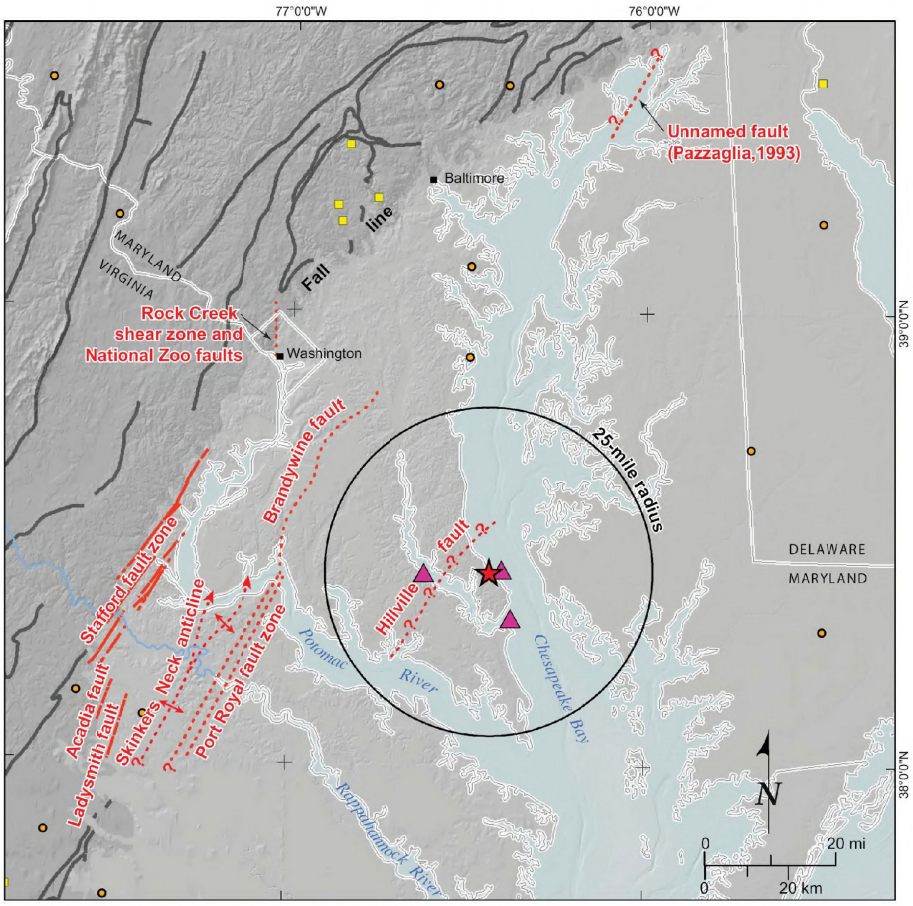
Figure 2.5-25—{Map of Tertiary Tectonic Features}



Explanation

CCNPP site

McCartan et al. (1995) features

Tertiary fault; dashed where uncertain; dotted where buried

Pre-Tertiary fault (Hibbard et al., 2006)

Anticline

Physiographic Provinces

Coastal Plain

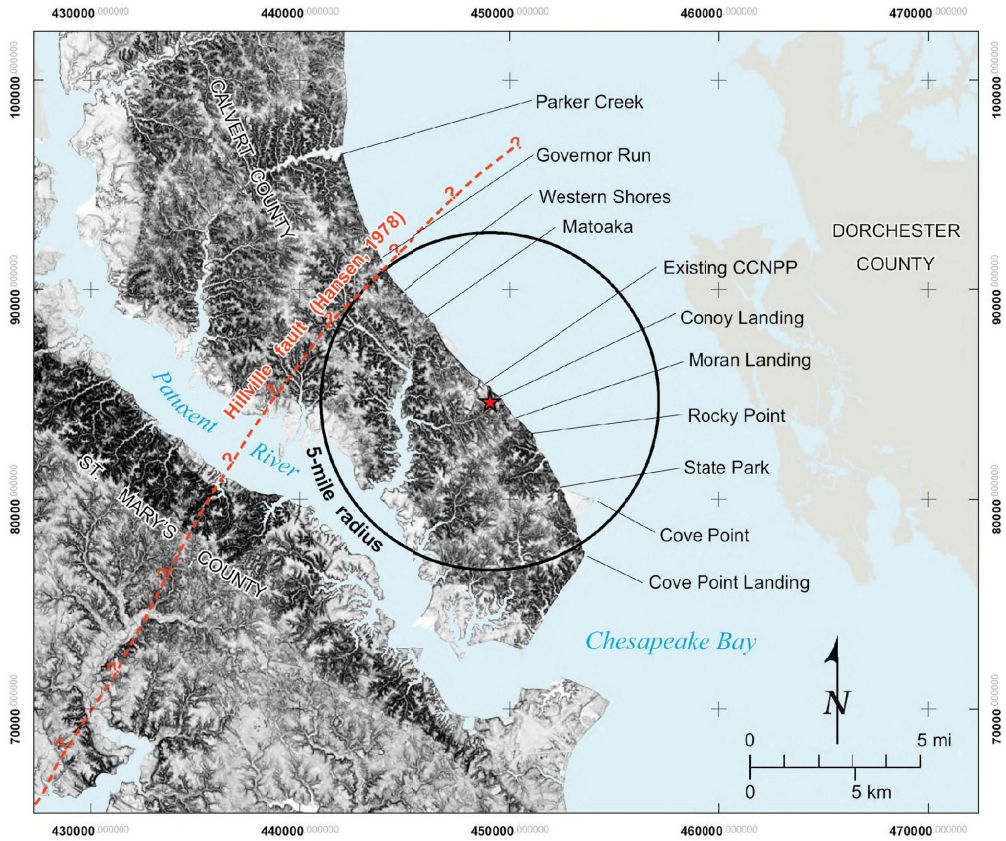
Piedmont

Earthquake Epicenters (by magnitude, Emb)

EPRI catalog (1627-1984)	*Eastern U.S. Seismicity (1985-2006)*
3.00 - 3.99	3.00 - 3.99
4.00 - 4.99	4.00 - 4.99
5.00 - 5.99	5.00 - 5.21
6.00 - 6.99	
7.00 - 7.40	

Note: Emb is an equivalent body wave magnitude explained in Section 2.5.2.1.

Figure 2.5-26—{LiDAR Data for Calvert and St. Mary's Counties}



Maryland State plane projection, NAD 83

Explanation

CCNPP Unit 3

Tertiary fault buried

LiDAR slope map

Degrees slope

High : 83.5

Low : 0.0

Note: LiDAR data for Calvert and St. Mary's County has an ~2-meter resolution. Text leadlines refer to reference locations from Kidwell (1997).

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Figure 2.5-27—{Site Vicinity Geologic Map 25-Mile (40-Km) Radius}

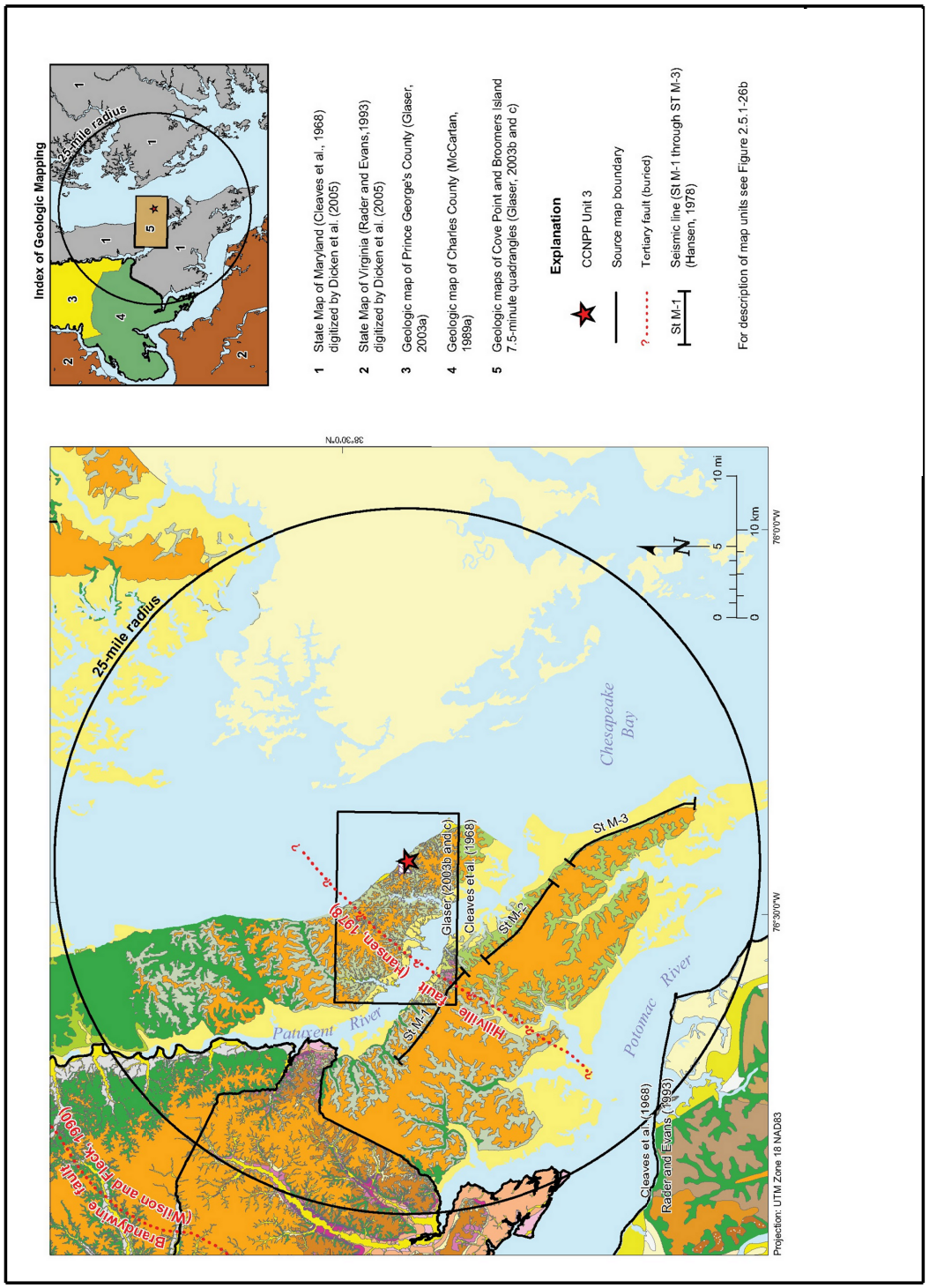

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Figure 2.5-28—{Site Vicinity Geologic Map 25-Mile (40-Km) Radius Unit Descriptions}

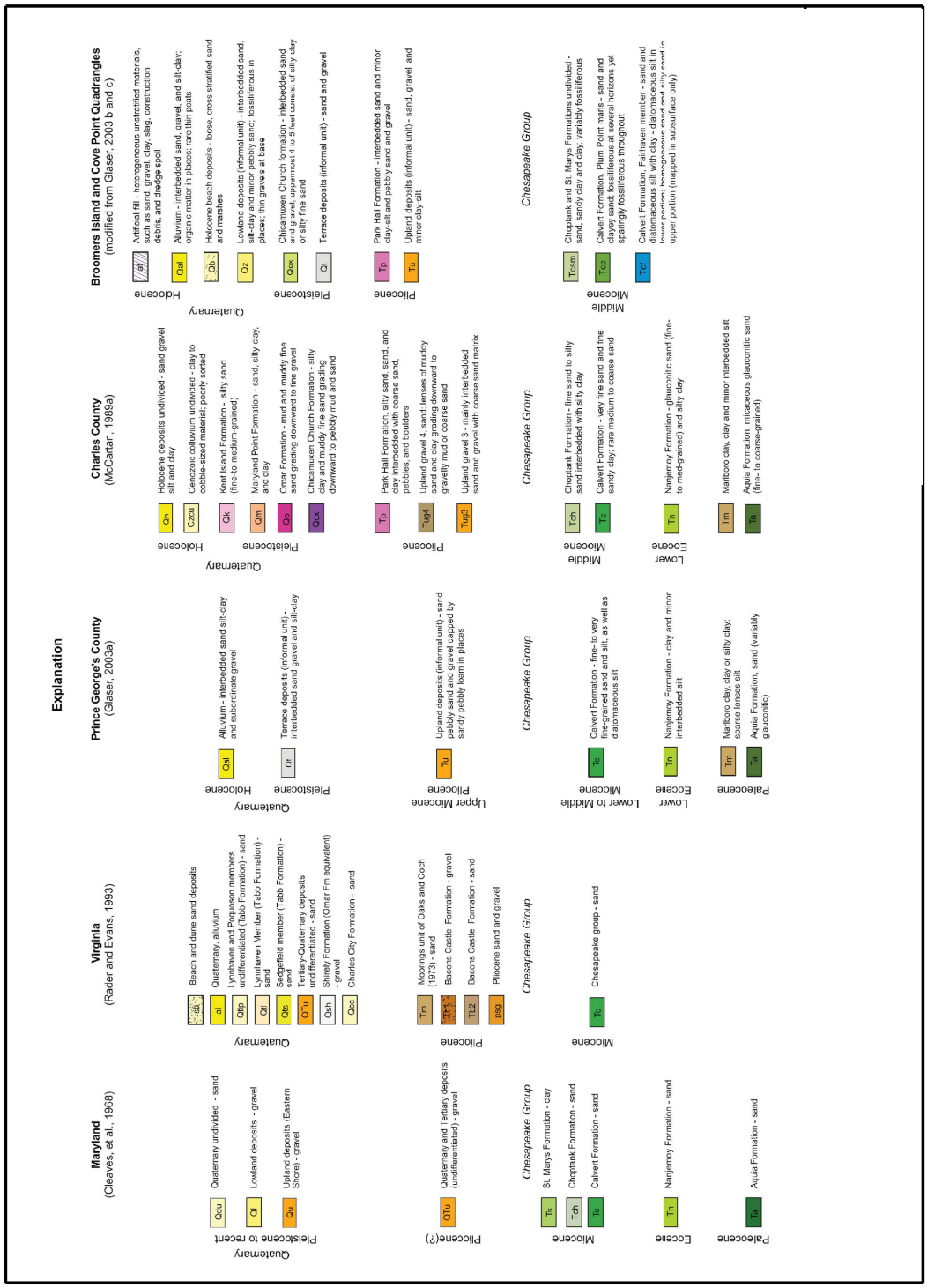

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Figure 2.5-29—{Map of Seismic Lines (A) and Channels (B)}

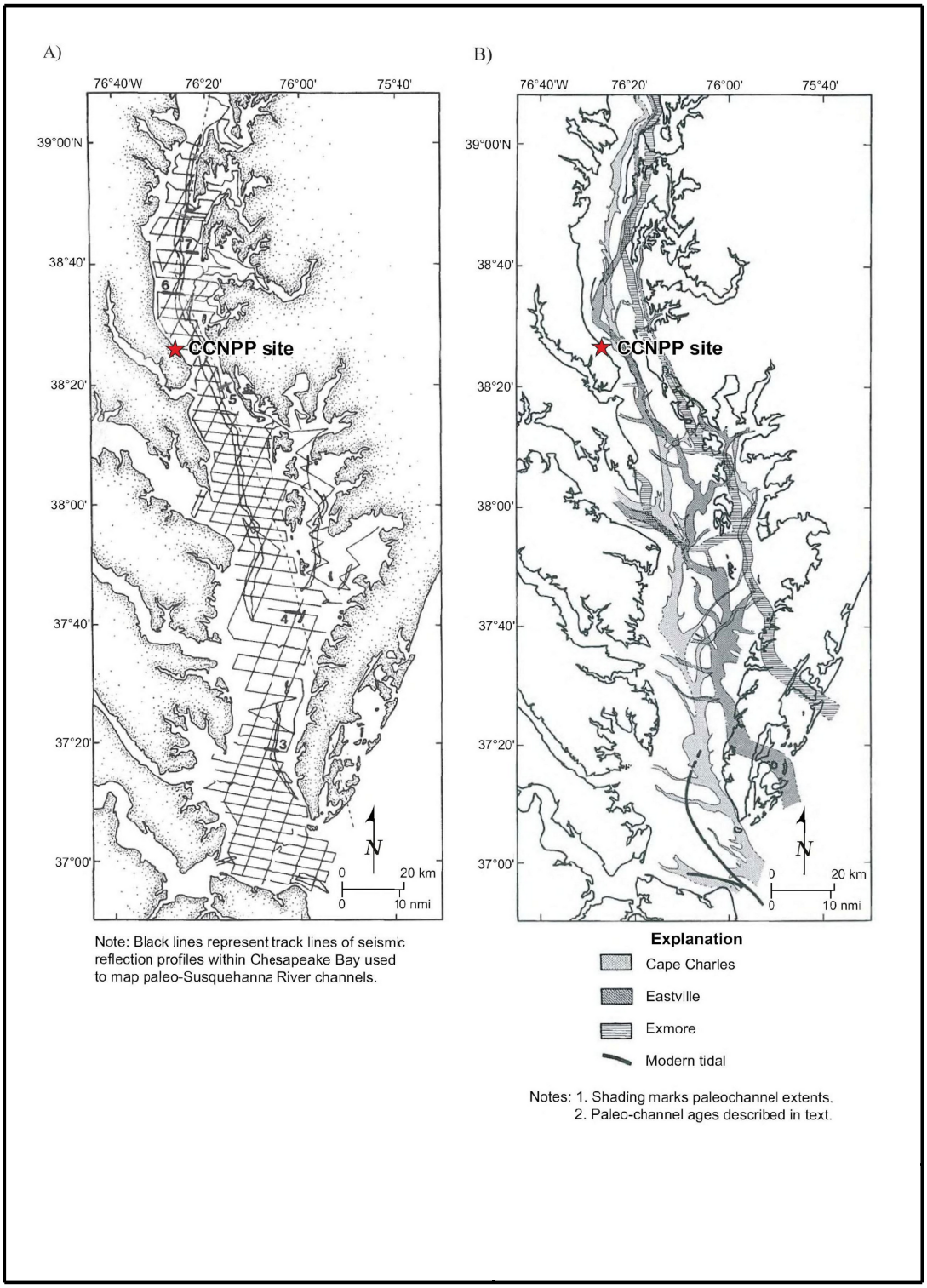

Figure 2.5-30—{Location Map (A) and Cross Section (B) of Calvert Cliffs, Maryland}

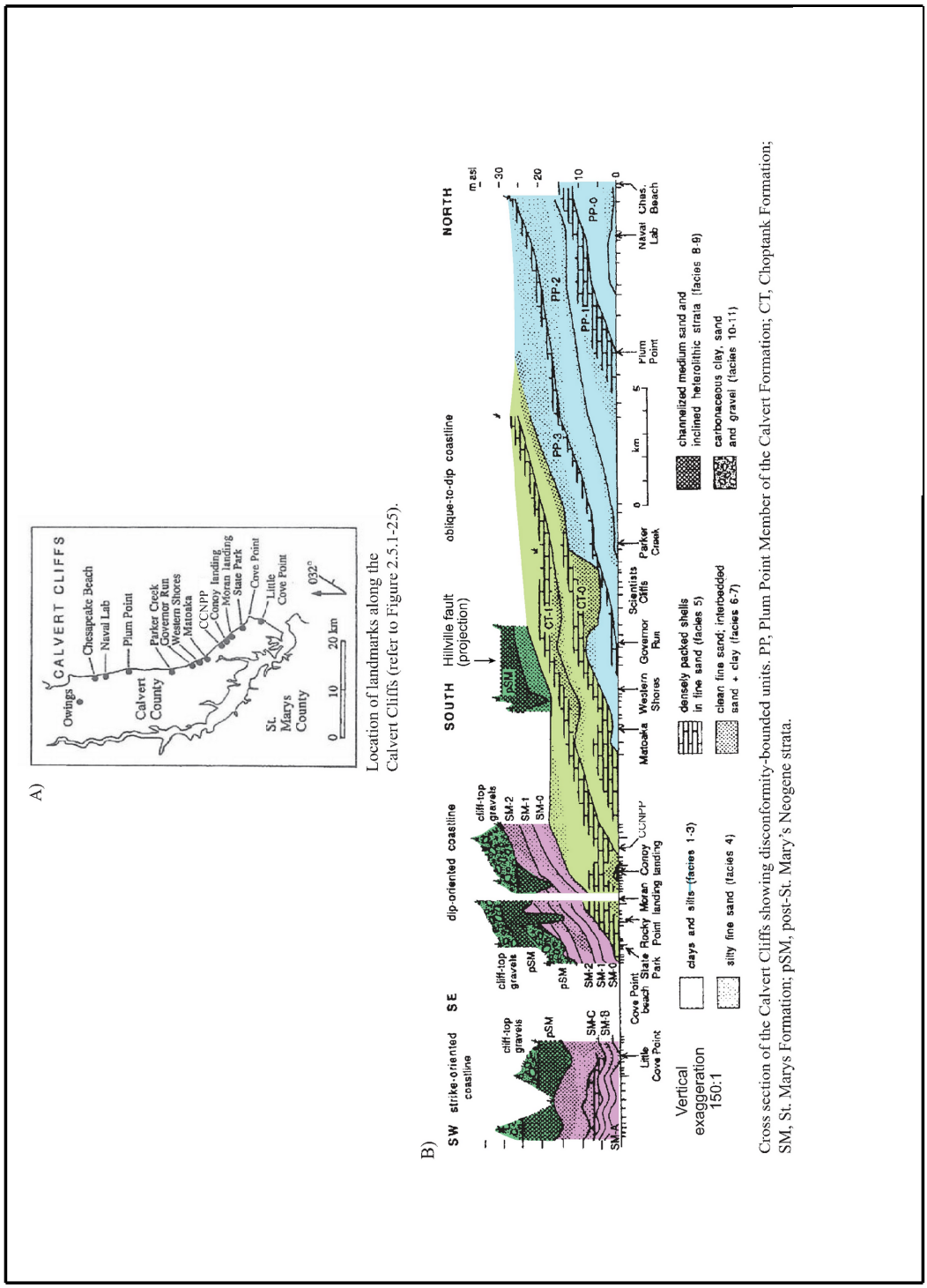

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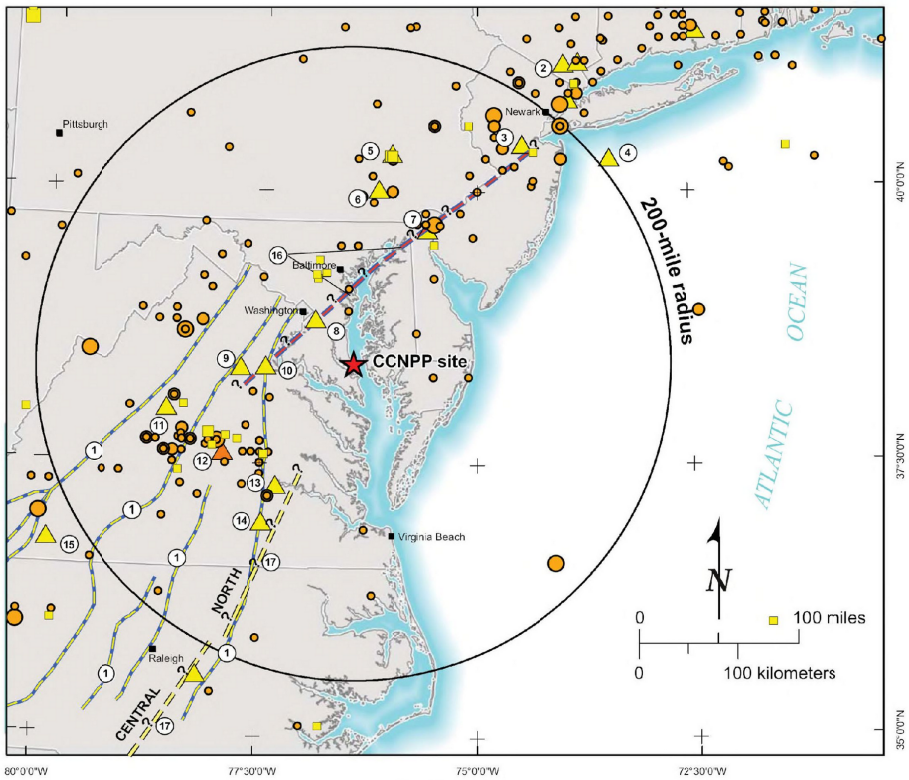
Figure 2.5-31—{Potential Quaternary Features in the Site Region}



Explanation

Features* compiled from Crone and Wheeler (2000) and Wheeler (2005)

Class

- A
- C
- C East coast fault system (Marple and Talwani, 2000)
- C Weems fall lines (1998) (Marple, 2004)
- C Stafford fault system (Marple, 2004)

Earthquake Epicenters (by magnitude, Emb)

EPRI Catalog (1627 - 1984)	*Eastern U.S. Seismicity (1985 - 2006)*
3.00 - 3.99	3.00 - 3.99
4.00 - 4.99	4.00 - 4.99
5.00 - 5.99	5.00 - 5.21
6.00 - 6.99	
7.00 - 7.49	

*Refer to table below for feature names

1. Fall lines (Weems, 1988)
2. Ramapo fault system
3. Kingston fault
4. New York Bight fault (offshore)
5. Cacoosing Valley earthquake
6. Lancaster seismic zone
7. New Castle County faults
8. Upper Marlboro faults
9. Everona fault-Mountain Run fault zone
10. Stafford fault (Mixon et al., 2000)
11. Lebanon Church fault
12. Central Virginia seismic zone
13. Hopewell fault
14. Old Hickory faults
15. Stanleytown-Villa Heights faults
16. Stafford fault system of Marple (2004)
17. East Coast fault system (Marple and Talwani, 2007)

Note: Emb is an equivalent body wave magnitude explained in Section 2.5.2.1.

Figure 2.5-32—{Site Area Geologic Map 5-Mile (8-Km) Radius}

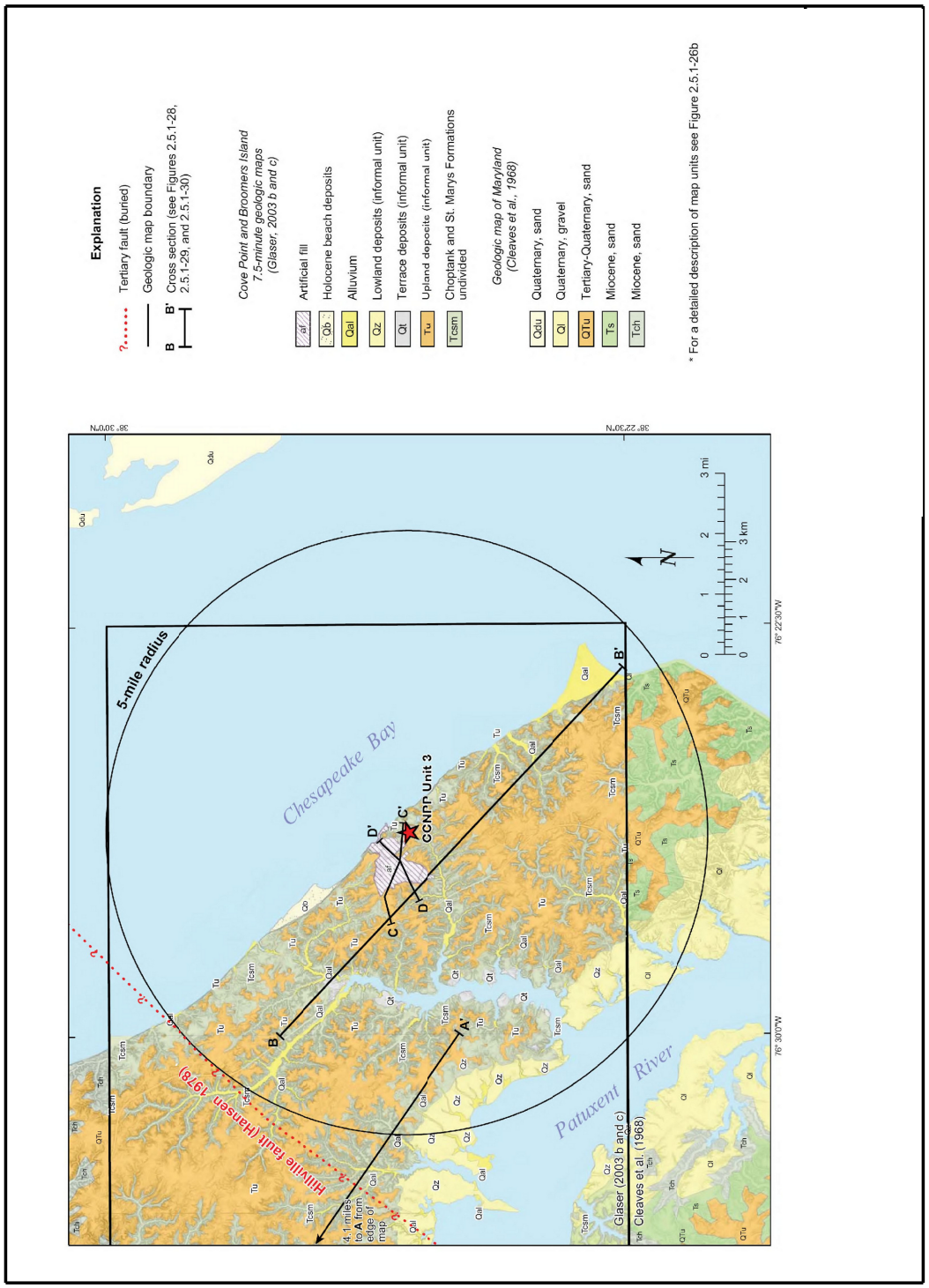


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Figure 2.5-33—{Site Area Geologic Cross Sections A-A′ and B-B′ 5-Mile (8-Km) Radius}

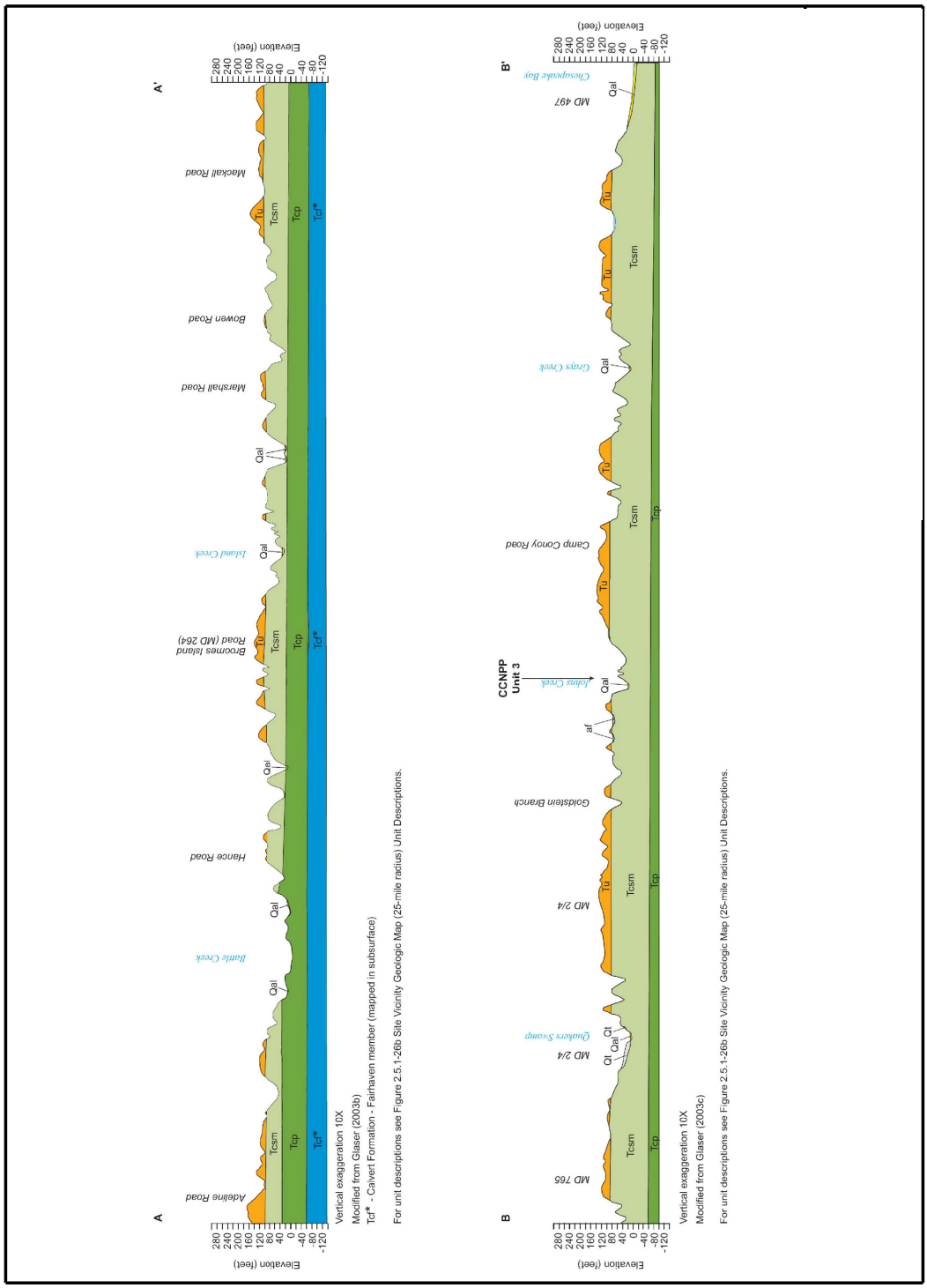

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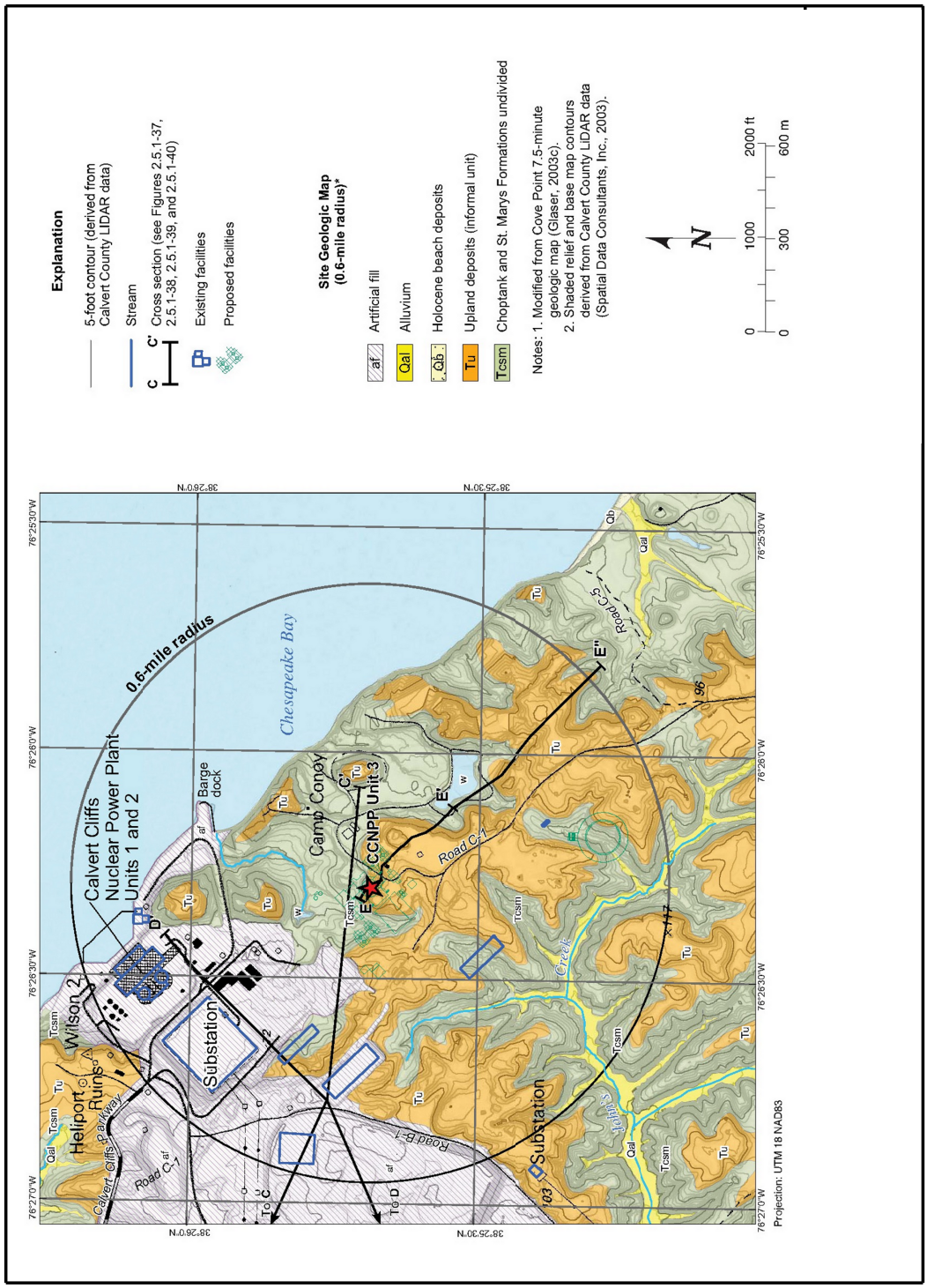
Figure 2.5-34—{Site Geologic Map 0.6-mi (1-km) Radius}



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