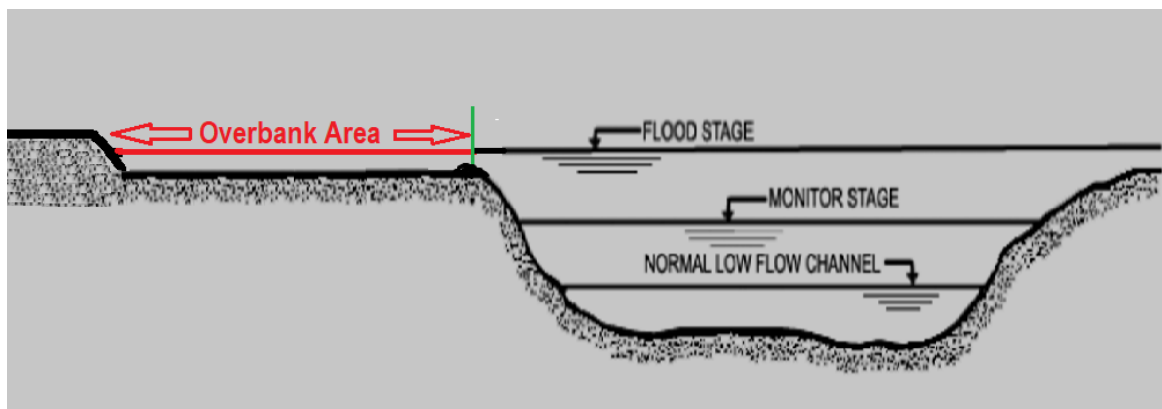


## Teledyne RD Instruments: WinRiver II v2.22 - New Features

1. **Ability to manually input edge discharge estimates:** Under flood stage conditions a channel may overflow its bank(s). In this diagram the main channel is shown to the right of the vertical green line and the overbank to the left of the vertical green line. It can be the case that instrumentation used for the measurement of the main channel may not be suitable for the overbank area which may for example be very shallow. If the main channel is measured using WRII v2.22, it is now possible to add in the  $Q$  of the overbank area to the main channel  $Q$  resulting in the summed  $Q$  being available in the "F12" and  $Q$  Measurement Summary.



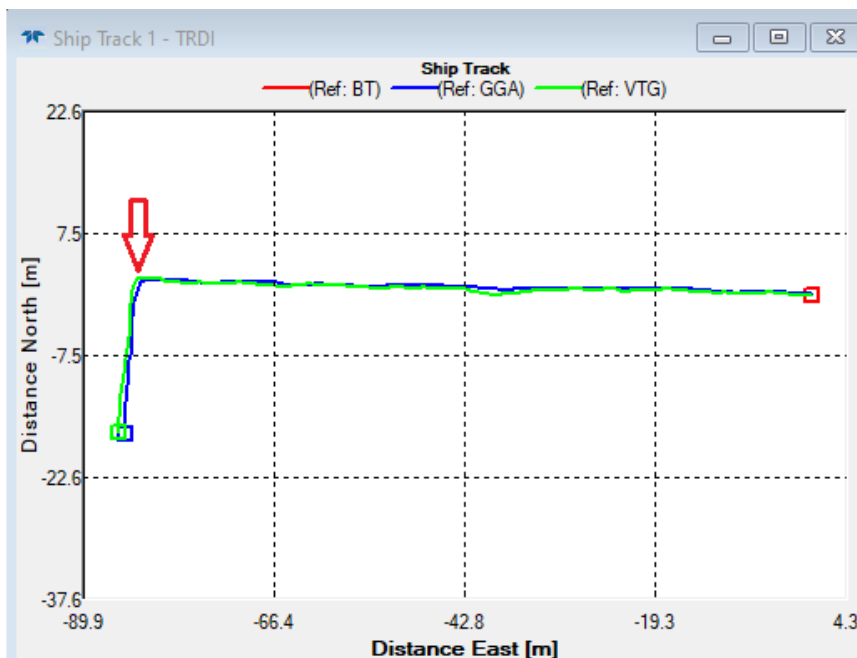
Care should be used to measure the respective 'edges' up to the green line in both directions and to not cause any overlapping.

In this example if the main channel transect was started on the right bank and the overbank area had a  $Q$  of  $10\text{m}^3/\text{sec}$  then select End Transect and enter 10 for the Manual Discharge.

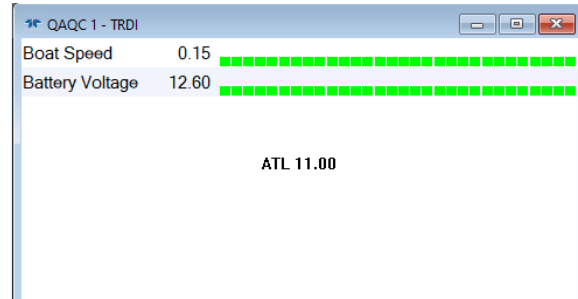
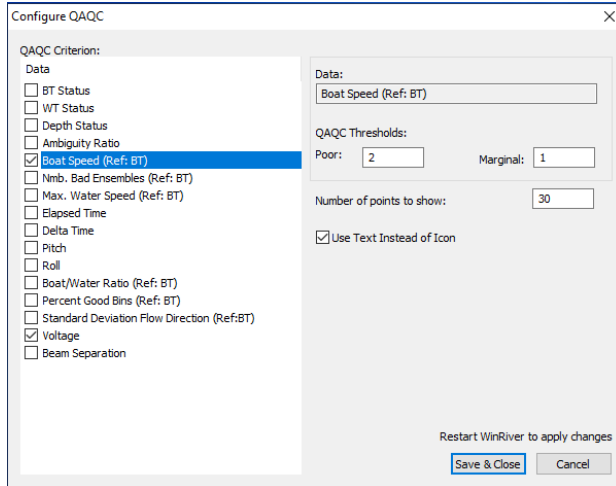
### Edge Estimates

<ul style="list-style-type: none"> <li>➤ Properties</li> <li>➤ Commands</li> <li>➤ DS / GPS / EH</li> <li>➤ Discharge</li> <li>➤ Edge Estimates</li> <li>➤ Offsets</li> <li>➤ Processing</li> <li>➤ Recording</li> </ul>	<p>Begin Transect</p> <p><input checked="" type="radio"/> Shore Distance [m] <input type="text" value="1.00"/></p> <p><input type="radio"/> Manual discharge [<math>\text{m}^3/\text{s}</math>] <input type="text" value="0.00"/></p> <p><input type="radio"/> Left Bank    <input checked="" type="radio"/> Right Bank</p> <p>End Transect</p> <p><input type="radio"/> Shore Distance [m] <input type="text" value="2.00"/></p> <p><input checked="" type="radio"/> Manual discharge [<math>\text{m}^3/\text{s}</math>] <input type="text" value="10.00"/></p>
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- 2. Improved robustness of Bluetooth:** The laptop internal Bluetooth can now be used instead of an external BT dongle. However, it should be carefully accessed in case of any unforeseen nuances. A range check should be done to confirm that the range is more than sufficient.
- 3. Fixed GPS Latency:** There is now no need to set the GPS latency in the serial port. An easy way to check for lack of GPS latency is to place the adcp and gps on a cart, start pinging, click save 'transect' and move in a straight line for say 100m then make a sharp right-angle turn (red arrow). When viewing the gps track it should turn within a second or two of you making the physical turn. Continue the process a few more times. Save the measurement. This should be done in an open area such as a field or empty parking lot with an unobstructed view of the sky. Note: When using gps for an actual measurement a good compass calibration is necessary.



- 4. QAQC:** This new feature allows you to select what items you would like to monitor during data collection.



There are other improvements and bug fixes in the WR11 v2.22 software. Once you have installed the software click Help, Contents, Appendix F – Software History, (it's at the very end of the Table of Contents) to view the changes.