**STREAMKEEPERS OF CLALLAM COUNTY - Revised November 2016**
**BASIC QUARTERLY MONITORING FIELD DATA SHEET**
Episode ID#:_____ Tour ID#:_____ Visit ID#: _____ (enter in office)
*(Includes physical-habitat parameters from Streamkeepers Volunteer Handbook; for reference only.)*

**Sampler in charge at this visit (if different than on Tour Cover Sheet):** _____

**Field Kit deviations:** List any monitoring equipment used in this visit <u>that differs from the kit/equipment</u> <u>on the Tour Cover Sheet</u>; include model/serial #s or the number of the field kit that the item comes from:

**General comments:** (problems encountered, major changes to reach, other significant events, deviations from field procedures, or recent weather when different from what is on tour cover sheet):

**\*\* FOR EACH PROTOCOL PERFORMED, PUT _ALL_ INITIALS OF _ONE_ PERSON RESPONSIBLE FOR THAT DATA.**
**\*\* IF YOU FIND NONE, WRITE "NONE". \*\* DON'T PUT INITIALS IF YOU DIDN'T PERFORM THE PROTOCOL.**

**Fish:** (If unsure of species, write "fish," "salmonid," "coho?" etc.) — *Sampler's initials:*

| Species | # adults | # juveniles | # dead | # redds | Description or comments |
|---|---|---|---|---|---|
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**Wildlife:** (Refer to tracks & scat ID sheets as needed.) — *Sampler's initials:*

| Species | Number | Sign | Location | Activity |
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**Noxious weeds:** Report submitted? Yes ___ No ___          Sampler's initials: ___
Weeds detected? Yes ___ No ___ Didn't check ___
*(Submit a report every summer, whether weeds are seen or not.)*

**Air temperature/thermometer:** _____ °C (to nearest whole °C)     Time: _____     Initials: _____

**Bank Stability Class (summer only):** (Circle one:)    1    2    3    4     Sampler's initials: ___
*Refer to the protocol in your Field Procedures manual for definitions.*

**Photos taken?** *(see Handbook for protocol)*     Yes ___          No ___     Sampler's initials: ___
*FOR SUMMER & WINTER PHOTOS: AT SITES WITHOUT ESTABLISHED CROSS-SECTION,*
*USE CENTRAL SAMPLING POINT (A.K.A. "ZERO POINT") AS CENTRAL POINT FOR PHOTOS.*
*(Cut below after inputting data into database and recording Visit ID# below; then give to photo processor.)*

Photo log: *Fill in completely for each picture, including vantage point (where it was taken from)*
**Site Name:**_____ **Date:**____/____/_____ **Camera #:**_____

| Initials | Frame # (*xxx-xxxx*) | Subject | Vantage Point |
|---|---|---|---|
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*(enter in office)* **Visit ID#:**

**Flow:** **Protocol:** Streamkeepers ___ Other: _____ **Primary sample** / **Replicate**

**Method:** Wade-across ___ Bucket ___ Single-point ___ Floating-object ___ ⟵ (use for zero flows)

**Time** (military--to nearest min.): Start: _____ End: _____ ; starting at **LB** / **RB** (left/right bank facing downstream)

Problems noted: _____

| | |
|---|---|
| **If using a Swoffer meter:** | Rotor #: [____] Rotor calibration # (on bag): [____] Calibration date: [____] <br> Hand-spin test (circle one): **pass** / **fail** Meter calibration # (switch on "calibrate"): [____] <br> Count test (circle one): **pass** / **fail** Blow-spin test (circle one): **pass** / **fail** |

***Use the diagram at the bottom to help you with the measurements below:***

[____] = **LBWE:** Left Bank (facing downstream) wetted edge of dry land (tape measurement to 0.1 ft.)

- [____] = **RBWE:** Right Bank (facing downstream) wetted edge of dry land (tape measurement to 0.1 ft.)

= [____] = **WW:** Wetted width; the difference between the above wetted edges (to 0.1 ft.)

÷10= [____] = **MaxΔ:** **MAXIMUM INTERVAL**; the wetted width above divided by 10 (to 0.1 ft.)

*MAXIMUM INTERVAL APPLIES EVEN OUTSIDE OF THE "PROP-TURNING" AREA!*

*[If wetted width is < 6.8 ft., use 0.3 ft. (the minimum interval) as the distance between flow measurements.]*

[____] = **LBPT:** Tape measurement at **LB** "prop-turning" edge--outside point at which prop turns (to 0.1 ft.)

- [____] = **RBPT:** Tape measurement at **RB** "prop-turning" edge--outside point at which prop turns (to 0.1 ft.)

= [____] = **PTW:** "Prop-turning" width; the difference between "prop-turning" edges above (to 0.1 ft)

÷20= [____] = **NomΔ:** **NOMINAL INTERVAL**; the "prop-turning" width divided by 20 (round **UP** to nearest 0.1 ft.)

*However, use smaller intervals in areas where velocity or depth is large or changing rapidly.*

*BUT PLEASE NOTE: **MINIMUM INTERVAL = 0.3 ft** .*

Include zero velocity readings 0.3 ft. to the outside of the first and last "prop-turning" locations where possible.

*When velocity is zero, indicate why: insufficient depth ( **insf/d** ) insufficient velocity ( **insf/v** ) or both ( **insf/dv** )*

| Tape *to nearest 0.1'* | Depth *to 0.01 ft.* | Velocity* *to 0.01 ft. per sec* | Angle** *to nearest 10°* | Tape *to nearest 0.1'* | Depth *to 0.01 ft.* | Velocity* *to 0.01 ft. per sec* | Angle** *to nearest 10°* | |
|---|---|---|---|---|---|---|---|---|
| | 0 | (wetted edge @ dry land) | | | | | | |
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| | | | | | | | | **Sampler's initials:** |
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| | | | | | | | | |
| | | | | | | 0 | (wetted edge @ dry land) | |

*( *For depths >2 ft., record velocity readings at both 2/10 and 8/10 depths, and record both to be averaged.)*

*( **Estimate the tell-tail's deviation from straight downstream, then face the prop in the direction of the current.)*

**Stream stage:** Before measuring flow: _____ ft / m; After: _____ **Sampler's initials:**

**Stage Benchmark**: stream gage / water-level at fixed point / top-down from fixed point *(mark as neg. #)*

**Describe fixed point:**

**Floating-Object Flow:** (circle:) Primary sample / Field replicate Sampler's initials: [____]

Mark Start & Finish lines across a stretch of the stream (≥ 10 ft.) with fairly uniform width, depth, and flow.

Length of course (to 0.1 ft): [____] Avg width (to 0.1 ft.): [____] Avg depth (to 0.1 ft): [____]

Time trials (# of seconds)--do at intervals all the way across the creek:

1) 2) 3) 4) 5) 6) 7) 8) 9) 10) <u>Avg:</u>[____]

Calculations (can be done later): Average velocity = Length of course / Avg. time = [____] ft/sec

Friction factor (circle one) = 0.8 for a gravel/cobble-bottomed stream, 0.9 for a smooth-bottomed stream

Flow (est.) = Avg. depth * Avg. width * Avg. velocity * Friction factor = [____] $ft^3$/sec (cfs) (round to 0.1 )

## STREAMKEEPERS OF CLALLAM COUNTY
## YSI ProDSS FIELD DATA SHEET

**General comments** (problems encountered, deviations from field procedures, or any notable water quality problems):

**Meter name (circle one): SK1 / SK3 / other:**

**Calibration dates (only need to record if for a non-Streamkeepers project):**

*(File button / View GLP / hit Down arrow successively for dates):*

*Barometer:___ / ___ / ___   Conductivity:___ / ___ / ___   pH: ___ / ___ / ___   Turbidity: ___ / ___ / ___   ODO: ___ / ___ / ___*

| **Primary samples:** | | | *Expected ranges:* | *If meter results do not fall into the expected ranges or are not close to the replicate, please re-calibrate and repeat.* | Additional readings: | |
|---|---|---|---|---|---|---|
| Water temp: | | °C (to nearest 0.1) | *0-20* | | | |
| Barometric pressure: | | in. Hg (to nearest 0.01) | *24-31* | | | |
| DO %Local: | | % (to nearest whole #) | *70-110* | | | |
| DO Concentration: | | mg/L (to nearest 0.1) | *6-15* | | | |
| Specific Conductivity: | | µS/cm (to nearest whole #) | *25-400* | | | |
| Salinity: | | PSU (= ppt) (to nearest 0.1) | *0-35* | | | |
| pH: | | pH units (to nearest 0.1) | *6.5 - 8.5* | **Sampling Time:** | | |
| Turbidity: | | FNU (to nearest whole #) | *0-1000+* | **Sampler Initials*:** | | |

**\*PUT _ALL_ INITIALS OF _ONE_ PERSON RESPONSIBLE FOR THE DATA**

| **Dissolved Oxygen drift check\*--record DO%Local to nearest 0.1%:** | **Time:** | **Initials:** |
|---|---|---|
| ***(\*If performing field replicates at this site, do the drift check after the replicates--see below)*** | | |

*(**NOTE:** Roll the die to determine at which reach to perform **replicates** -- record below.)*

| **Field replicates:** | *Check sample/replicate deviations and re-test as necessary; see Handbook* | | Additional readings: | |
|---|---|---|---|---|
| Water temp: | | °C (to nearest 0.1) | | |
| Barometric pressure: | | in. Hg (to nearest 0.01) | | |
| DO %Local: | | % (to nearest whole #) | | |
| DO Concentration: | | mg/L (to nearest 0.1) | | |
| Specific Conductivity: | | µS/cm (to nearest whole #) | | |
| Salinity: | | PSU (= ppt) (to nearest 0.1) | | |
| pH: | | pH units (to nearest 0.1) | **Sampling Time:** | |
| Turbidity: | | FNU (to nearest whole #) | **Sampler Initials:** | |