Guidelines for video collection through Scent Explore

The Water Velocity Calculation tool (WVCT) uses state of the art video processing algorithms in order to extract the water surface velocity from a video containing a pre-defined floating object moving on the surface of a water body. In order for the WVCT to calculate the water surface velocity with accuracy the guidelines below are communicated to the users to be taken into account for the video recording.

1. The area of the water body should be chosen strategically so avoid any visible obstacles and/or river bends that will influence the speed and/or course of the floating object.
2. It is preferable for the video not to be taken from close-up. The camera frame should include some steady features located at the riverbank to the degree that this is feasible.
3. The user should keep the camera as steady and stable as possible. It is advised for the camera not to follow the movement of the object.
4. The video may contain frames at the beginning and the end where the floating object is not visible. Such frames though should not be included in the middle of the video. The first frame with the object will be considered the beginning of the recording and the first frame without the object after that will signify the end of the video. The measurement will be extracted based only on this part of the video.

The steps that should be followed for the video recording are the following:

STEP 1: Select an area of the river where there are no visible obstacles and/or river bends.

STEP 2: Wait for camera activation from the app and choose a suitable position/frame.

STEP 3[1]: In position, wait for the pre-defined object to be thrown in the water

STEP 4: Start the video recording while waiting for the object to float by.

STEP 5: Record the object floating by while keeping the camera stable and steady.

STEP 6: When the object is no longer visible, stop the video recording.

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[1] The floatable object is thrown in the water by volunteers not engaged in recording at the moment