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Figure C-4. Comparison of predicted and observed tidal elevation at station BRD3 (RM 1.1) for 15-day period: January 24 through February 7, 2004.



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## Figure C-7. River flow and tidal conditions during 15-day low-flow period: August 26 through September 9, 1996.

Upstream boundary daily-average river flow from USGS gauge station on the Green River near Auburn, WA (12113000). Downstream boundary 15-minute stage height based on periodic forcing constituent coefficients.



Figure C-8a. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8b. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8c. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8d. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8e. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8f. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8g. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8h. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8i. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-8j. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996.



Figure C-9a. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9b. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9c. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9d. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9e. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9f. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9g. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9h. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9i. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-9j. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996.



Figure C-10a. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10b. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10c. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10d. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10e. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10f. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10g. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10h. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-10i. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.


Figure C-10j. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996.



Figure C-11a. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11b. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11c. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11d. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11e. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11f. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11g. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11h. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11i. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



Figure C-11j. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996.



## Figure C-12. River flow and tidal conditions during 15-day moderate-flow period: October 25 through November 8, 1996.

Upstream boundary daily-average river flow from USGS gauge station on the Green River near Auburn, WA (12113000). Downstream boundary 15-minute stage height based on periodic forcing constituent coefficients.



Figure C-13a. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13b. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13c. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13d. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13e. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13f. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13g. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13h. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13i. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-13j. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996.



Figure C-14a. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14b. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14c. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14d. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14e. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14f. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14g. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14h. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14i. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-14j. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996.



Figure C-15a. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15b. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15c. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15d. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.


Figure C-15e. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15f. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15g. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15h. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15i. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.



Figure C-15j. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996.





Figure C-17. River flow and tidal conditions during 15-day high-flow period: January 24 through February 7, 2004.



Figure C-18a. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18b. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18c. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18d. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18e. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18f. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18g. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18h. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18i. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-18j. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004.



Figure C-19a. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19b. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19c. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19d. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19e. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19f. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19g. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19h. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19i. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-19j. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on February 4, 2004.



Figure C-20a. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20b. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20c. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20d. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20e. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20f. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20g. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20h. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.


Figure C-20i. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-20j. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21a. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21b. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21c. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21d. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21e. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21f. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21g. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21h. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21i. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-21j. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22a. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22b. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22c. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22d. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22e. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22f. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22g. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22h. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22i. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-22j. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23a. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23b. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23c. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23d. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23e. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23f. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23g. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23h. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23i. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-23j. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 24-hr period on January 30, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24a. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24b. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24c. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.






Figure C-24e. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24f. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24g. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24h. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24i. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-24j. Comparison of predicted and observed current velocity at BRD3 station (RM 1.1) during 23-hr period on Febuary 4, 2004: sensitivity to effective bed roughness. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

















Data
Model (z0 = 2 mm)
Model (z0 = 20 mm)
Model (z0 = 0.2 mm)





















Data
Model (z0 = 2 mm)
Model (z0 = 20 mm)
Model (z0 = 0.2 mm)















Figure C-25j. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-26a. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.





Figure C-26b. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-26c. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-26d. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-26e. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



## Figure C-26f. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



## STATION: Duwamish Yacht Club DAY (1996) = 241.059

Figure C-26g. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.





Figure C-26h. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-26i. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-26j. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to effective bed roughness.



Figure C-27a. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to effective bed roughness.





Figure C-27b. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to effective bed roughness.











Figure C-27d. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to effective bed roughness.





Figure C-27e. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to effective bed roughness.















Figure C-27h. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to effective bed roughness.
















### STATION: Duwamish Yacht Club DAY (1996) = 298.955



### STATION: Duwamish Yacht Club DAY (1996) = 299.028



### STATION: Duwamish Yacht Club DAY (1996) = 299.049

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## Figure C-28d. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

Data
Model (z0 = 2 mm)
Model (z0 = 20 mm)
Model (z0 = 0.2 mm)



Figure C-28e. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

![](_page_184_Figure_2.jpeg)

![](_page_185_Figure_0.jpeg)

Figure C-28f. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

![](_page_185_Figure_2.jpeg)

![](_page_186_Figure_0.jpeg)

Figure C-28g. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

![](_page_186_Figure_2.jpeg)

![](_page_187_Figure_0.jpeg)

Figure C-28h. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

![](_page_187_Figure_2.jpeg)

![](_page_188_Figure_0.jpeg)

Figure C-28i. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

![](_page_189_Figure_0.jpeg)

# Figure C-28j. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to effective bed roughness.

![](_page_189_Figure_2.jpeg)

![](_page_190_Figure_0.jpeg)

Figure C-29a. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_191_Figure_0.jpeg)

Figure C-29b. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_192_Figure_0.jpeg)

Figure C-29c. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_193_Figure_0.jpeg)

Figure C-29d. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_194_Figure_0.jpeg)

Figure C-29e. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_195_Figure_0.jpeg)

Figure C-29f. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_196_Figure_0.jpeg)

Figure C-29g. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_197_Figure_0.jpeg)

Figure C-29h. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_198_Figure_0.jpeg)

Figure C-29i. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_199_Figure_0.jpeg)

Figure C-29j. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 10-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_200_Figure_0.jpeg)

Figure C-30a. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_201_Figure_0.jpeg)

![](_page_201_Figure_1.jpeg)

![](_page_202_Figure_0.jpeg)

![](_page_202_Figure_1.jpeg)

![](_page_203_Figure_0.jpeg)

Figure C-30d. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_204_Figure_0.jpeg)

![](_page_204_Figure_1.jpeg)

![](_page_205_Figure_0.jpeg)

![](_page_205_Figure_1.jpeg)

![](_page_206_Figure_0.jpeg)

Figure C-30g. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_207_Figure_0.jpeg)

Figure C-30h. Comparison of predicted and observed current velocity at Boeing station (RM 3.5) during 20-hr period on August 28, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_208_Figure_0.jpeg)

![](_page_208_Figure_1.jpeg)

![](_page_209_Figure_0.jpeg)

![](_page_209_Figure_1.jpeg)

![](_page_210_Figure_0.jpeg)

Figure C-31a. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_211_Figure_0.jpeg)

Figure C-31b. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_212_Figure_0.jpeg)

Figure C-31c. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_213_Figure_0.jpeg)

Figure C-31d. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_214_Figure_0.jpeg)

Figure C-31e. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.

![](_page_215_Figure_0.jpeg)

Figure C-31f. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.


Figure C-31g. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-31h. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-31i. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.



Figure C-31j. Comparison of predicted and observed current velocity at Sea Boil Works station (RM 2.35) during 20-hr period on October 27, 1996: sensitivity to vertical grid resolution. Shaded vertical bars indicate range of critical near-bed velocity for erosion of cohesive sediment.























































Figure C-32j. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 23-hr period on August 28-29, 1996: sensitivity to vertical grid resolution.

















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Figure C-33e. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to vertical grid resolution.





Figure C-33f. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 11-hr period on August 28-29, 1996: sensitivity to vertical grid resolution.



































Figure C-34b. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to vertical grid resolution.





Figure C-34c. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to vertical grid resolution.





Figure C-34d. Comparison of predicted and observed salinity at 16th Avenue Bridge (RM 3.35) during 13-hr period on October 25-26, 1996: sensitivity to vertical grid resolution.









































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## STATION: Duwamish Yacht Club DAY (1996) = 299.049

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## STATION: Duwamish Yacht Club DAY (1996) = 299.080



























## Figure C-35i. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to vertical grid resolution.





## Figure C-35j. Comparison of predicted and observed salinity at Duwamish Yacht Club (RM 4.15) during 8-hr period on October 25-26, 1996: sensitivity to vertical grid resolution.

