

GEOLOGY OF VANCOUVER LAKE, WASHINGTON, "BULLS EYE" LAKE



By: Candice Armijo and Curt Peterson

QUESTIONS

- ⌘ **How old is Vancouver Lake?**
- ⌘ **How was the shape of the lake formed?**
- ⌘ **How did the water accumulate in the lake?**
- ⌘ **Did the water get trapped inside this form?**



WHAT WE KNOW ABOUT VANCOUVER LAKE



- ⌘ Surface area of lake:
~9km²
- ⌘ Depth of lake:
~1 to 4 meters
- ⌘ Has been classified
as a short-lived
'ephemeral' lake.

WEST SIDE OF LAKE



WEST SIDE OF LAKE



BOTTOM OF SCROLL BAR



NW SIDE OF LAKE

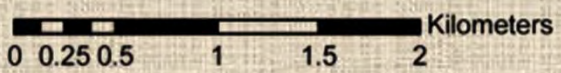


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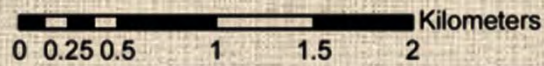
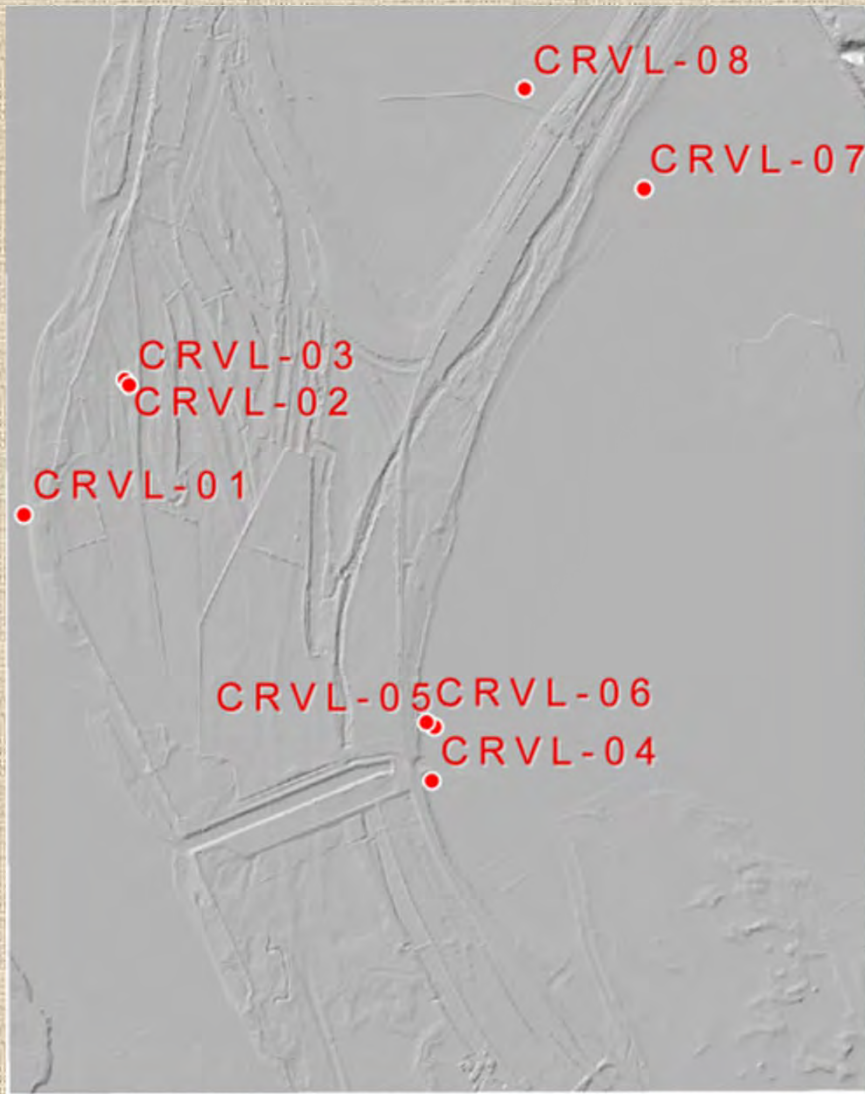


ASH LAYER

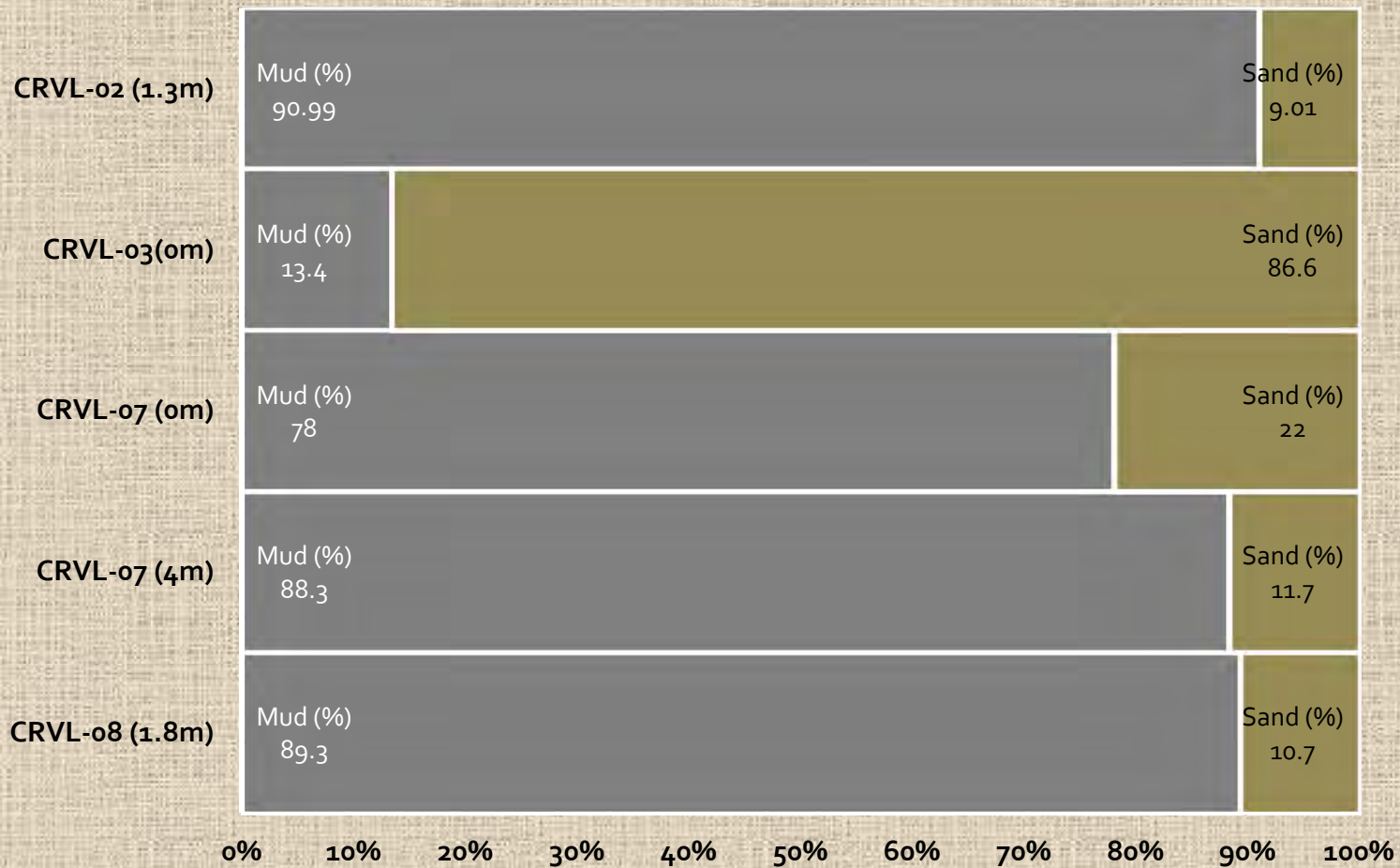




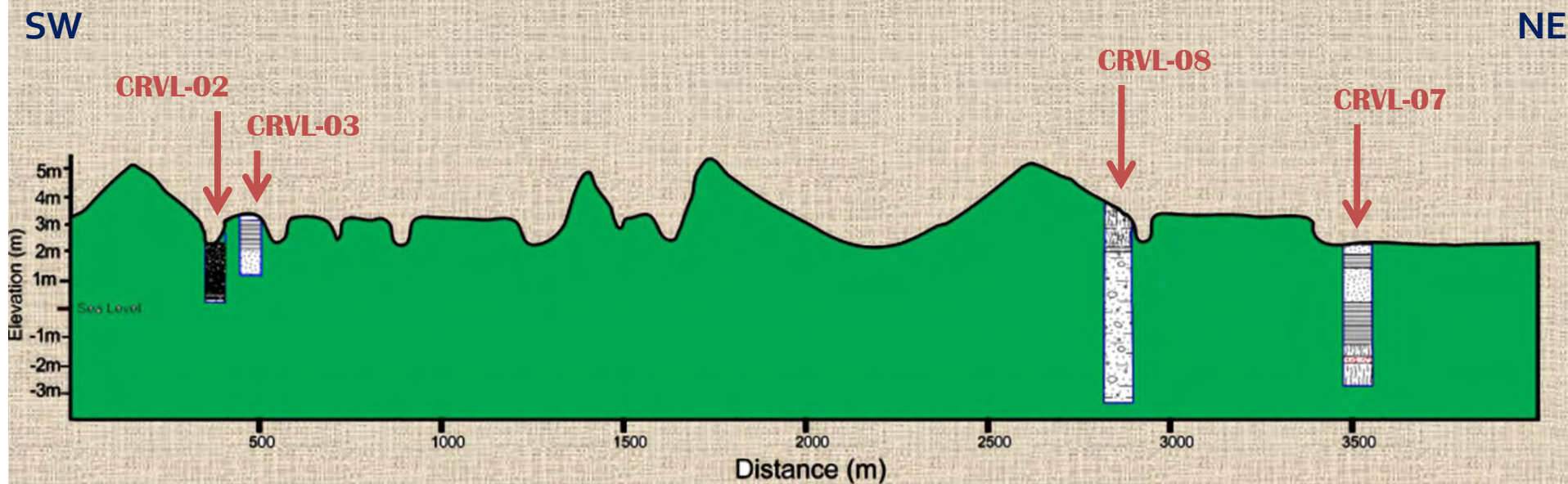
COLUMBIA RIVER MOVING TO THE WEST



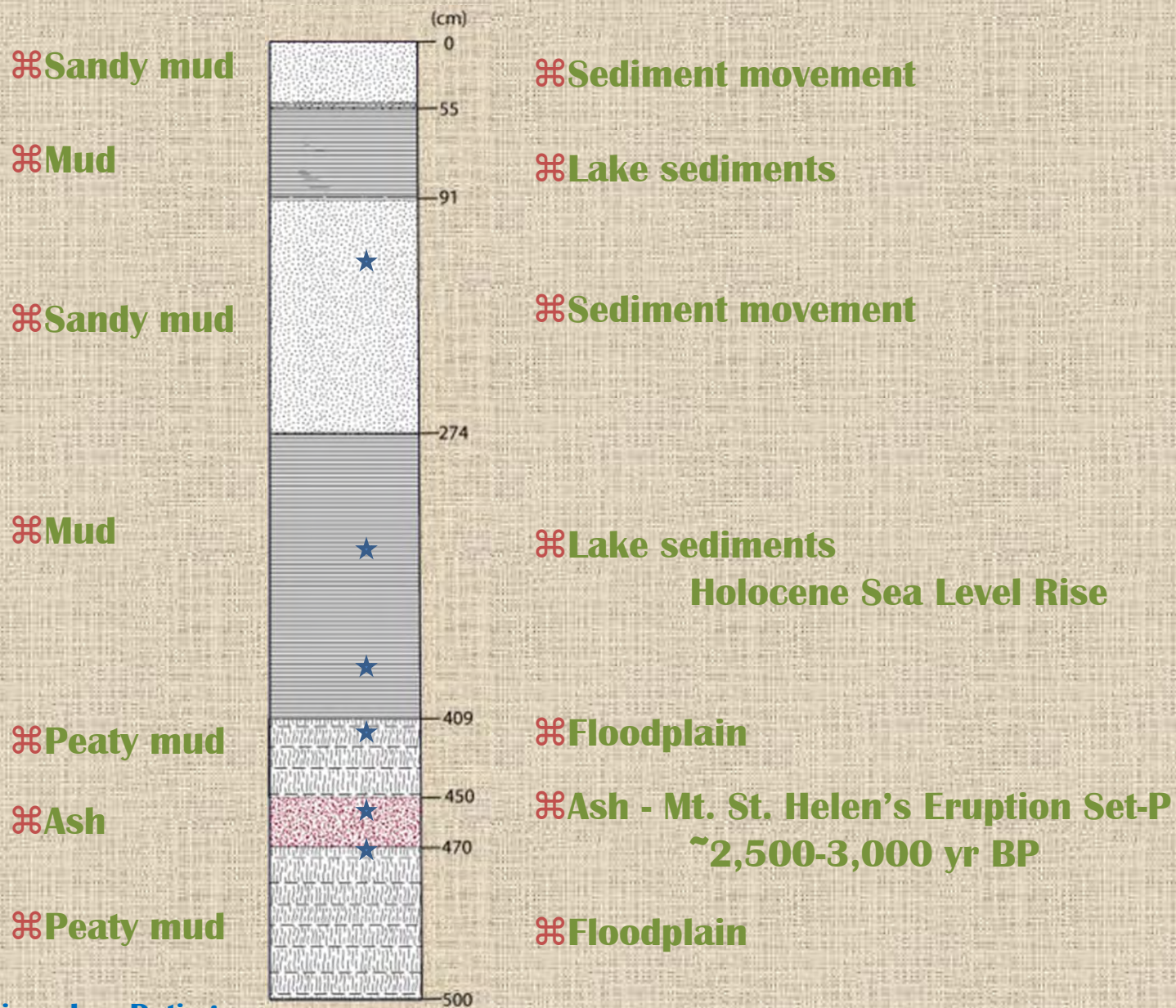
SIEVE ANALYSIS



CROSS SECTION



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★ Samples taken for Radiocarbon Dating

'BULLS EYE' LAKE

- ⌘ **Vancouver Lake was formed by the submergence of an ellipsoidal vegetated flood plain basin that was previously formed by successive but oppositely directed channel migrations, i.e., oppositely orientated scroll bars. The Bulls Eye Lake or Bulls Eye Pond is maintained indefinitely when the rate of submergence from sea level rise exceeds the rate of sedimentation in the stable flood plain basin.**



Bower Slough

CONCLUSION

⌘ Represent a new classification of flood plain features which are likely unique to large-scale fluvial-tidal settings.

⌘ Bachelor Island

⌘ Sauvie Island

⌘ Deer Island

⌘ Radiocarbon dates are pending: Beta Analysis Inc. (Summer 2012)



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⌘ C.D. Peterson, 2011 Geomorphology

⌘ www.wlsevier.com

⌘ Shannon and Wilson, Inc., 1972, Portland Or., Vancouver Lake Urban Planning Project Port of Vancouver, Wa.

