# Bluff Recession and Setback Act (BRSA) Control Point Monitoring Program

The Department of Environmental Protection (Coastal Zone Management Program) currently monitors 129 established control points along Pennsylvania's Lake Erie shoreline. These control points are used to determine annual rates of bluff recession, help identify Bluff Recession Hazard Areas (BRHAs), and help determine minimum bluff setback distances in accordance with Chapter 85, Title 25 of the PA Code.

Control points are fixed and somewhat permanent points, such as buried steel pins or existing utility poles, from which direct measurements to the bluff crest are made. The control points are located approximately every one half kilometer along the bluff crest (please refer to Diagram of Bluff Terms on next page) from the Ohio to the New York borders. Direct measurements from the control points to the bluff crest are taken every four to five years, with the assistance of Global Positioning System technology.

The first control point was established in 1975 in an effort to begin monitoring the stability of bluff conditions along Lake Erie. The control point program began in earnest in 1982, when 47 control points were established on the tableland along the bluff crest. An additional 69 control points were established in 1986 and 1987. Changes in land use and on-site construction activities sometimes necessitate the need to move control points or cause the control points to be lost. The control point management and measurement program is an on-going process. The most recent control points were established in Spring 2002. The most recent round of control point measurements concluded in October 2003.

While control point measurements are taken to provide average rates of recession for a given area, it is important to understand that bluff recession is often episodic in nature. A control point showing very little recession over a 15 or 20-year period, may have a 20-foot loss in one year. This would drastically change the recession average for that particular point. It should also be noted that significant recession may be occurring on either side of a control point that historically has shown very little recession. While the historical average rate of recession for that particular control point may be low, the eroding conditions on either side would make the area of the control point increasingly vulnerable to more significant recession in the future. Increased annual rates of recession could be expected at that location in the future. The longer the duration the control points are monitored, the more accurate the calculated recession rate averages will be.

# Diagram of Bluff Terms