritus | | 5 | Cobble | 20 | Sand | 25 | Silt | Muck |
| In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other | Boulder | 10 | Gravel | 40 | Clav | | | reactive and the second |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Spawning, Calegiac, Notecommon Note of the Note any fish observations (seasonal, permanent) Note any fish observations | Adjacent Land Use | course | snaded, dom | inant vege | etation, ma | ture or ea | rly succession | onal) |
| Critical Habitat (spawning or nursery areas, groundwater upwellings) Spawning, Relaging Nulser Migratory Obstructions (seasonal, permanent) Nore Note any fish observations | ras, ag ticla | | | | | hery All his | | |
| Note any fish observations | Spawning Cologins Migratory Obstructions (se | or nurse | ery areas, groupermanent) | indwater (| 1pweilings | | | |
| Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc | None. | | | | | | | |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc | Note any fish observations | <u>Jee</u> | tish not | 25. | | | | |
| Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc | Waterbody Notes / | | | | | | | |
| Other Habitat Notes, Incidental Wildlife Observations, etc. | Natural Watercourse V | Trape | ezoidal Chann | el | Grasse | d Swale | Ru | ried Tile |
| Other Habitat Notes, Incidental Wildlife Observations, etc. | Surficial Drainage (i.e. furn | ows) | Dugout Po | ond | Dominat | ed by Aqu | atic Veg | Dry |
| MANHAA MINHAANIA | | | | | | ,,,,,,,,, | aao 10g1 | |
| Teld Notes Authored by Field Notes QA/QCed by | Other Habitat Notes, Inci- | dental V | | | | | | |
| Tield Notes Authored by Field Notes QA/QCed by | | | | | | | | |
| Field Notes QA/QCed by UF | Told Nation Author de La COM F. | | | | TV | | | |
| | reru Notes Authored by | | _ Fleid Not | es QA/QCed | by U | | | |

with its alound.

Mud Crek 53-11 ran sive of Cd. Not being hoppy

Mud Crek 53-1

Page / of /

| Project Name | C.P. | | | Station Number | 53-1 | 149 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
|---|-----------------------|--|---------------|--|--|---|
| Project Number | 16096090 | 7 | er van 2000 | Pass No. (if applic | cable) | LD_ Starry |
| Photos & | 19×120678- | 50b 679 | =015 680=0/54 | | 2010 | .6 17 |
| Descriptive Location | On Tho | mpso | n line | -liakin eo | ist of Arn | ny Camp |
| UTM coordinates | 04252 | 89 | easting | 4778173 | northing | zone / 7 |
| Fishing Method (circle or Sampling Method (circle | | Backpo | ack Bo | | el/Make Pode R | 12 - |
| Effort (Electrofishing Sec | | | Number of Net | | Number of Anod | es: / / |
| Settings | | | | | | |
| requency (Hz) 60 | Voil | age (volts) | <u>400</u> a | errent (Amps) | Power (Watts) | |
| Station Information | 465 | | | | -Total 14 | n |
| ength of Stream Survey Station Characteristics: | | <u>い (2.0</u> th (m): | | +underbridge | | |
| | | | | - 0.0 Average:- 0.30 Average: | Marian Company | |
| | | | | | | 4.3 |
| Vater Clarity/Colour: | 14.35 | | _ Water | Velocity if Measured (m/s Conductivity (uS/ci | And a state of the contract of the contract of | Time 15.6 |
| | 1416 | | | | m GLE | |
| Temperature (°C) | | | | | | |
| Catch Data | 8,5) | | | Dissolved Oxygen (mg/ | | |
| Catch Data | .8,5) | Number of | | | 1). 12,14 | i.e. age, disease, etc): |
| Catch Data | .8,5) | Number of ++++ / / / | | | 1). 12,14 | |
| atch Data | .8,5) | Number of ### // | | | 1). 12,14 | |
| pH pH pecles | .8,5) | ## [] | | | 1). 12,14 | |
| catch Data pecies John Ot Cmn Shn | .8,5) | ## // ## \ | | | 1). 12,14 | |
| pH Catch Data Species John Ot Cmn Shn 156456 | .8,5) | ## // ## \ ! | | | 1). 12,14 | |
| Catch Data Species John Ot Cmn Shn 1541+36 CCK Chub | .8,5) | ## // ## \ ! | | | 1). 12,14 | |
| Catch Data Species John Ot Cmn Shn UWHSC CK Chub | .8,5) | ## // ## \ ! | | | 1). 12,14 | |
| Catch Data Species John Ot Cmn Shn UWHSC CK Chub | .8,5) Day | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| Catch Data Species John Ot Cmn Shn UWHSC CK Chub | .8,5) | ## // ## \ ! | Fish | | 1). 12,14 | |
| John Dt Cmn Shn DWHSC C(k chub Towa Dt. NAh Ridbelly Salmonid Sp | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| atch Data pecles John Ot Conn Shn Bultsc Cok chub Towa Ot. NAh Ridbelly Salmonid Sp | .8,5) Day | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| atch Data pecles John Ot Cmn Shn Bultsc C(k chub Towa Ot. NAh Ridbelly Salmonid Sp | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| atch Data pecles John Ot Conn Shn Bultsc Cok chub Towa Ot. NAh Ridbelly Salmonid Sp | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| John Dt Cmn Shn BwHSC C(k chub Towa Dt NAh Ridbelly Salmonid Sp | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| Salmonid Sp | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| Species John Ot Conn Shn Dents Conn | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| John Dt Cmn Shn DWHSC C(k chub Towa Dt. NAh Ridbelly Salmonid Sp | Daca Rainbow Troat | ## // ## \ ! | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |
| atch Data pecles John Ot Cmn Shn Bultsc C(k chub Towa Ot. NAh Ridbelly Salmonid Sp | Dica Rainbow Tront | ## // ## \ \ \ \ \ \ \ \ | Fish | Dissolved Oxygen (mg/ | 1). 12,14 | |



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Field Notes Authored by KE

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| Stantec | Mud Creek 3- |
|---|--|
| F2 11 | |
| Station # 5 5 - 4 | Project Name |
| Watercourse Name Mud (10) | Project # 1609100710 |
| | Field Staff KF 9 BM |
| Date Nov. 29 20/2 | Time 11:45 Am. |
| Weather conditions in previous 24 l | hrs cold |
| GPS Coordinates (Zone) | E 425048, N 479011, Datum |
| Descriptive Location Hmy | comp Rd, north of Thompson |
| Water Quality | |
| Dissolved Oxygen (mg/L) 7.7 | PH 7. 72 Conductivity (μS/cm) 1/5 |
| Water Temperature (°C) 200 | Air Temperature (°C) |
| Time in situ measurements taken_ | 12:010 000 |
| [발명원] : [Africa: 4. 문화 Land Hard 등 2. 문화 그 보니 수 있었다. | |
| Watercourse Dimensions & Morp | phology flood plain. 22m |
| Mean Watercourse Width | (m) Maximum Pool Depth(cm) |
| Mean Bankfull Width 5 | (m) Mean Water Depth(cm) |
| <u> </u> | % Pool% Run% F |
| Evidence of eroding banks, Commo | ents on bank stability |
| reach of steep, crod | ing banes a some slumping |
| Substrate (% cover) | |
| Bedrock 20 | Cobble & O Sand & O Silt Muck |
| Boulder Q.O | Cobble |
| | grass. |
| In-water Cover | Undercut Banks Deep Pool Watercress Aquatic Vet |
| Cover Types Present (circle): | |
| Overhanging Vegetation Wood | dy Debris Boulder Other |
| TANDENIES VINNES OF TRANSPORT OF THE PROPERTY | |
| Riparian Zone | |
| Riparian Zone Riparian Cover (% of watercourse: | shaded, dominant vegetation, mature or early successional) |
| Riparian Cover (% of watercourse: | shaded, dominant vegetation, mature or early successional) |
| Riparian Cover (% of watercourse : | cothen wood . Ash |
| Riparian Cover (% of watercourse | |
| Adjacent Land Use | cothen wood . Ash |
| Riparian Cover (% of watercourse : | cothen wood . Ash |
| Adjacent Land Use Fish Habitat Potential | Cotton wood .Ash I wea |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse | ery areas, groundwater upwellings) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, page 1975) | ery areas, groundwater upwellings) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse | ery areas, groundwater upwellings) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, plannance) | ery areas, groundwater upwellings) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, plumane) Note any fish observations | ery areas, groundwater upwellings) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, polymore) Note any fish observations Waterbody Notes | ery areas, groundwater upwellings) permanent) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, plantal waterbody Notes Natural Watercourse Trape | ery areas, groundwater upwellings) permanent) ezoidal Channel Grassed Swale Buried Tile |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, pormando de la | ery areas, groundwater upwellings) permanent) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, promoter of the control of | ery areas, groundwater upwellings) permanent) ezoidal Channel Grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, polymonal) Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidental V | ery areas, groundwater upwellings) permanent) ezoidal Channel Grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry Wildlife Observations, etc |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, promoter of the control of | ery areas, groundwater upwellings) permanent) ezoidal Channel Grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry |

Field Notes QA/QCed by_

10th Conc. brain 53-2



WIND FARM WATERBODY RAPID ASSESSMENT FORM

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| twB | / |
| | |

| Station # 53-2 | | Project Name (| C.?, | |
|--|--|---------------------|-------------------------|--|
| Watercourse Name UNYNDI | | Project # 160 | 160709 | |
| Photos 674-12 675-015 | 676-015 | Field Staff N B. | | |
| Date 2012 06 67 | | Time 14:55 | | |
| Weather conditions in previou | us 24 hrs No Davi | 0 | | |
| GPS Coordinates (Zone) | 7T E 042409 | AN | +778199 | Datum NAVES |
| Descriptive Location NE c | orner of Thomas | son line & Arm | n camo Rd | |
| | | |) | |
| Water Quality | | | | |
| Dissolved Oxygen (mg/L) 4 Water Temperature (°C) | .28 pH 7 | <u> Conductivit</u> | ty (µS/cm) 7 | 57 |
| Water Temperature (°C) | 35.78 | Air Temperature (°C | 3016 | |
| Time in situ measurements ta | ken 14.55 | | | |
| Watercourse Dimensions & | Morphology | | | |
| Mean Watercourse Width /. | 5 (m) | Maximum Pool Dep | th 0.10 m | (cm) |
| Mean Watercourse Width /. Mean Bankfull Width // Piffle | 5 (m) | Mean Water Depth | 0.05 m | (CRT) |
| % Riffle | Top % Pool | | % Run | % Flat |
| Evidence of eroding banks, C | | | | |
| | | | | |
| Substrate (% cover) | | | | |
| Bedrock | Cobble | Sand | Silt_ | FIRE TRANSPORTED TO A PERSON NAMED TO A PERSON N |
| Boulder | Gravel 50 | Clay | <u>Marl</u> | Detritus |
| Riparian Zone Riparian Cover (% of waterco | | | | ssional) |
| ay, roads | | | | |
| Fish Habitat Potential Critical Habitat (spawning or n | nursery areas, groundw | rater upwellings) | | |
| spawning nuisem | | | | |
| Migratory Obstructions (seaso | | | | |
| man dry up, u | en shallow | | | |
| Note any fish observations | Dec' Fish steet | | | |
| Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows | Trapezoidal Channel _\ s) Dugout Pond_ | | Swale by Aquatic Veg | Buried Tile |
| Other Habitat Notes, Inciden | ntal Wildlife Observat | ons, etc. | | |
| | | | | |
| | | | | |
| | | | | |
| | | TK | | |
| Field Notes Authored by | Field Notes Q | A/QCed by TK | | |

10th Conc. brain 53-2

| Stantec Consulting Ltd - Electrofishing Record and Catch Results Project Name CP Station Number S3-2 Project Number 1009(0705 Pass No. (if applicable) Photos Descriptive Location NE Corner of Thompson Line + Army Comp Rd UTM coordinates D424090 easting 4778199 northing zone Project Number Date (yyyymmdd): 2012 06 07 Date (yyyymmdd): 2012 06 Date (yyymmdd): 2012 06 Date (yyyymmdd): 2012 06 Date (yyymmdd): 2012 06 Date (yyymmd | | [094] (| Donc brown C |
|--|---|---|---|
| Project Number 1009(0705 Pass No. (if applicable) Photos 674 - 1 675 - 1 5 676 - 4 5 Date (yyyymmdd): 2012 06 07 Descriptive Location NE Corner of Thompson Line + Army Comp Rd. UTM coordinates U2240 9 easting 4778 9 northing zone 12 Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Boat Unit Model/Malke Explain Fishing Method (circle one): Boat Unit Model/Malke Explain Fishing Method (circle one): Bactipack Boat Unit Model/Malke Explain Fishing Method (circle one): Boat Unit M | Stantec Stan | itec Consulting Ltd - Electrofishing Record | |
| Photos 674: 1 675: 15 676: d 5 Date (yyyymmodd): 2012 06 07 Descriptive Location | | | |
| Photos 674:1 675:15 676:45 Date (yyyymmdd): 2012 06 07 Descriptive Location | Project Number 16096 | 0709 Pass No. (if applica | ble) |
| Descriptive Location DECOCREC of Thompson Line + Army Comp Rd. DITM coordinates DUBLIONS DUB | Photos 674= | | ATTACAMENT TO SECURE A SECURE |
| Fishing Method (circle one): Sampling Method (circle one): Sampling Method (circle one): Sampling Method (circle one): Settings Frequency (Hz) 60 Voltage (volts) 800 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Vater Clarity/Colour: Temperature (*C) 25.38 Conductivity (uS/cm) Ph 2.90 Dissolved Oxygen (mg/L) Species Number of Fish Comments (Lo. ago, disease, etc): | Descriptive Location | NE corner of Thompson line + | Army Camp Rd. |
| Backpack Boat Unit Model/Make ER 2 2 2 2 2 2 2 2 2 | UTM coordinates (| 424099 easting 4778199 | |
| Settings Frequency (Hz) 60 Voltage (volts) 800 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Row on 805t 500 2m (Dry on west 500) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Velocity if Measured (m/s): 1/1/4 Time 1/2:55 Temperature (°C) 25,38 Conductivity (uS/cm) 757 pH 790 Dissolved Oxygen (mg/L) 8.28 Species Number of Fish Comments (Le. age, disease, etc): | Fishing Method (circle one): Sampling Method (circle one): | 사진 마리 그 100 프로그램의 보고 100 | Make ERIA - |
| Settings Frequency (Hz) 60 Voltage (volts) 800 Current (Amps) Power (Watts) Station Information Length of Stream Surveyed (m) Row on 805t 5 de 2m (Dry on west 5 de) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: +89 Water Velocity if Measured (m/s): 4/A Time 14:55 Temperature (°C) 25.38 Conductivity (uS/cm) 757 pH 790 Dissolved Oxygen (mg/L) 8.28 Species Number of Fish Comments (Le. age, disease, etc): | Effort (Electrofishing Seconds): | 60 Number of Netters: / | Number of Anodes: |
| Length of Stream Surveyed (m) Row on ast 5:de 2m (Dry on west 5:de) Station Characteristics: Width (m): Range Average: Depth (m): Range Average: Water Clarity/Colour: +eq Water Velocity if Measured (m/s): u/9 Time u :5 < Temperature (°C) 25.78 Conductivity (uS/cm) 75.7 pH 7.90 Dissolved Oxygen (mg/L) 8.28 Species Number of Fish Comments (Lo. age, disease, etc): | Settings Frequency (Hz) 60 | Voltage (volts) 800 Current (Amps) | |
| Station Characteristics: Width (m): Range | | | |
| Depth (m): Range Average: Nater Clarity/Colour: +ea Water Velocity if Measured (m/s): u/A Time u.s < Temperature (°C) 25.38 Conductivity (uS/cm) 757 pH 7.90 Dissolved Oxygen (mg/L) 8.28 Catch Data Species Number of Fish Comments (Le. age, disease, etc): | | | west side) |
| Nater Clarity/Colour: +ea Water Velocity if Measured (m/s): u/A Time u.s. Temperature (°C) 25.78 Conductivity (uS/cm) 757 pH 7.90 Dissolved Oxygen (mg/L) 8.28 Catch Data Species Number of Fish Comments (Le. age, disease, etc): | Station Characteristics: | H 교육 (- R.22) 에 보고 발생하고 및 관련 () - 라마 (| |
| Temperature (°C) 25.78 pH 7.90 Dissolved Oxygen (mg/L) 8.28 Species Number of Fish Comments (Le. age, disease, etc): | | Depin (m): Hange Average: | |
| Dissolved Oxygen (mg/L) 8.28 Catch Data Species Number of Fish Comments (Le. age, disease, etc): | Water Clarity/Colour: Temperature (°C) | | |
| Gelwh | Catch Data | 7.90. Dissolved Oxygen (mg/L) | |
| Great | Species | Number of Fish | Comments (i.e. age, disease, etc): |
| BRST D | Circles | | |
| | BRST | | |
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| | | | Print Court Burgaran |
| | | | |

Fish Measurements on Separate Sheet? Y/N

Field Staff: NO, mt

Notes By: MT

(Station Diagram on Back)

No fishing. OFF Romes



WIND FARM WATERBODY RAPID ASSESSMENT FORM

| | | | ct Name_ | C.P. | | | |
|--|--|-----------------|-------------------|------------------|--------------|----------|-----------|
| Watercourse Name VAKAOW | | Proje | | 096070 | | | |
| Photos 622=14 623=1/5 62 | 14:45 | | | BIME | | | |
| Date 2012 06 06 | | Time | 14:39 | 8 | Water State | | |
| Weather conditions in previous | The state of the s | | | | | | |
| GPS Coordinates (Zone) 17 | The state of the s | | | N 477 8 | | Datu | m N |
| Descriptive Location 0 A | | m 600 | M NOIT | hof Th | Dimpson | Lin | e |
| on east side of id. (| runs parall) | | | | | 1 3 6 | Walt Prop |
| Water Quality | | | | | | | |
| Dissolved Oxygen (mg/L) | | | | | | | |
| Motor Formant (20) | pH | | | ctivity (µS/ | c m) | /_ | 7 |
| Water Temperature (°C) | / | Air Te | emperatur | e (°C) | | | 1 |
| Time in situ measurements tak | cen | | <u> </u> | | Property Ass | | |
| Watercourse Dimensions & I | Morphology | | | | | | |
| Mean Watercourse Width | | Mayir | num Bool | Depth 0 | ~ 3 | | |
| Mean Bankfull Width 2.5 | (m). | | Water De | | | (cm) | |
| % Riffle | 7 | Pool | Water De | % F | 0.03 | (cm) | |
| Evidence of eroding banks, Co | /0 | | Tecer | | redged | | |
| | minority of bank | Stability | Tecer | THE CO | (cage a | | |
| | | | Per | Her 22 Medi | | | |
| Substrate (% cover) | | | | | | | |
| Bedrock | Cobble | | _Sand | 35 | Silt | 2 | Mu |
| Boulder | Gravel | 60 | _Clay | | Mari | | De |
| | Undercut B Voody Debris | Bould | Deep Po er C | ool Wat Other | ercress | Αq | uatic |
| Cover Types Present (circle): Overhanging Vegetation V Riparian Zone Riparian Cover (% of watercount | Voody Debris | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of the street | Voody Debris | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour 2% 5000 5000 5000 5000 5000 5000 5000 50 | Voody Debris | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of the street | Voody Debris | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount 2/6 50 ML 5 ML/05 Adjacent Land Use | Voody Debris | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount 2/6 50nc 50nc/05 Adjacent Land Use Fish Habitat Potential | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour 2/0 50nc 5hc/05 Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour 2% 50mc 5mc/50 Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount of the second | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Some Sharlos Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu possible Somming laborations) Migratory Obstructions (season | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount of the second | rse shaded, domi | Bould | er C | Other | | | uatic |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Some Sharlos Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu possible Somming laborations) Migratory Obstructions (season | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour 2/0 50nc 5hc/05 Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Possible Somming lands Migratory Obstructions (season All y Vela Shoulds Note any fish observations | rse shaded, domi | Bould | er C | Other | | | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount 2/0 50 ML SMA 1005 Adjacent Land Use Control Fish Habitat Potential Critical Habitat (spawning or nu 2/2 SMA 1005 Migratory Obstructions (season A 1 M 1007 Note any fish observations Waterbody Notes | rse shaded, domi | Bould nant vege | er Contaction, ma | Other | ly succes | ssional) | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Possible Spawning o | rse shaded, domi | Bould nant vege | er Contaction, ma | other | ly succes | ssional) | Tile_ |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount 2/0 50 ML SMA 1005 Adjacent Land Use Control Fish Habitat Potential Critical Habitat (spawning or nu 2/2 SMA 1005 Migratory Obstructions (season A 1 M 1007 Note any fish observations Waterbody Notes | rse shaded, domi | Bould nant vege | er Contaction, ma | Other | ly succes | ssional) | |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount of the second | rse shaded, domi | Bould nant vege | er Contaction, ma | other | ly succes | ssional) | Tile_ |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Possible Spawning o | rse shaded, domi | Bould nant vege | er Contaction, ma | other | ly succes | ssional) | Tile_ |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount of the second | rse shaded, domi | Bould nant vege | er Contaction, ma | other | ly succes | ssional) | Tile_ |
| Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount of the second | rse shaded, domi | Bould nant vege | er Contaction, ma | other | ly succes | ssional) | Tile |



RAPID ASSESSMENT FORM FOR AQUATIC HABITAT 1-4

| - | - |
|------|-------|
| 200 | |
| Star | IUCL. |

| | ect U | | | Project # | 1100/11/11/11/1 | hu | |
|---|--|--|--|--|---------------------------|-----------------|-----------|
| Statio | | | | Field Staff | 19 0 | MA | |
| | os Taken | 07-6) | | Date No | 11.39 | 2011 | |
| | Coordinates / | 12 11779421 | 424102 | Time 8 | 30 | 2011 | |
| | riptive Locatio | | Colmo | ed cho | 00 (04) | 11- | , - |
| 11 | avensu | | e P | vy vu | maun | F 7 0 | |
| Wate | or Quality | 11 | °C | -10 | | | |
| Disso | olved Oxygen (| (mg/L) <u> . </u> | ¥ pH_ | 81 C | onductivity (μS/ | $cm) \supset c$ | 24 |
| Wate | r Temperature | e(°C)_7,0 |)4 | Air Temper | ature (°C) 4 | 0 | |
| Weat | ther conditions | in previous 24 | 4 hrs <u>CO</u> (d | a lots | et rain | -111 | |
| | | ensions & Mo | rphology | | | | |
| | Watercourse | CASTAL SULLINGS | (m) | Maximum F | | 75 | _(cm) |
| | n Bankfull Widt | th5_ | (m) | Mean Water | r Depth 1 | ,0 | (cm) |
| | <u>─</u> % Riffle | <u> </u> | % Pool | 100 % 5 | | % Flat | |
| Evide | ence of eroding | g banks, Comr | nents on bank | stability <u></u> | Julia regeta | LA | |
| | | | | assure | P | | |
| Subs | | eam (% cover |) two ici | | · | | |
| - 13 | Bedrock | Silt | | Boulder | <u>Ø</u> Clay | | _Cobble |
| | Muck | Gra | vel | Mari | San | d _ 30 | _Detritus |
| Subs | trate – Downs | stream (% co | ver) turb | id assu | ned | | |
| | Bedrock | Silt | | Boulder | 20 Clay | | Cobble |
| | Muck | Gra | vel | Mari | San | | Detritus |
| 3 20 3 31 | | | | | | | |
| | ter Cover | | | | | 1 | ~ 1 |
| COVE | | nf (circle). | Undercut B | anka Daa | p Pool Va | cular Plan | its Cour |
| 0010 | r Types Prese | g Vegetation | The second secon | | | | |
| | Overhanging | | Woody Det | | | | |
| Ripar | Overmanging rian Zone | g Vegetation | Woody Det | oris Bou | lder Oth | er | |
| Ripar | Overmanging rian Zone ian Cover (% o | g Vegetation | Woody Deb | oris Bou | lder Oth | er | |
| Ripar | Overhanging rian Zone ian Cover (% o Upstream_ | of watercourse | Woody Deb | oris Bou | lder Oth | er | |
| Ripar Ripari | rian Zone ian Cover (% o Upstream_ Downstream | of watercourse | Woody Deb | oris Bou | lder Oth | er | |
| Ripar Ripari Adjac | rian Zone ian Cover (% o Upstream Downstream eent Land Use | of watercourse | Woody Deb | oris Bou | lder Oth | er | |
| Ripar Ripari Adjac | rian Zone ian Cover (% o Upstream_ Downstream | of watercourse | Woody Deb | oris Bou | lder Oth | er | |
| Ripar Ripari Adjac | rian Zone ian Cover (% o Upstream_ Downstream ent Land Use Upstream_ Downstream | of watercourse | Woody Deb | oris Bou | lder Oth | er | |
| Ripari Ripari Adjac | rian Zone ian Cover (% o | of watercourse | woody Determine shaded, domine shaded | nant vegetation | ider Other, mature or ear | er | |
| Ripar Ripari Adjac | rian Zone ian Cover (% o Upstream Downstream ent Land Use Upstream Downstream Downstream Habitat Poten al Habitat (spa | of watercourse | woody Determine shaded, domine shaded | oris Bou | ider Other, mature or ear | er | |
| Ripari Ripari Adjac | rian Zone ian Cover (% o Upstream_ Downstream ent Land Use Upstream_ Downstream Downstream Habitat Poten al Habitat (spa Upstream_ Upstream_ | of watercourse A A A A A A A A A A A A A A A | woody Determine shaded, domine shaded | nant vegetation | ider Other, mature or ear | er | |
| Ripari Ripari Adjac Fish I | rian Zone ian Cover (% o Upstream_ Downstream ent Land Use Upstream_ Downstream Downstream Habitat Poten al Habitat (spa Upstream_ Downstream Downstream | of watercourse A A A A A A A A A | woody Determined the shaded, domined the shaded with the shade | nant vegetation | ider Other, mature or ear | er | |
| Ripari Ripari Adjac Fish I | rian Zone ian Cover (% of Upstream_ Downstream_ ent Land Use Upstream_ Downstream Habitat Poten al Habitat (spa Upstream_ Downstream tory Obstruction | of watercourse A A A A A A A A A A A A A A A | woody Determined the shaded, domined the shaded with the shade | nant vegetation | ider Other, mature or ear | er | |
| Ripari Ripari Adjac Fish I | rian Zone ian Cover (% of Upstream_ Downstream_ Downstream_ Downstream_ All Habitat Potental Habitat (spate Upstream_ Downstream_ Downstream_ Downstream_ Downstream_ Upstream_ Upstream_ Upstream_ Upstream_ Upstream_ Upstream_ | of watercourse A A A Atial Iwining or nurse In the course of the course In the course of the course of the course In the course of the course of the course In the course of the course of the course of the course In the course of | woody Determined the shaded, domined the shaded with the shade | nant vegetation | ider Other, mature or ear | er | |
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| Ripari Ripari Adjac Fish I Critica | rian Zone ian Cover (% of Upstream_ Downstream_ ent Land Use Upstream_ Downstream Habitat Poten al Habitat (spa Upstream_ Downstream tory Obstruction Upstream_ Downstream Upstream_ Downstream | of watercourse A A A Atial Iwining or nurse In the course of the course In the course of the course of the course In the course of the course of the course In the course of the course of the course of the course In the course of | eshaded, dominated of the state | nant vegetation | ider Other, mature or ear | er | |
| Ripari Ripari Adjac Fish I Critica Migra | rian Zone ian Cover (% of Upstream_Downstrea | of watercourse A A A A A A A A A A A A A A A | eshaded, dominate of the state | nant vegetation Individual to the control of the c | ider Otho | er | |
| Ripari Ripari Adjac Fish I Critica Migra | rian Zone ian Cover (% of Upstream_Downstrea | of watercourse A A A A A A A A A A A A A A A | eshaded, dominate of the shaded of the shade | nant vegetation Individual to the control of the c | ider Otho | er | |
| Ripari Ripari Adjac Fish I Critica Migra | rian Zone ian Cover (% of Upstream_Downstrea | of watercourse A A A A A A A A A A A A A A A | eshaded, dominate of the state | nant vegetation Individual to the control of the c | ider Otho | er | |
| Ripari Ripari Adjac Fish I Critica Migra | rian Zone ian Cover (% of Upstream_Downstrea | of watercourse A A A A A A A A A A A A A A A | eshaded, dominate of the shaded of the shade | nant vegetation Individual to the control of the c | ider Otho | er | |
| Ripar Ripari Adjac Fish I Critica Migra | rian Zone ian Cover (% of Upstream_Downstrea | of watercourse A A A A A A A A A A A A A A A | eshaded, dominate of the shaded of the shade | nant vegetation Individual to the control of the c | ider Otho | er | |

10th cone. Frain 1-4

| Project Name | C.P. | | | Stat | ion Number | 1-4 | Ballon Ballon |
|---|--|------------------------------------|--|---|--|----------------------------|------------------------|
| Project Number | 160966 | 709 | NO PERSONAL PROPERTY. | Pas | s No. (if applical | ble) / | |
| Photos | | 600:015 6 | 201-d5 | | | 2012 06 | 06 |
| Descriptive Location | A CONTRACTOR OF THE PARTY OF TH | my Can | CONTRACTOR STATE OF THE PARTY O | 800 m | | of Rave | |
| JTM coordinates | 477 | 9431 | easting North | 424 | 102 | northing | zone <u>/ 7</u> |
| Fishing Method (circ Sampling Method (ci | | Back | back habitat | Boat | Unit Model/ transect agen | Make LR spot | -12- |
| Effort (Electrofishing Settings | Seconds): | 120 | Number of I | Netters:/ | <u>, </u> | Number of Anod | es: |
| requency (Hz) | 0 | Voltage (volts) | 700 | Current (Amp | s) | Power (Watts) | |
| Station Information | | | | | | | |
| ength of Stream Su | rveyed (m) | 290 | | | | | |
| Station Characteristic | | Width (m): | Donne A | 21. | | | |
| | A | TTILLET (TIL). | Range 💍 | 8-1.0 | Average: | 0.85 | |
| Vater Clarity/Colour: Temperature (°C) pH | light | Depth (m): | Range U.C | ter Velocity if I | Average: Measured (m/s): luctivity (uS/cm) | 0.06 N/A 609 | Time_ <u>] / : / ව</u> |
| Temperature (°C) pH catch Data | light 20.9 | Depth (m): | Range O C | ter Velocity if I | Average: Measured (m/s): | 0.06 N/A 609 9.32 | Time // / / ? |
| pH Data pH pecles | light 20.9 | Depth (m): | Range O C | ter Velocity if I | Average: Measured (m/s): luctivity (uS/cm) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data | light 20.9 | Depth (m): | Range O C | ter Velocity if I | Average: Measured (m/s): luctivity (uS/cm) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.9 | Depth (m): | Range <u>U</u> c | tter Velocity if i Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) l Oxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range <u>U</u> c | tter Velocity if i Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) l Oxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH Catch Data Species | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |
| Temperature (°C) pH atch Data pecies | light 20.5 .85 | Depth (m): (Conjish) Number of | Range 00 C | ter Velocity if I Conc Dissolved | Average: Measured (m/s): luctivity (uS/cm) LOxygen (mg/L) | 0.06 N/A 609 9.32 | |



| | Mud Creek-1 NWB | |
|---------|--|--|
| Stantec | WIND FARM WATERBODY RAPID ASSESSMENT FORM 53-5 | |

| Station # | | |
|--|---|--|
| vvalercourse manne | Project Name 0.0 Project # 160960709 | |
| Photos 1080, 1081, 1095-1098 | Field Staff VF & BM | |
| Date Nov 29 2017 | Time la ISOM | |
| Weather conditions in previous 24 hrs | | |
| GPS Coordinates (Zone) 17T E 424 | | Datum |
| Descriptive Location Avmus Camp R | ed, north of Champion | |
| Descriptive Location 4. Vivia Chine F | 4A) 1011 13 & 1.010 p2 | |
| Water Quality | do | |
| Dissolved Oxygen (mg/L) pl | H Conductivity (μS/cm) | |
| Water Temperature (°C) | Air Temperature (°C) | |
| Time in situ measurements taken | All Tomporators (G) | |
| | | |
| Watercourse Dimensions & Morphology | | |
| Mean Watercourse Width(m) | Maximum Pool Depth(| AND RESIDENCE OF THE PARTY OF T |
| Mean Bankfull Width(m) | | cm) |
| | % Pool% Run | % Flat |
| Evidence of eroding banks, Comments on ban | nk stability | |
| | | |
| Substrate (% cover) | | |
| BedrockCobble_ | | Muck |
| Boulder Gravel | Clay Mart | Detritus |
| Riparian Zone | | |
| Riparian Cover (% of watercourse snaded, do | minant yegetation, mature or early successi | onal) |
| Adjacent Land Use | ominant vegetation, mature or early successi | onal) |
| Adjacent Land Use | minant vegetation, mature or early successi | onal) |
| Adjacent Land Use Fish Habitat Potential | | onal) |
| Adjacent Land Use | | onal) |
| Adjacent Land Use Fish Habitat Potential | roundwater upwellings) | onal) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) | roundwater upwellings) | onal) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr | roundwater upwellings) | onal) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) | roundwater upwellings) | onal) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations | roundwater upwellings) | onal) |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes | roundwater upwellings) | |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations | roundwater upwellings) annel Grassed Swale B | uried Tile |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Cha Surficial Drainage (i.e. furrows) Dugout | roundwater upwellings) annel Grassed Swale B t Pond Dominated by Aquatic Veg_ | uried Tile |
| Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Cha Surficial Drainage (i.e. furrows) Dugout Other Habitat Notes, incidental Wildlife Observations | annel Grassed Swale B t Pond Dominated by Aquatic Veg_ servations, etc | uried Tile |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Chasurficial Drainage (i.e. furrows) Dugout Other Habitat Notes, Incidental Wildlife Observations | roundwater upwellings) annel Grassed Swale B t Pond Dominated by Aquatic Veg_ | uried Tile |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Chasurficial Drainage (i.e. furrows) Dugout Other Habitat Notes, incidental Wildlife Observations | roundwater upwellings) annel Grassed Swale B It Pond Dominated by Aquatic Veg servations, etc. Chrestnal reg | uried Tile |
| Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, gr Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Chasurficial Drainage (i.e. furrows) Dugout Other Habitat Notes, Incidental Wildlife Observations | roundwater upwellings) annel Grassed Swale B It Pond Dominated by Aquatic Veg servations, etc. Chrestnal reg | uried Tile |



Elliet-MBryan Drain RAPID ASSESSMENT FORM FOR AQUATIC HABITAT

| ProjectStation # | Control of the contro | Project # 1009000000 |
|--|--|--|
| Photos Taken _ Lel | | Date Nov ag 2011 |
| GPS Coordinates _ Descriptive Locatio | | re 500 m cast of Jen |
| | | |
| Water Quality Dissolved Oxygen (| (ma/l) 11.85 n | Conductivity (μS/cm) 166 |
| Water Temperature | | Air Temperature (°C) |
| Weather conditions | | da loto et ran |
| | ensions & Morphology | |
| Mean Watercourse | AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER. | Maximum Pool Depth (cm) |
| Mean Bankfull Widt | % Pool | Mean Water Depth (cm)% Flat |
| | g banks, Comments on ban Vec | k stability |
| | eam (% cover) twoid | , assured based on bank |
| Bedrock | Silt | Boulder |
| Muck | Gravel | MarlSand _ CO _Detrit |
| Substrate - Down | | d, assured |
| Bedrock | Silt | Boulder Clay Cobb |
| Muck | Gravel | MarlSand Detrit |
| In-water Cover | | |
| | | |
| Cover Types Prese | | |
| Cover Types Prese Overhanging | g Vegetation Woody D | |
| Cover Types Prese Overhanging Riparian Zone | g Vegetation Woody D | ebris Boulder Other |
| Cover Types Prese Overhangin Riparian Zone Riparian Cover (% | g Vegetation Woody Direct + leaved of watercourse shaded, dor | ebris Boulder Other |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Upstream | of watercourse shaded, dor | ebris Boulder Other |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% O Upstream Downstream | g Vegetation Woody D | ebris Boulder Other |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Upstream_ Downstream Adjacent Land Use | g Vegetation Woody D | ebris Boulder Other |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% O Upstream Downstream | of watercourse shaded, dor | ebris Boulder Other |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Oupstream_ Downstream Adjacent Land Use Upstream_ Downstream Downstream Fish Habitat Poter | g Vegetation Woody Differ + lease Woody Differ + lease Woody Differ to lease when the lease wood woody Differ to lease when the lease wood wood wood wood wood work to lease when the lease wood wood wood wood wood work to leave the lease wood wood wood wood wood wood wood woo | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Oupstream Downstream Adjacent Land Use Upstream Downstream Downstream Critical Habitat Poter Critical Habitat (spa | g Vegetation Woody Differ + lease Woody Differ + lease Woody Differ to lease the lease wood Differ to lease the | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Upstream Downstream Adjacent Land Use Upstream Downstream Critical Habitat Poter Critical Habitat (spa | g Vegetation Woody Differ + lease Woody Differ + lease Woody Differ to lease the lease woody Differ to lease the lease woody Differ to lease the lease wood Differ to lease the | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Upstream Downstream Adjacent Land Use Upstream Downstream Critical Habitat Poter Critical Habitat (spa | g Vegetation Woody Differ + lease Woody Differ + lease Woody Differ to the lease wood of watercourse shaded, dor | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Overhanging Riparian Zone Riparian Cover (% Overhanging Upstream Downstream Downstream Critical Habitat Poter Critical Habitat (spatem Downstream Downstream Downstream Migratory Obstruction | g Vegetation Woody Differ + lease Woody Differ + lease Woody Differ to lease the lease woody Differ to lease the lease woody Differ to lease the lease wood Differ to lease the | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Outpostream Downstream Downstream Downstream Downstream Critical Habitat Poter Critical Habitat (spatem) Downstream Downstream Downstream Downstream Upstream Upstream Upstream | of watercourse shaded, dorn Shaded awning or nursery areas, grant on seasonal, permanent) | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Upstream Downstream Adjacent Land Use Upstream Downstream Critical Habitat Poter Critical Habitat (spa Upstream Downstream Downstream Downstream Downstream Downstream Downstream Downstream | of watercourse shaded, dorn Shaded awning or nursery areas, grantial cons (seasonal, permanent) | ebris Boulder Other minant vegetation, mature or early successional) |
| Cover Types Prese Overhanging Riparian Zone Riparian Cover (% Outpostream Downstream Downstream Downstream Downstream Critical Habitat Poter Critical Habitat (spatem) Downstream Downstream Downstream Downstream Upstream Upstream Upstream | of watercourse shaded, dorn Shaded awning or nursery areas, grantial cons (seasonal, permanent) | ebris Boulder Other minant vegetation, mature or early successional) |
| Riparian Zone Riparian Cover (% Upstream Downstream Note any fish obser | of watercourse shaded, dor h h h h h h h h h h h h h | ebris Boulder Other |
| Riparian Zone Riparian Cover (% Upstream Downstream Note any fish obser | of watercourse shaded, dorn Shaded awning or nursery areas, grantial cons (seasonal, permanent) | ebris Boulder Other minant vegetation, mature or early successional) oundwater upwellings) servations, etc |
| Riparian Zone Riparian Cover (% Upstream Downstream Note any fish obser | of watercourse shaded, dor h h h h h h h h h h h h h | ebris Boulder Other |
| Riparian Zone Riparian Cover (% Upstream Downstream Note any fish obser | of watercourse shaded, dor h h h h h h h h h h h h h | ebris Boulder Other minant vegetation, mature or early successional) oundwater upwellings) servations, etc |
| Riparian Zone Riparian Cover (% Upstream Downstream Note any fish obser | of watercourse shaded, dor h h h h h h h h h h h h h | ebris Boulder Other minant vegetation, mature or early successional) oundwater upwellings) servations, etc |
| Riparian Zone Riparian Cover (% Upstream Downstream Note any fish obser | g Vegetation Woody Direct + lease Woody Direct Plant Woody | ebris Boulder Other minant vegetation, mature or early successional) oundwater upwellings) servations, etc |

Elliot-MByan Drawn 43-1

| Project Name | AND THE RESERVE AND THE PERSON NAMED IN | Station Number | The management and |
|------------------------------------|---|---|---------------------------------|
| Project Number Logilo | 0709 | Pass No. (if applicable) | |
| Photos 1231-1 | 232 | Date (yyyymmdd): | 2012/07/ |
| Descriptive Location Thor | upson papt | of Jericho! | |
| | | | |
| UTM coordinates 4 26 | easting | 4778120 northin | ng zone 17 |
| Fishing Method (circle one): | | Boat Unit Model/Make | |
| Sampling Method (circle one): | even habitat | transect spot | |
| Effort (Electrofishing Seconds): | Number of Ne | tters: Number of | Anodes: |
| Settings | | | |
| Frequency (Hz) | Voltage (volts) (| Current (Amps) Power (Wa | itts) |
| Station Information | | | |
| Length of Stream Surveyed (m) | | _ / | |
| Station Characteristics: | Width (m): Plange | Average: | |
| | Depth (m): Range | Average: | |
| Water Clarity/Colour: | Water | er Velocity if Measured (m/s): | Time |
| Temperature (°C) | | Conductivity (uS/cm) | |
| pH | _ / _ | Dissolved Oxygen (mg/L) | |
| Species | Number of Fish | Comm | nents (i.e. age, disease, etc): |
| Species | Indining of Figure | - Collins | ionto (i.e. age, disease, etc). |
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Elliot McByan Dam WIND FARM WATERBODY RAPID ASSESSMENT FOR

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Project Name Station # Watercourse Name Photos 10 4 7 10 Project # 1/009400 Field Staff KE + 15 M Date Nov 29 2017 Time 3 on Weather conditions in previous 24 hrs __ GPS Coordinates (Zone) 17T E 72550 Descriptive Location | lower | **Water Quality** pH_____ Conductivity (μS/cpr) _ Dissolved Oxygen (mg/L) _____ Air Temperature (°C) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Maximum Pool Depth Mean Water Depth Mean Bankfull Width % Pool % Riffle % Run % Flat Evidence of eroding banks, Comments on bank stability Substrate (% cover) Cobble Bedrock Sand Silt Muck Gravel_ Marl **Detritus** Clay Boulder in-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress **Aquatic Vea** Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations _____ **Waterbody Notes** Buried Tile L Natural Watercourse Trapezoidal Channel Grassed Swale Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc. Field Notes Authored by 45 Field Notes QA/QCed by ____