Review Existing Data: Prior to traveling to the site, review any available gage data for the stream and section in question. This data can be used to determine the approximate flows that occur 'in a typical season,' which can give you an idea as to how the flow observed during the site visit relate to other flows at different times of the year. Check to see if there have been any recent (within the last year) floods that may have affected the site.

Bring with you in the field: pin flags, stakes, large marker, flagging tape, field determination form, camera, and preferably at least one other person.

Flag the OHW elevation based on field indicators:

- When on site, first walk up and downstream in the project area, looking at both banks.
- Review the list of field indicators on the form and look for these and other evidence.
- Remember to consider past high flow events- historic floods can leave distinct, persistent silt lines on trees that can be deceiving.
- Pin-flags or stakes should be used when the substrate allows. Otherwise, tape flagging can be tied on vegetation.
- Label flags and stakes as OHW and number them so later surveyors can be sure that they have found all of them, or you can identify which ones may have been missed or lost.

Photograph the Site: Take photos up and downstream and preferably of both banks- after the flags are set. Be sure to capture photographic evidence of field indicators and the location of your markers.

Survey Flags: Preferably, if time allows, put review data and photos in the office upon returning from your field visit to verify your judgment before having the flags surveyed. This is often not possible but can be helpful to gain a better perspective and confirm your field observations.

Frequently Asked Questions

Q: Who is qualified to determine OHW?

A: There are no certifications or licenses required to determine the Ordinary High Water of a stream. When the ordinary high water elevation delineates a property boundary (i.e. state-owned navigable waterways), the boundary must be determined by a licensed surveyor.

Q: When should this form be used?

A: Any time a project may include work below the ordinary high water of a stream, when no-work areas are based on the line of ordinary high water, or to determine property boundaries adjacent to a state-owned waterway.

Q: Who should fill out this form?

A: The person, or persons, making the determination in the field should fill the form out together. If the OHW is a property boundary, the form must list the name of the licensed surveyor involved.

Q: How many field indicators need to be checked in order to make a valid determination?

A: You should use as many corroborating indicators as you see. Some indicators 'stand alone' as identifiers others, such as drift material, are used in conjunction with others. Wrack hung up on fences or vegetation is usually located higher in elevation than the actual OHW.

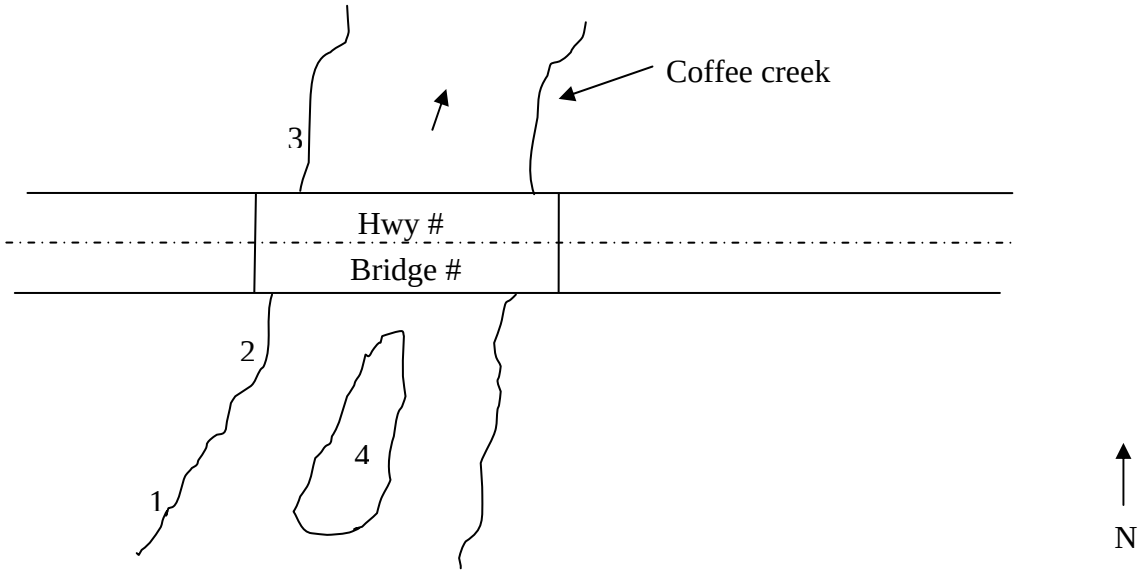
Q: How many flags or points are needed to estimate the line of ordinary high water?

A: You should place at least three flags on one side of a waterway in different locations up and downstream in the project site. The number of flags placed will depend on the slope of the stream and will increase as slope increases. Use that side of the stream that has more consistent indicators. If this side of the stream is inaccessible, use a hand level to estimate the OHW off the side of the stream with better indicators and place the flags on the accessible side.

Q: What is meant by 'flagging protocol?'

A: When flags are hung on vegetation to indicate an elevation how they should be interpreted needs to be explained. For example, is the intended elevation at the knot, at the elevation of the vegetation? Or is it where the flag touches the bank, or if the flag is hanging above the bank, is it where the flag would intercept the bank straight below? If not described this could be confusing for someone surveying the site. Providing a sketch map would also help explain the protocol (see attached sample).

Sample Sketch Map



Flag protocol:

Flag 1 is hung on vegetation- follow flag down and survey the point at which the flag intercepts the ground below.

Flag 2 is a pin-flag at horizontal extent of OHW- shows a good clear break in slope at this point.

Flag 3 is a pin-flag, self-explanatory.

Flag 4 is at the top of a point bar and does not represent the extent of OHW. Elevation data is needed to compare with elevation of flags. Point bar should be a little lower than OHW.

Flags are placed on side of bank that has very discernible OHW indicators. Staining on bridge piers appears to be at same elevation as indicators on the bank. Please shoot the elevation of the bright red paint on bridge pier located nearest to west bank for comparison.