

Percent Bank Forested ca. 2010

Technical Details

Percent Bank Forested ca. 2010 is reported for each 100m slice and also for each 1KM slice. In the GIS data, Percent Bank Forested is reported in the field *PBF2010* for the 100m slices and the field *PBF2010KM* for the 1KM slices. In the spreadsheet, the 100m slice data are reported in the column *2010 Percent Bank Forested (100m)* and the KM data are reported in the column *2010 Percent Bank Forested (1KM)*.

Percent Bank Forested ca. 2010 is calculated per 100 meter slice to be the area of floodplain forest within 120 feet (one site potential tree height) of the low water bank divided by the total area within 120 feet of the bank. A graphic illustration is on the last page of this document. The value is expressed as a percentage (i.e. the attribute 94 means 94%). The same process was used for the 1KM slices. For each 1KM slice, the Percent Bank Forested is calculated to be the area of floodplain forest within 120 feet of the bank divided by the total area within 120 feet of the bank.

Different datasets were used to process Percent Bank Forested for 100m slices 1 – 7907 and 100m slices 7908 – 22907. For 100m slices 1 – 7907, representations of floodplain forest and bank are ca. 2010 using data derived from 2000-2001 Landsat satellite data at a 30m grid cell size. The satellite derived data were updated and refined with more recent ancillary data but the 30m resolution serves as the underpinning of the representation of floodplain forest and bank for 100m slices 1 – 7908. For 100m slices 7908 – 22907, the representation of both the bank and floodplain forest come from the ISE's finer-grained ca. 2010 land use/ land cover data which have a northern boundary at 100m slice 7908 (ise.uoregon.edu/slices/lulc.html). These data are based on 2011 NAIP imagery and ca. 2009 LiDAR data and were processed at a 6ft grid cell size.

SLICES 1 – 7907

The representation of water comes from 30m derived satellite data with manual refinement based on National Agriculture Imagery Program (NAIP) imagery. The representation of bank is where the low flow water features meet the land surface. Using GIS, a buffer of 120 feet (one site potential tree height) from this land/ water interface was created to determine the total area within 120 feet of a bank (i.e. the denominator in the percent bank forested calculation). For slices 1- 7907 the representation of floodplain forest is also derived from 30m satellite data with revisions that are described in the Floodplain Forest ca. 2010 technical details. GIS processing determined the area of floodplain forest within the 120 foot buffer (the numerator in the calculation).

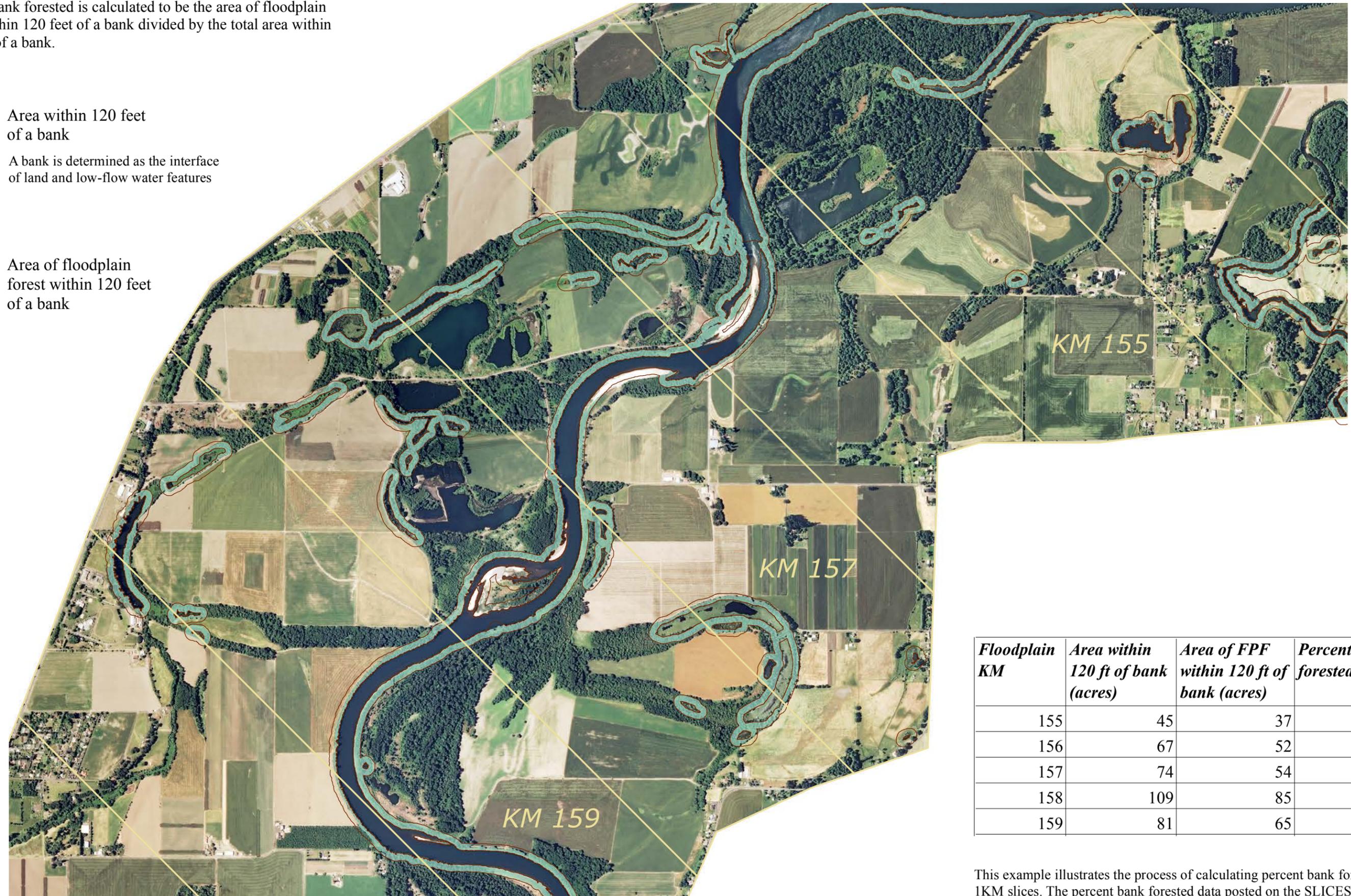
SLICES 7908 - 22907

The representation of bank is where 2010 low flow water features (classes 20 – 23 and 25 from 2010 land use/ land cover) meet the land surface. Using GIS, a buffer of 120 feet (one site potential tree height) from this land-water interface was created to determine the total area within 120 feet of a bank (the denominator in the calculation). Floodplain forest is defined as classes 40 – 42 from ca. 2010 land use/ land cover (these data are described in Floodplain Forest ca. 2010 technical details). GIS processing determined the area of floodplain forest within the 120 foot buffer (the numerator in the calculation).

Percent Bank Forested ca. 2010

Percent bank forested is calculated to be the area of floodplain forest within 120 feet of a bank divided by the total area within 120 feet of a bank.

-  Area within 120 feet of a bank
A bank is determined as the interface of land and low-flow water features
-  Area of floodplain forest within 120 feet of a bank



<i>Floodplain KM</i>	<i>Area within 120 ft of bank (acres)</i>	<i>Area of FPF within 120 ft of bank (acres)</i>	<i>Percent bank forested</i>
155	45	37	81%
156	67	52	78%
157	74	54	74%
158	109	85	78%
159	81	65	80%

This example illustrates the process of calculating percent bank forested using 1KM slices. The percent bank forested data posted on the SLICES website were processed using the 100m slices.