

How to Take Stream Temperature Monitoring (i.e. HOBO) Site Photographs



Spring 2015

CTDEEP River & Stream Volunteer Monitoring Program

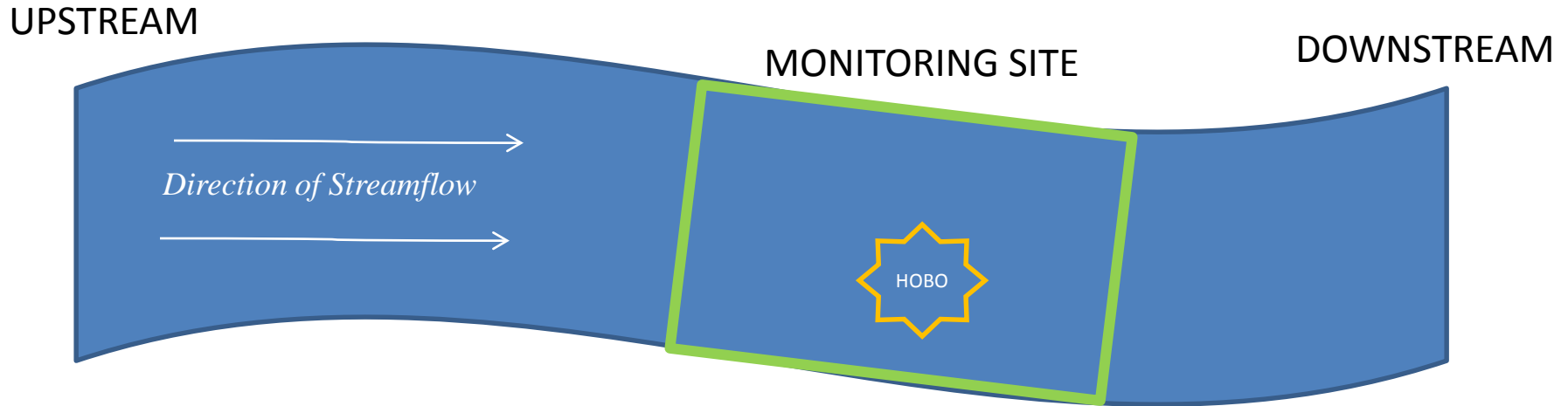
Stream Temperature Monitoring

Last revised 04/07/2015



Connecticut Department of Energy and Environmental Protection

How to Take HOBO Site Photographs






Directions:

As part of the Volunteer Stream Temperature Monitoring program you must take three photographs before leaving your site:

1. A photo looking UPSTREAM from your site
2. A photo looking DOWNSTREAM from your site
3. A photo showing the HOBO LOCATION

These photos are important data. They not only document the stream conditions at the time the HOBO is deployed/retrieved, they also provide 'proof' that the HOBO was installed by volunteers where indicated without the need for DEEP field staff checks – it's important that you remember to take and submit them!! (Photos should be taken twice - on the day that the HOBO is installed and on the day it is retrieved.)

LEGEND

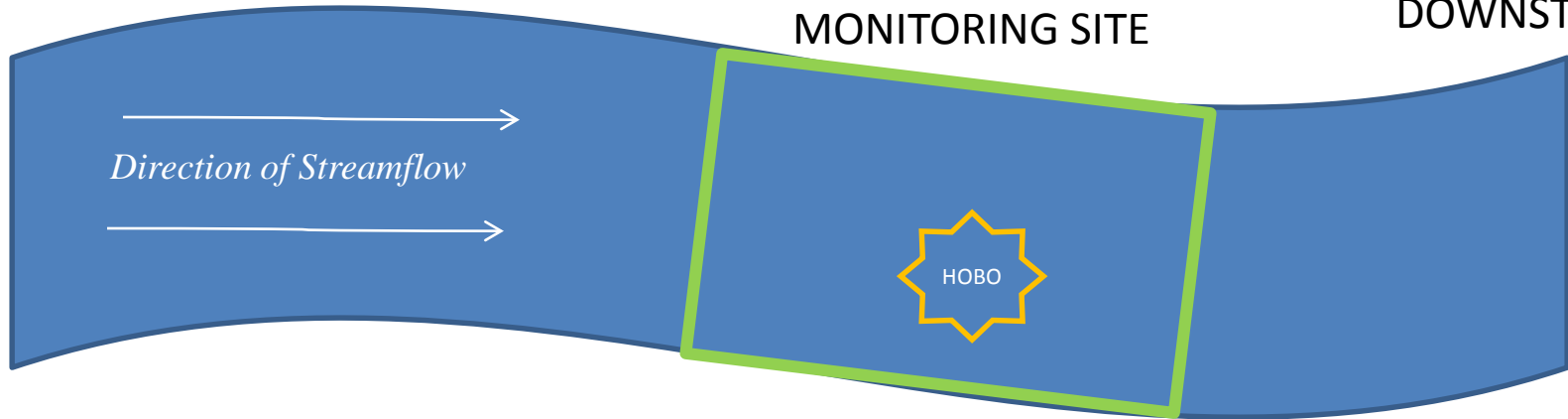
-  Stream
-  Monitoring site
-  HOBO Location

CAMERA SETUP

UPSTREAM

MONITORING SITE

DOWNSTREAM



Directions:

1. Turn your camera (or Smartphone) on; remove any covers. ☺
2. If you have the option to record a date and time stamp, turn the feature on and make sure the current date/time are correct.

LEGEND




-  Stream
-  Monitoring site
-  HOBO Location

Photo #1: UPSTREAM of the HOB0

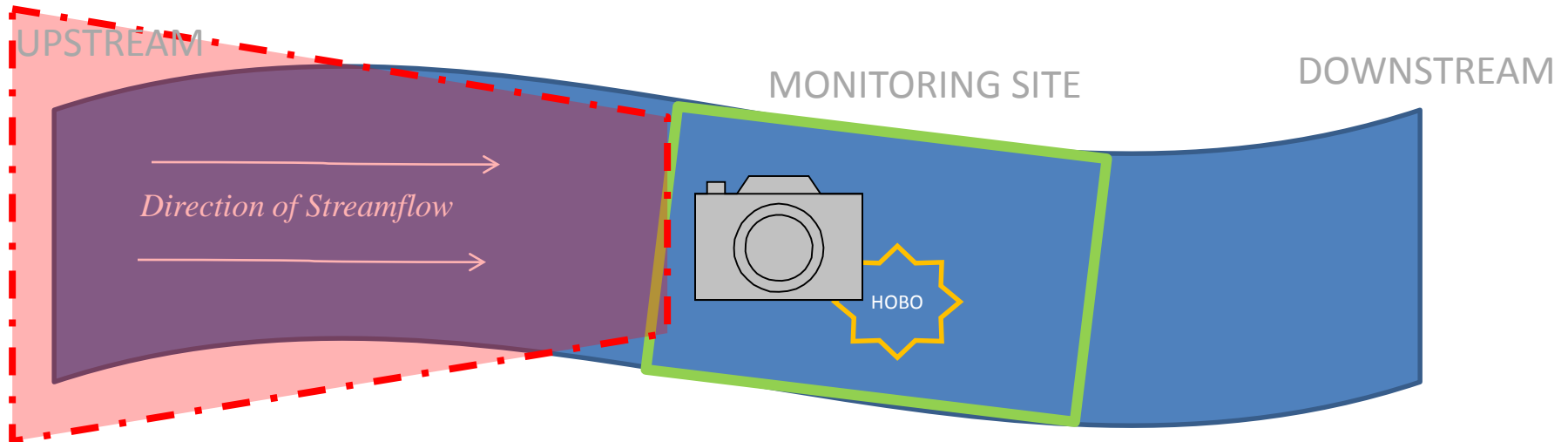


Photo 1 Directions:

1. Stand in the stream near the installed HOB0 and face UPstream. (The water should be flowing so that it is coming from in front of you, flowing past, and travelling away behind you.)
2. If the setting is available set your camera to the 'Landscape' setting. Make sure it is zoomed out as much as possible.
3. Take your photo, trying to capture the stream in the distance ahead of you as well both banks as much as possible.
4. Check the photo to make sure it is clear.
5. Check the 'upstream area' photo box on the logger installation/retrieval form

LEGEND

-  Area to capture in photo
-  Location of camera
-  Stream
-  Monitoring Site
-  HOB0 location

Photo #2: DOWNSTREAM of the HOBO

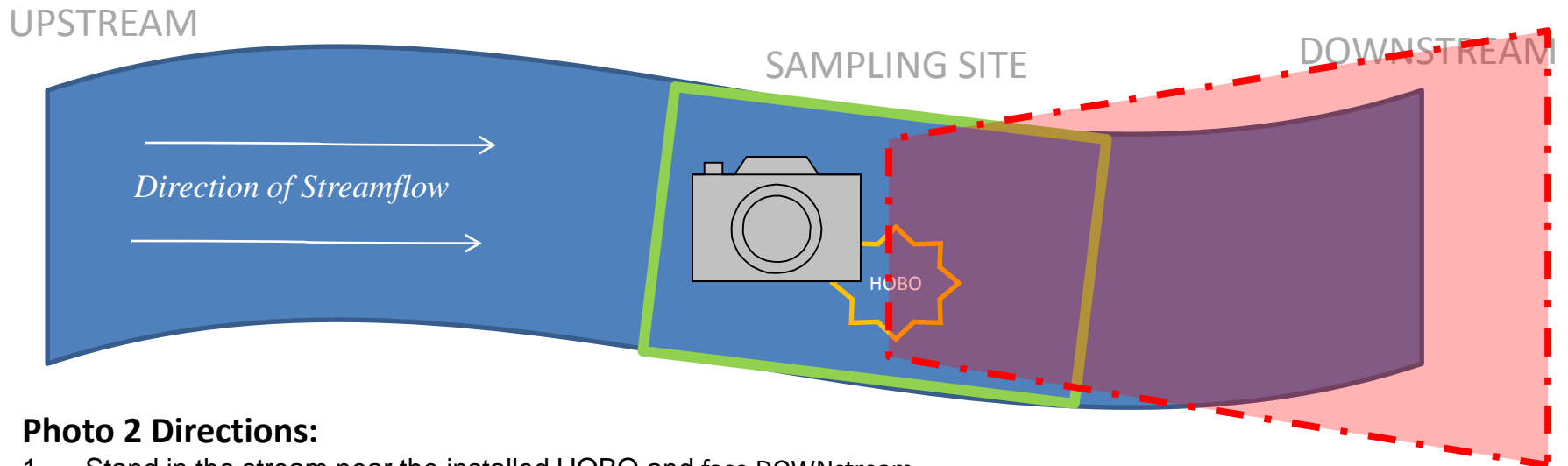


Photo 2 Directions:

1. Stand in the stream near the installed HOBOS and face DOWNstream.
(The water should be flowing so that it is coming from behind you, flowing past, and travelling away in front of you.)
2. If the setting is available set your camera to the 'Landscape' setting. Make sure it is zoomed out as much as possible.
3. Take your photo, trying to capture the stream in the distance ahead of you as well both banks as much as possible.
4. Check the photo to make sure it is clear.
5. Check the 'downstream area' photo box on the logger installation/retrieval form

LEGEND

-  Area to capture in photo
-  Location of camera
-  Stream
-  Monitoring Site
-  HOBOS location

Photo #1: HOB0 Location

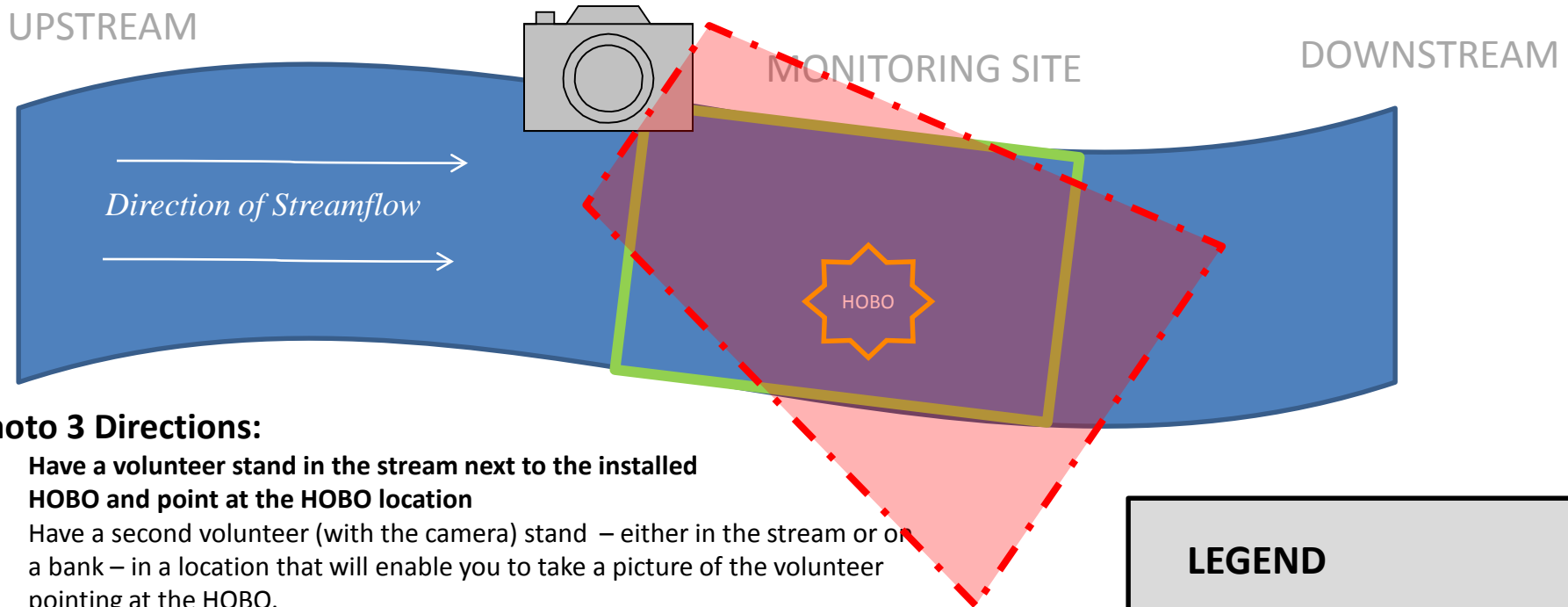


Photo 3 Directions:

1. Have a volunteer stand in the stream next to the installed HOB0 and point at the HOB0 location
2. Have a second volunteer (with the camera) stand – either in the stream or on a bank – in a location that will enable you to take a picture of the volunteer pointing at the HOB0.
3. If the setting is available set your camera to the 'Landscape' setting. Make sure it is zoomed out as much as possible.
4. Make sure not to take the picture too close – you want to capture the HOB0 location as well as any important landmarks or flagging that will help locate the HOB0 in the future.
5. Take your photo.
6. Check the photo to make sure it is clear.
7. Check the 'Location of Logger' photo box on the logger installation/retrieval form

LEGEND

-  Possible area to capture in photo
-  Location of camera
-  Stream
-  Monitoring Site
-  HOB0 Location

Example Photographs

Photo 1: Upstream



Photo 2: Downstream



HOB0 under rock pile



Pink flagging

Photo 3: HOB0 Location

Note that photo captured both the hobo position as well as flagging