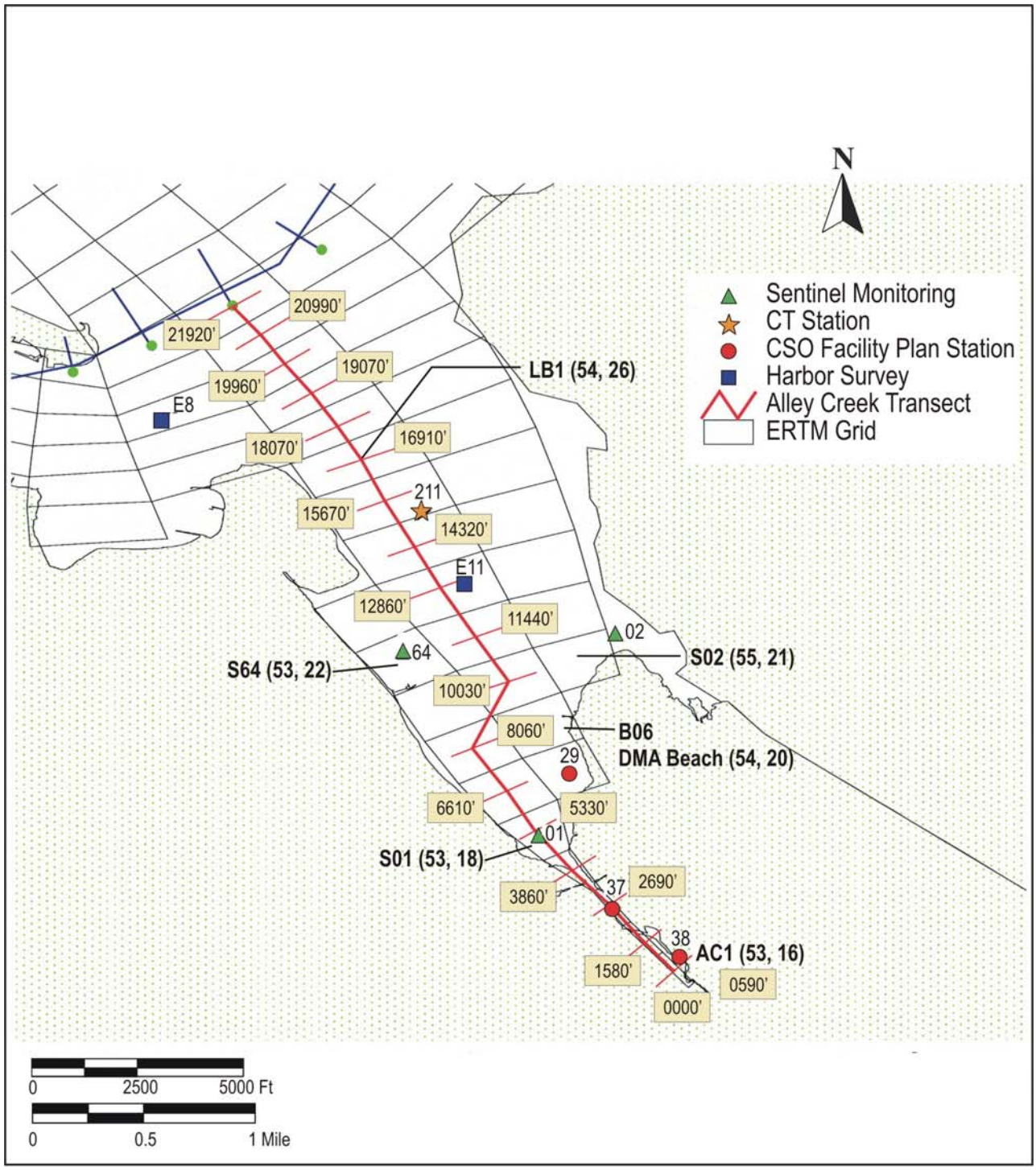
APPENDIX C

FIGURES FOR ALTERNATIVE ANALYSIS



New York City
Department of Environmental Protection

Alley Creek/Little Neck Bay Transect and Selected Locations

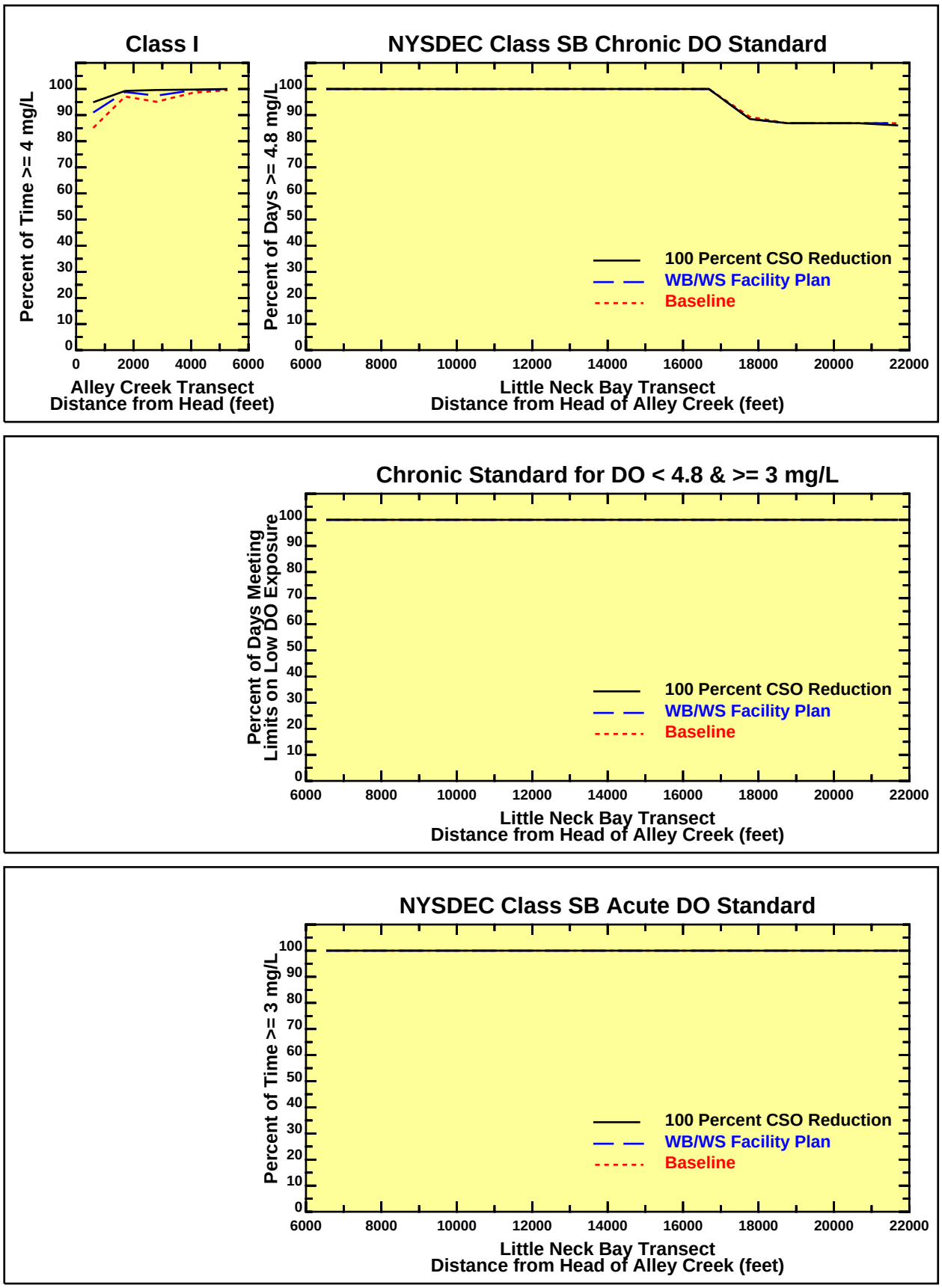
Alley Creek and Little Neck Bay Waterbody/Watershed Facility Plan

FIGURE C-1

DISSOLVED OXYGEN PROJECTIONS

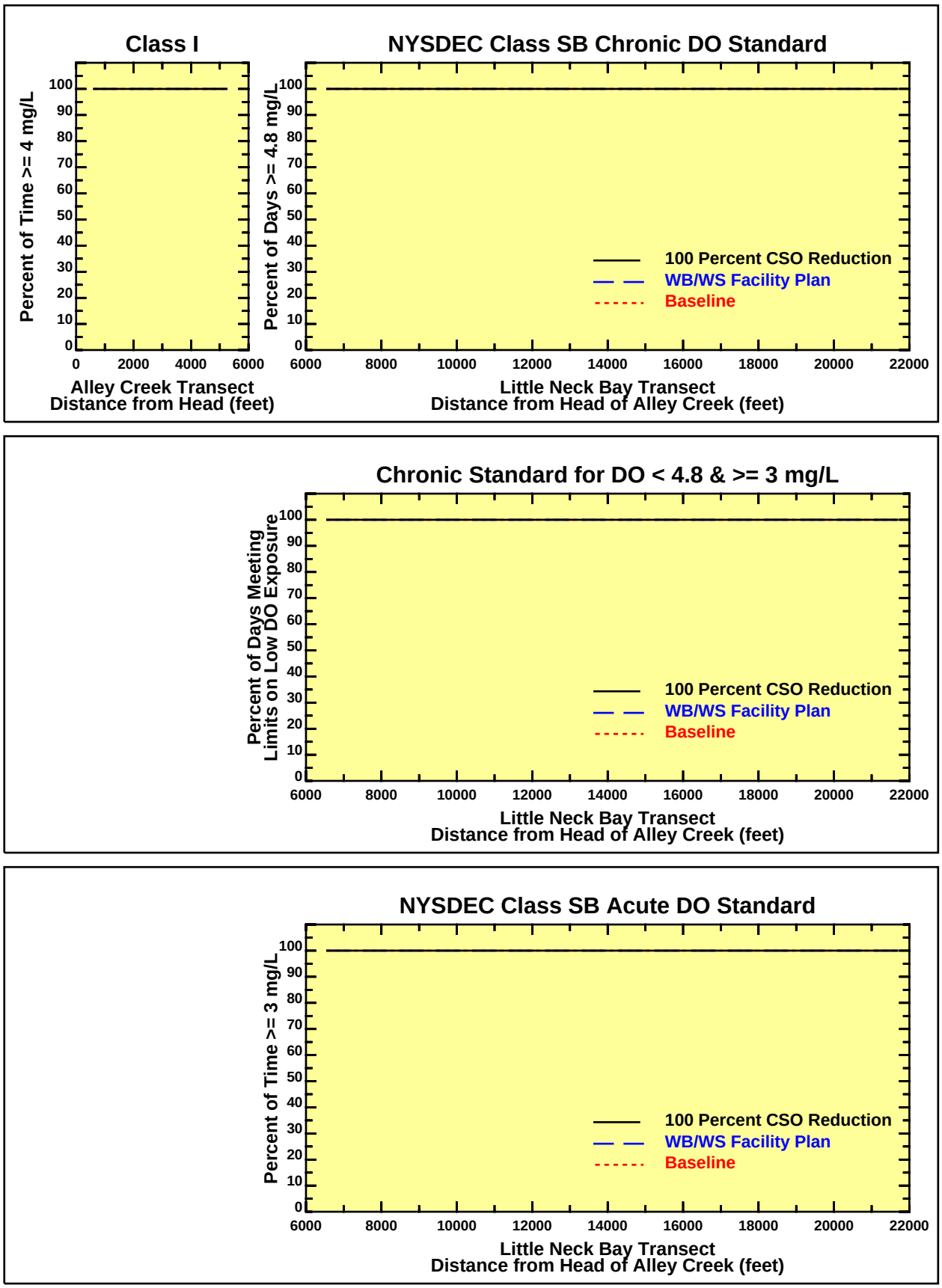
COMPARISON OF
BASELINE, 100 PERCENT CSO REDUCTION
AND WATERBODY/WATERSHED FACILITY PLAN

- **CURRENT NYSDEC STANDARDS, SUMMER AND MONTHLY**
- **COMPARISON IN ALLEY CREEK WITH SB CHRONIC AND ACUTE STANDARD, SUMMER AND MONTHLY**



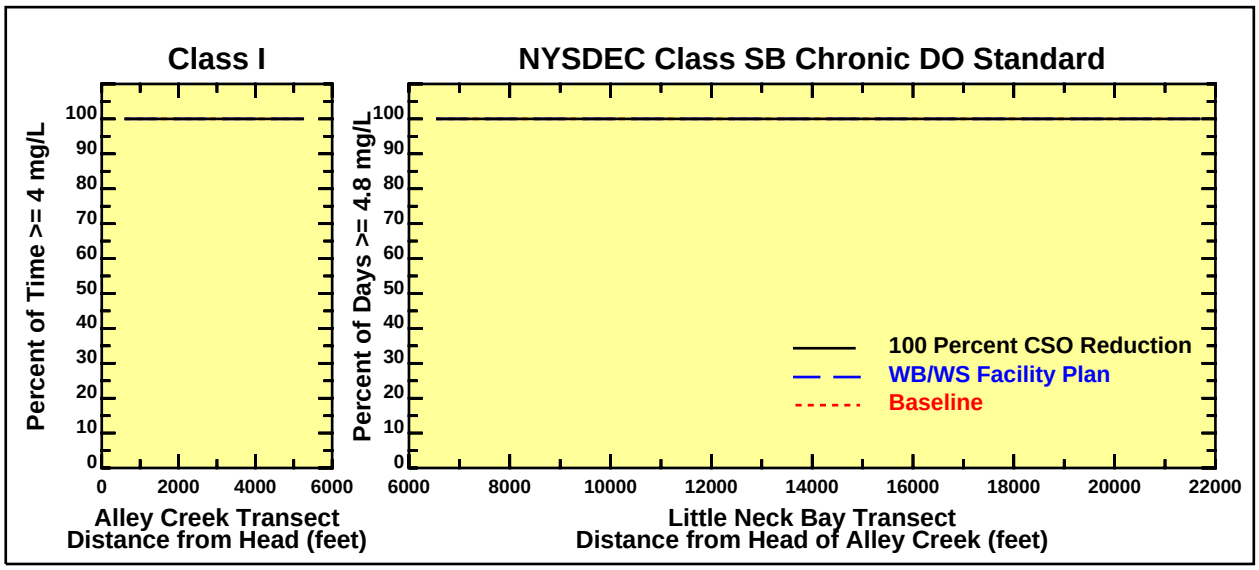
Dissolved Oxygen Alternatives Comparison for Summer
Alley Creek and Little Neck Bay Transect

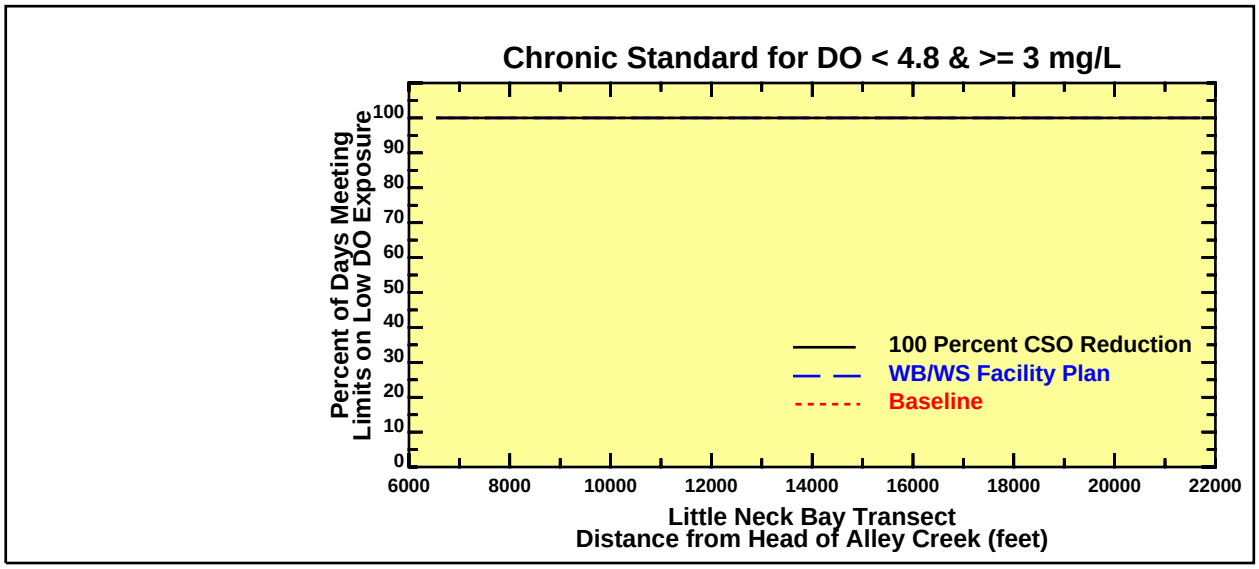
3case_spat01.gdp
GOHJ0010
November 4, 2008

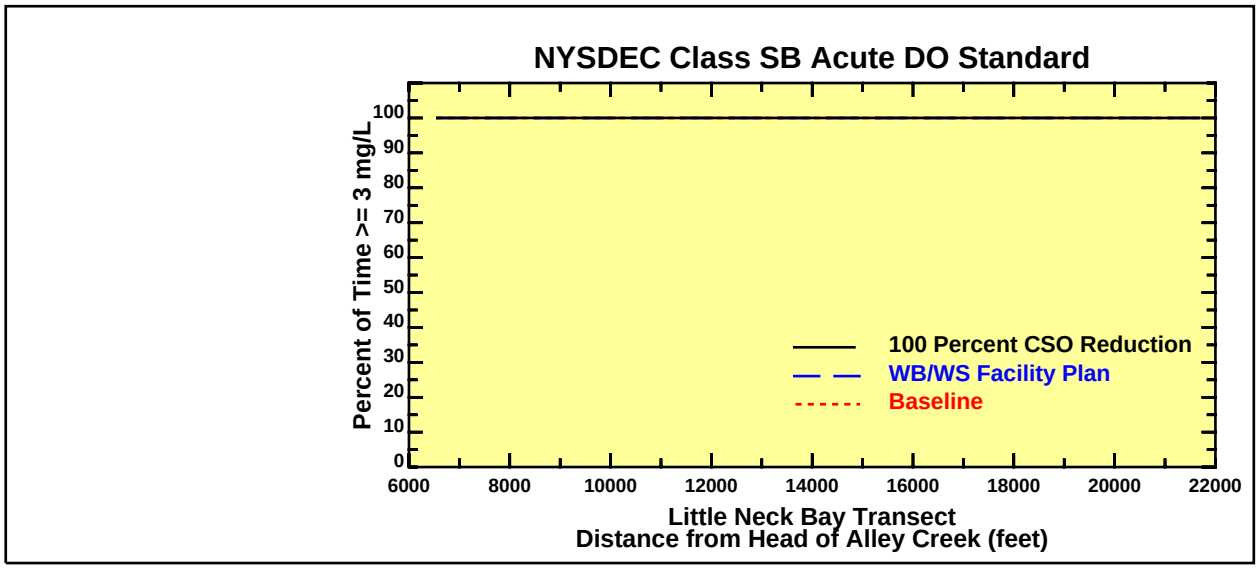


Dissolved Oxygen Alternatives Comparison for January
Alley Creek and Little Neck Bay Transect

3case_spat01.gdp
GOHJ0010
November 4, 2008

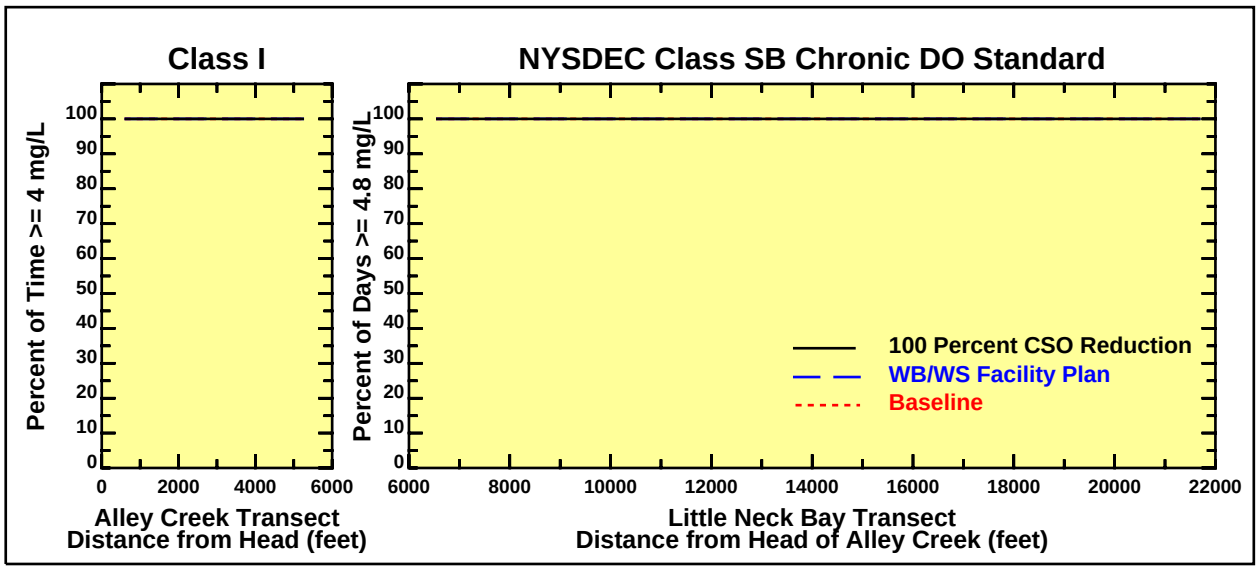


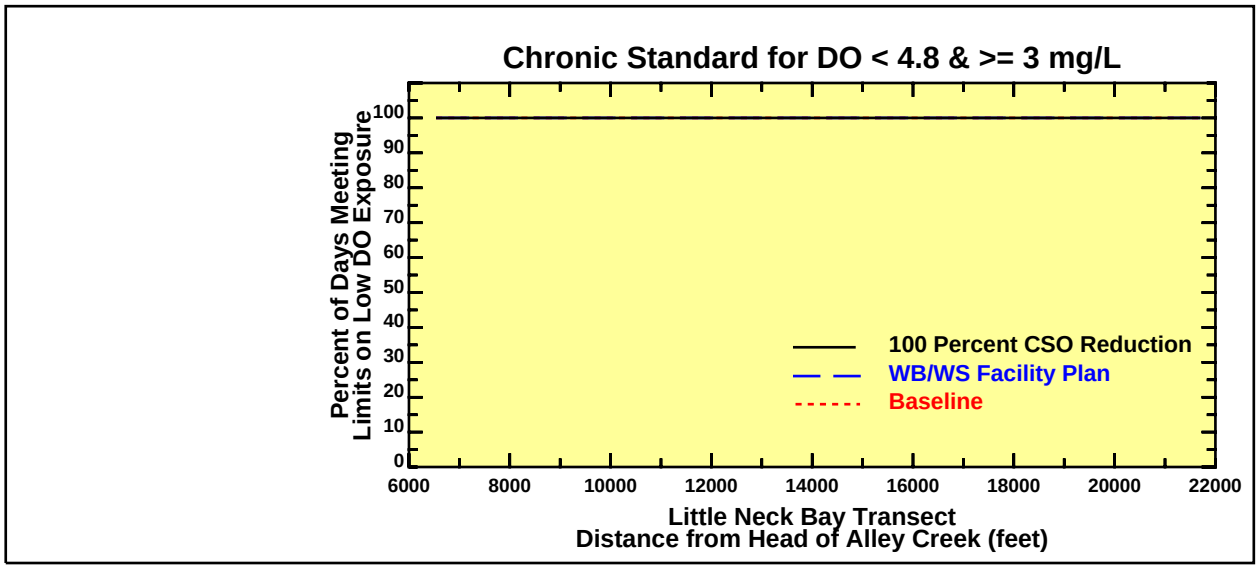


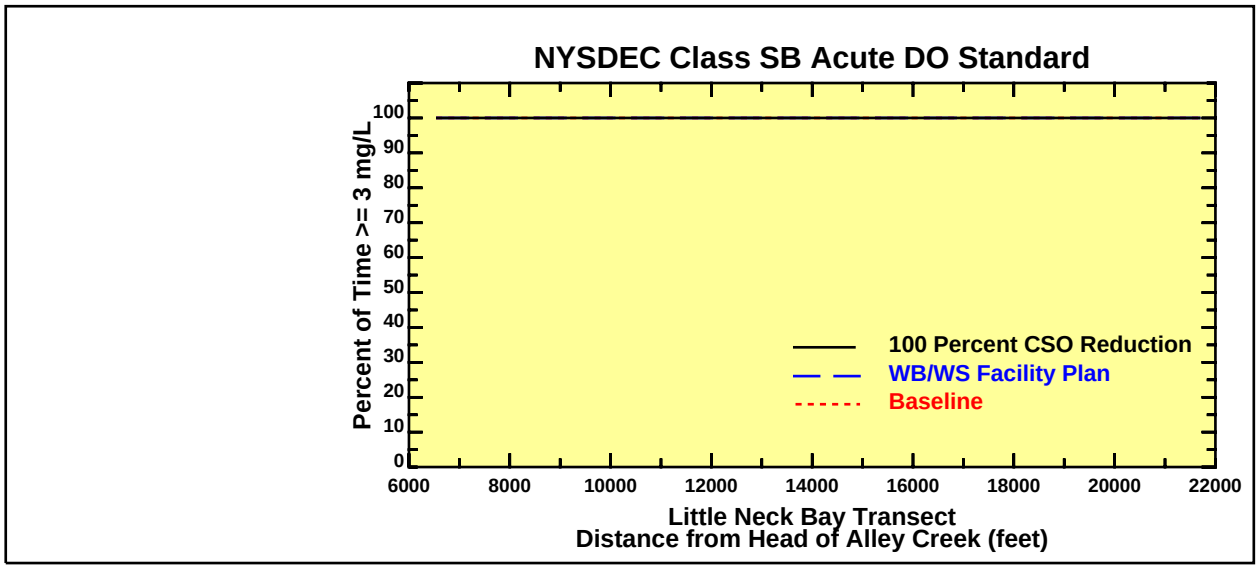


Dissolved Oxygen Alternatives Comparison for Febuary
Alley Creek and Little Neck Bay Transect

3case_spat01.gdp
GOHJ0010
November 4, 2008

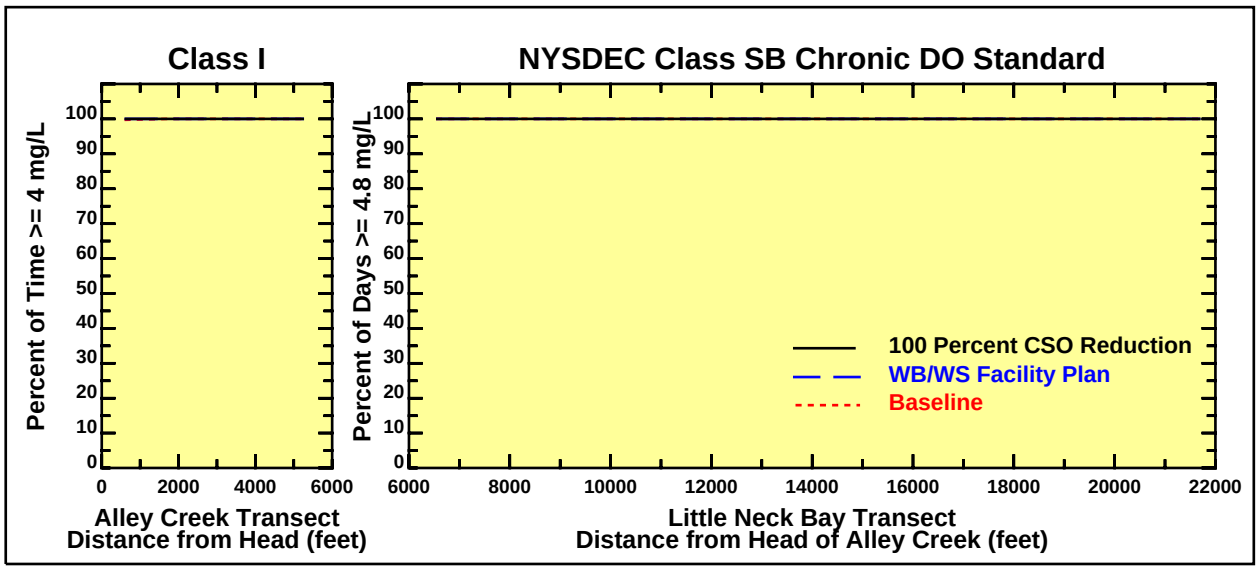


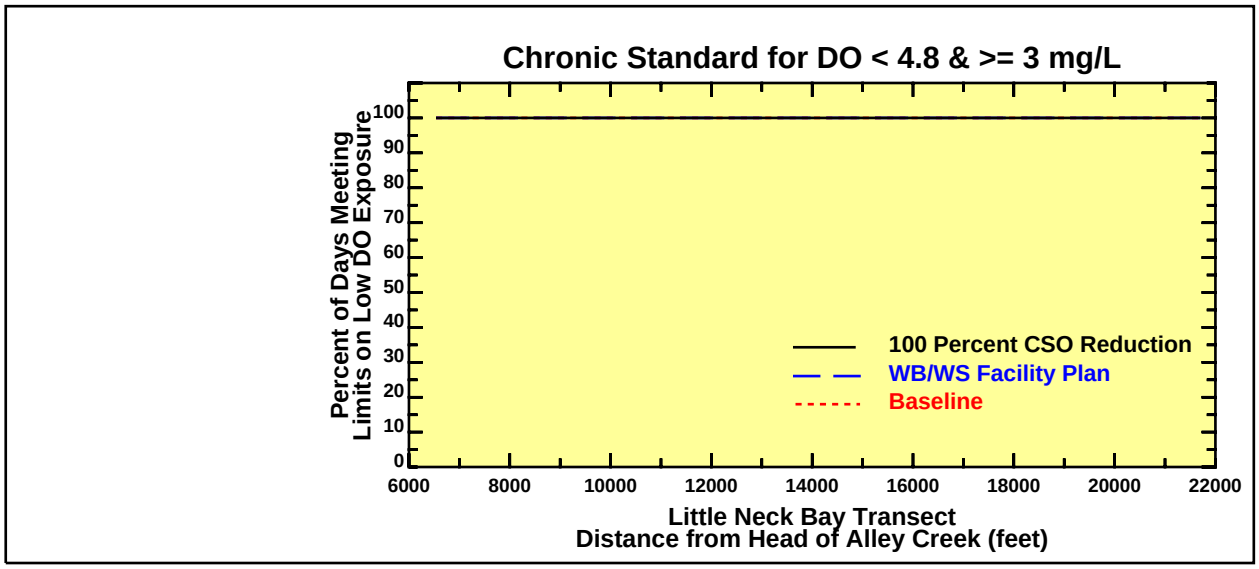


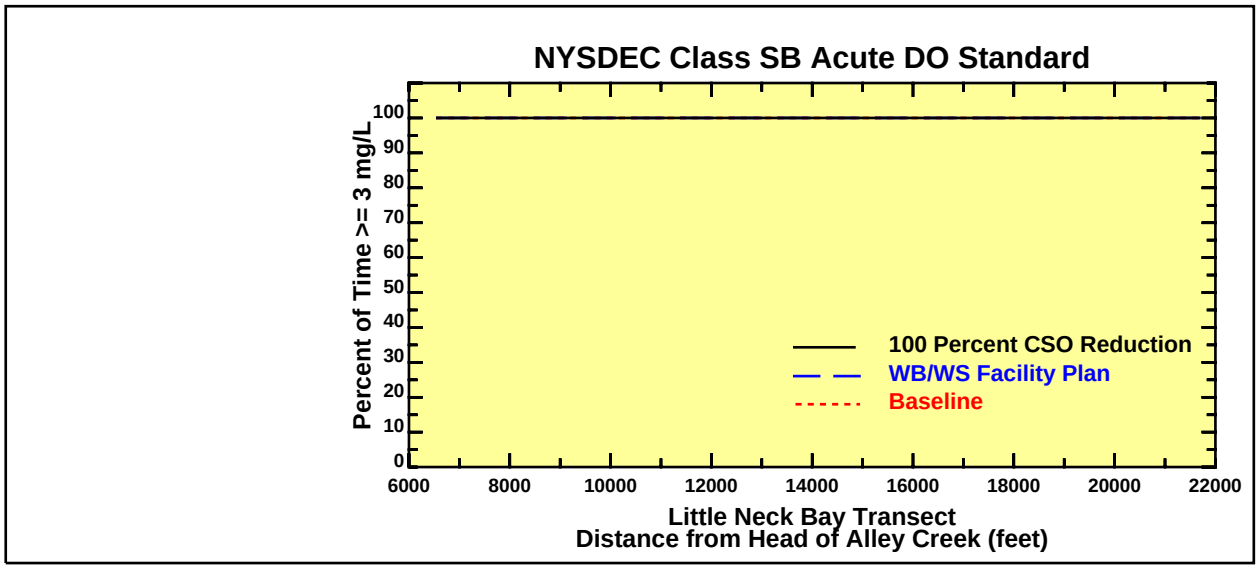


Dissolved Oxygen Alternatives Comparison for March
Alley Creek and Little Neck Bay Transect

3case_spat01.gdp
GOHJ0010
November 4, 2008

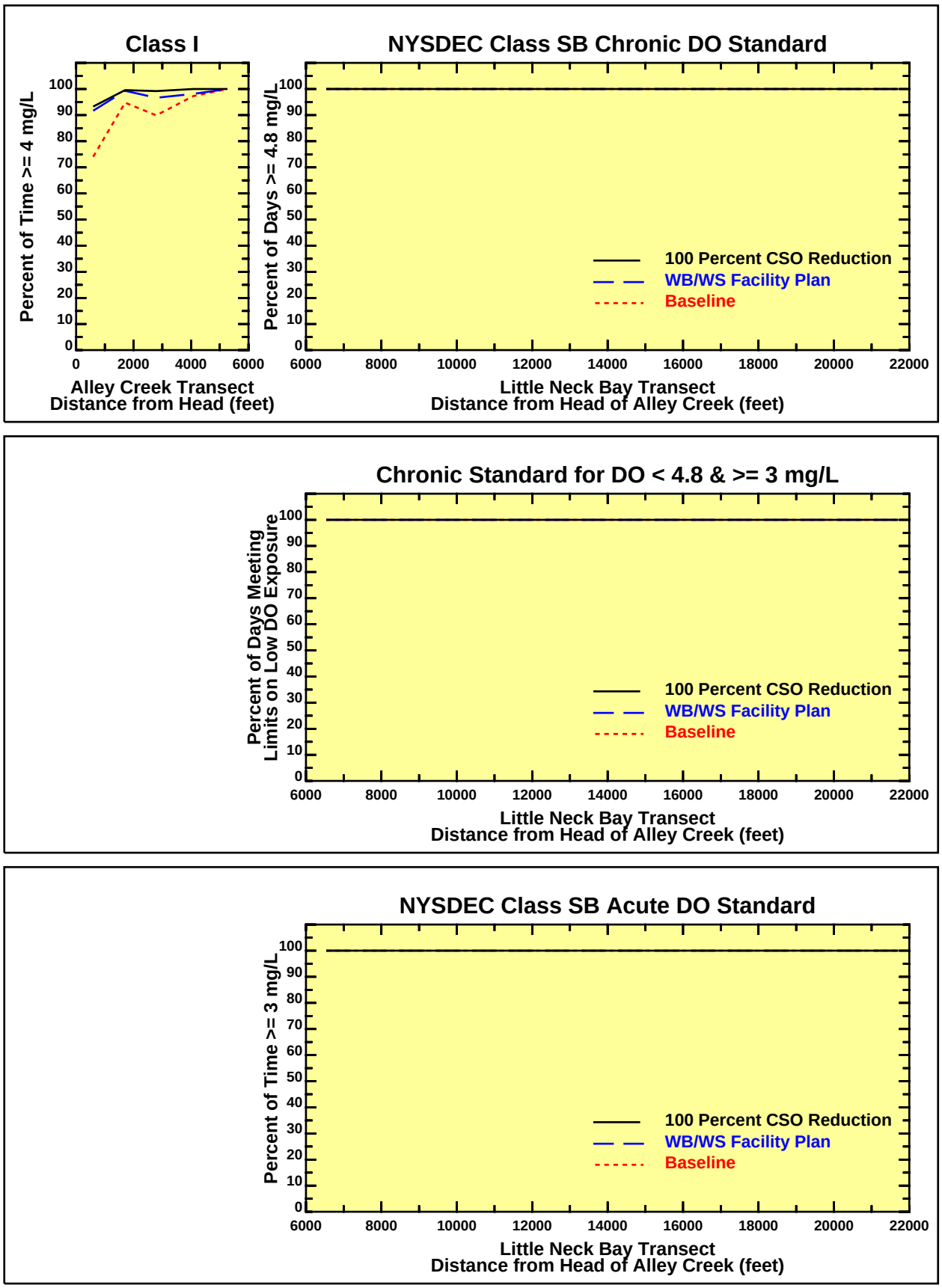






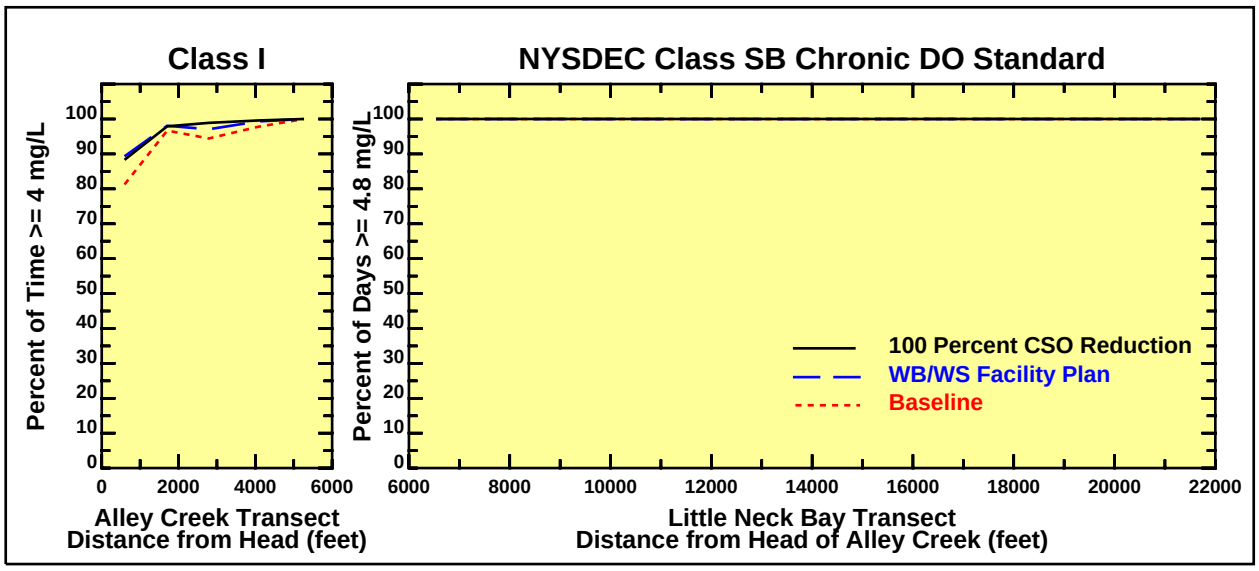
Dissolved Oxygen Alternatives Comparison for April
Alley Creek and Little Neck Bay Transect

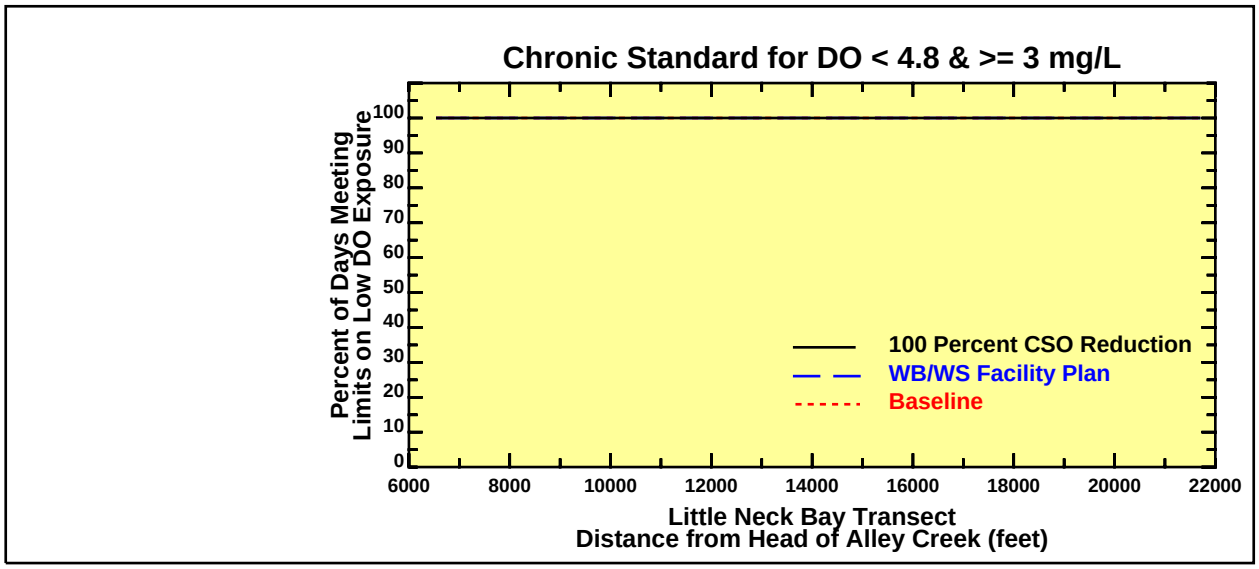
3case_spat01.gdp
GOHJ0010
November 4, 2008

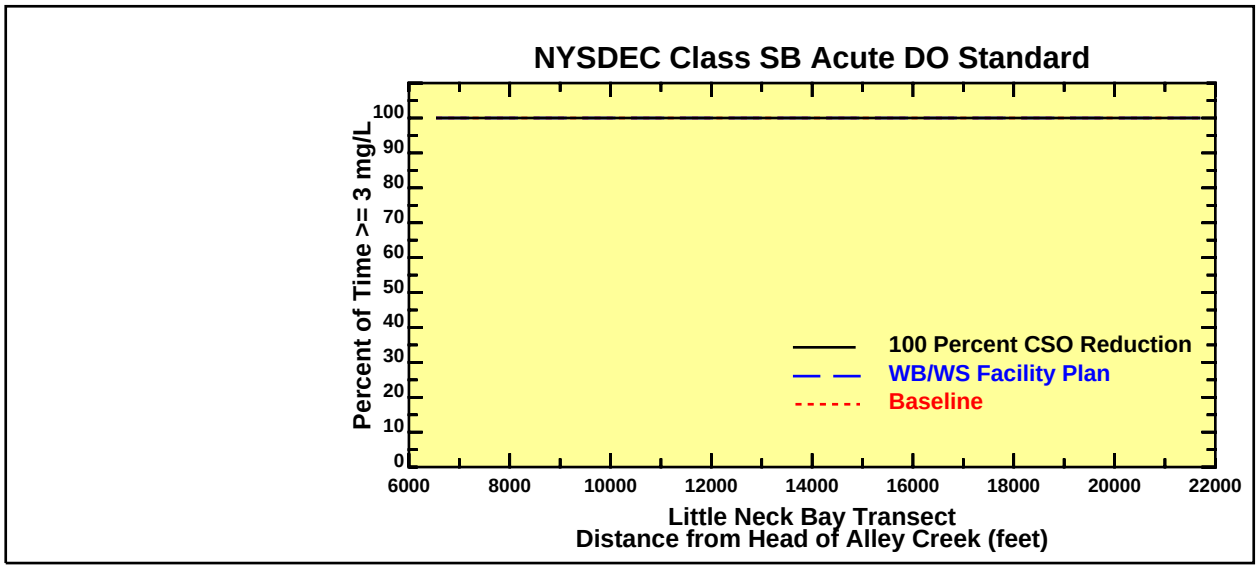


Dissolved Oxygen Alternatives Comparison for May
Alley Creek and Little Neck Bay Transect

3case_spat01.gdp
GOHJ0010
November 4, 2008







Dissolved Oxygen Alternatives Comparison for June
Alley Creek and Little Neck Bay Transect

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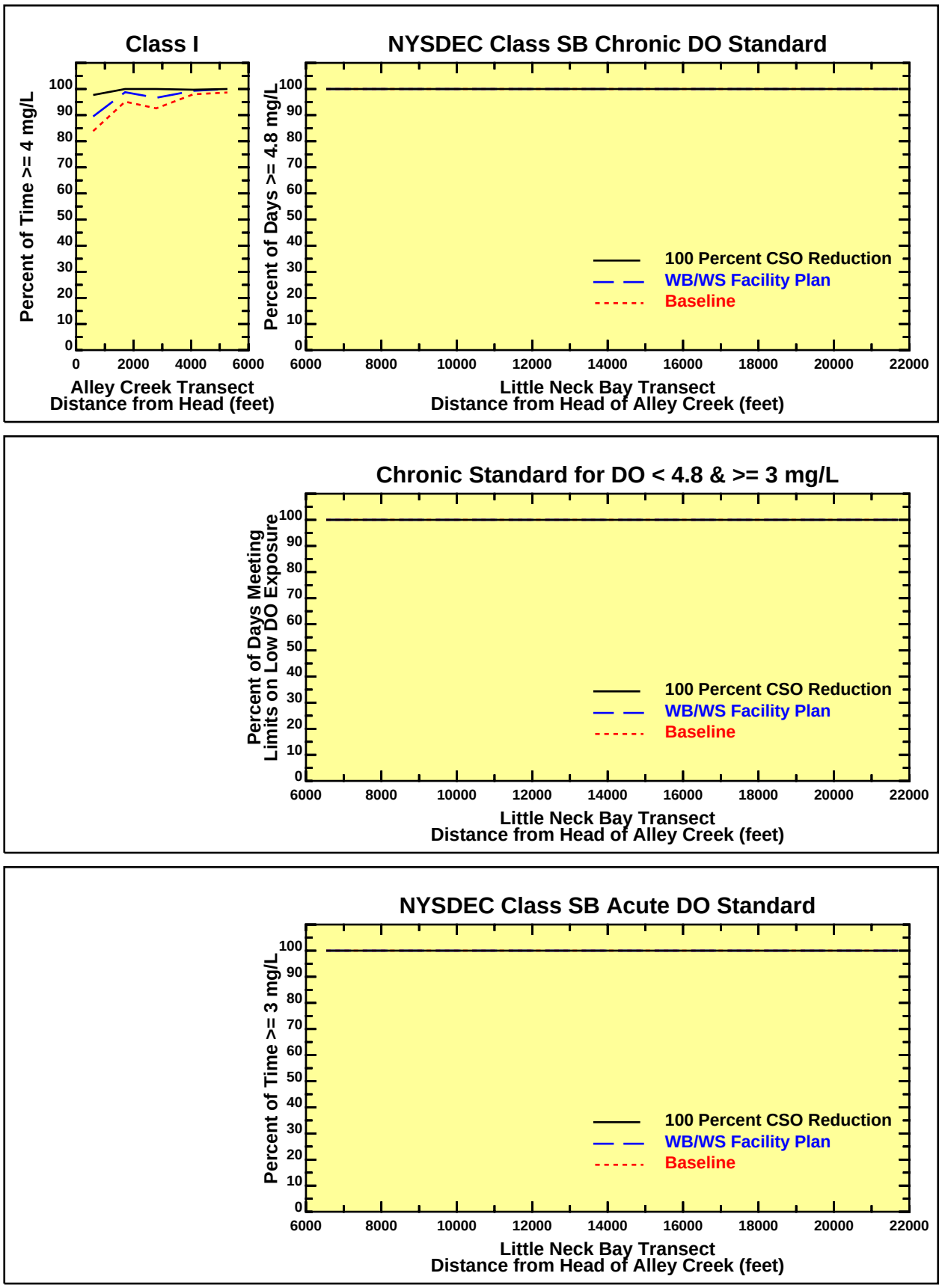
GOHJ0010
November 4, 2008



Dissolved Oxygen Alternatives Comparison for July
Alley Creek and Little Neck Bay Transect

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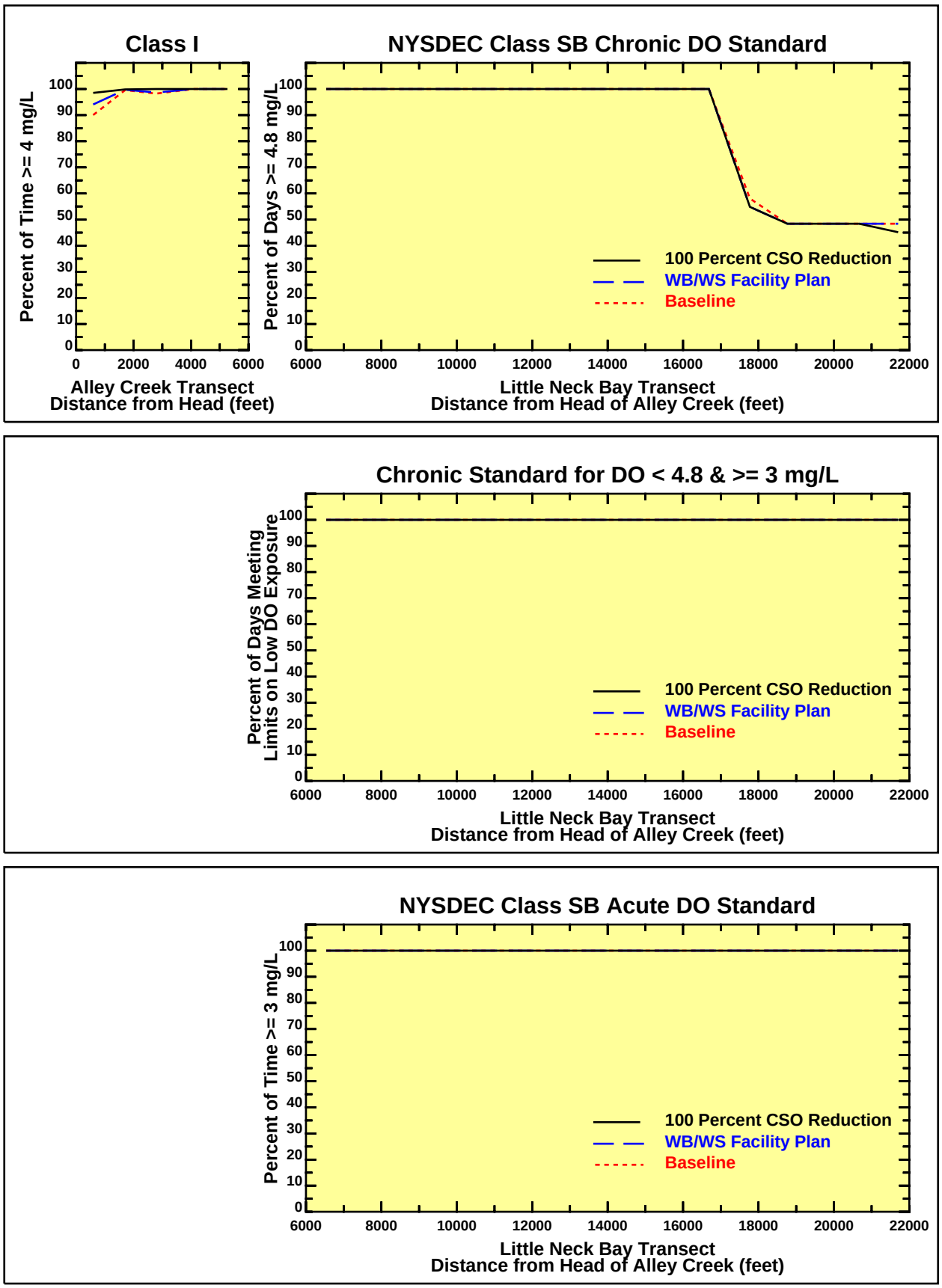
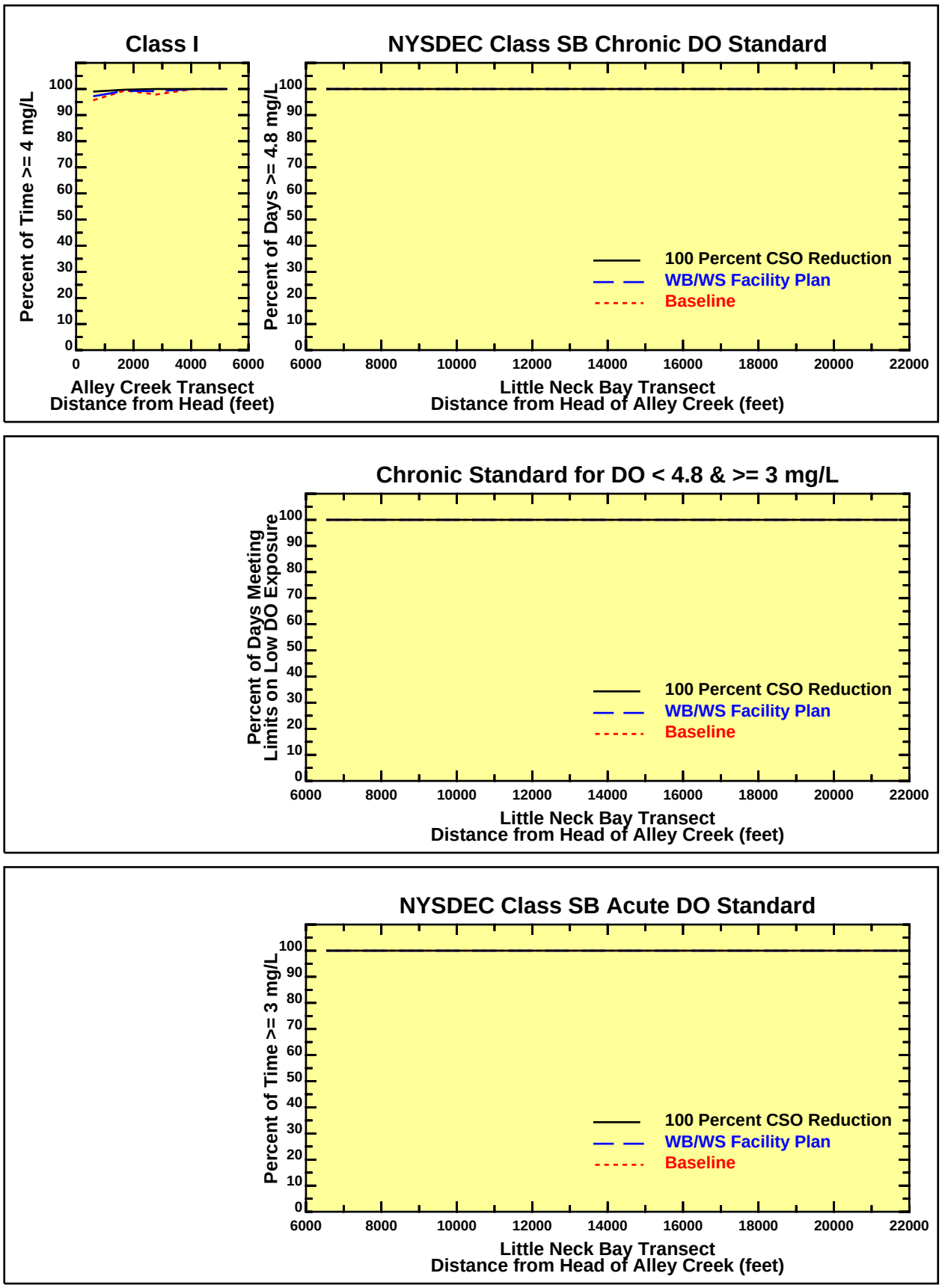
November 4, 2008



Dissolved Oxygen Alternatives Comparison for August
Alley Creek and Little Neck Bay Transect

3case_spat01.gdp
GOHJ0010
November 4, 2008



Dissolved Oxygen Alternatives Comparison for September
Alley Creek and Little Neck Bay Transect

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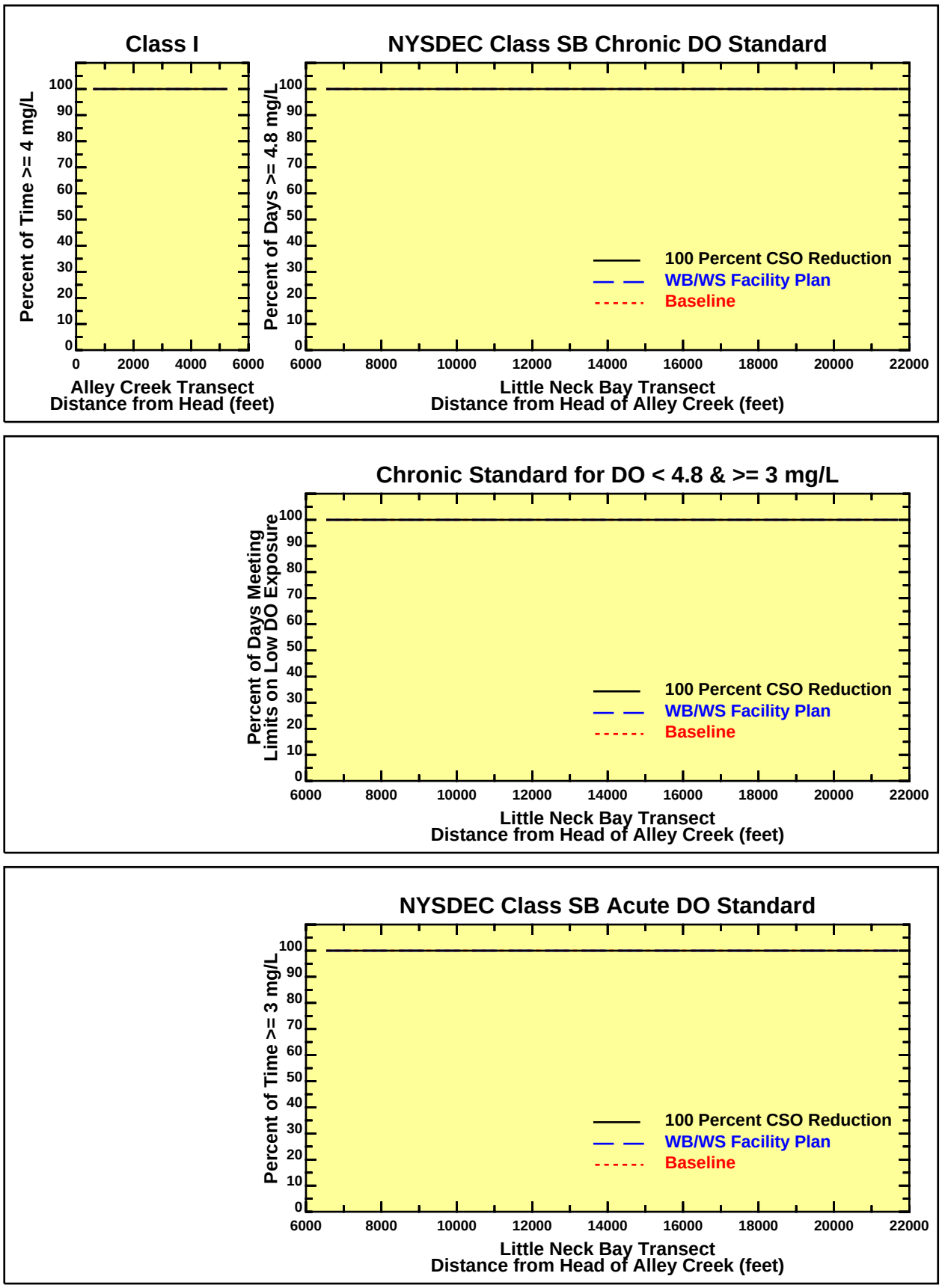

Dissolved Oxygen Alternatives Comparison for October
Alley Creek and Little Neck Bay Transect

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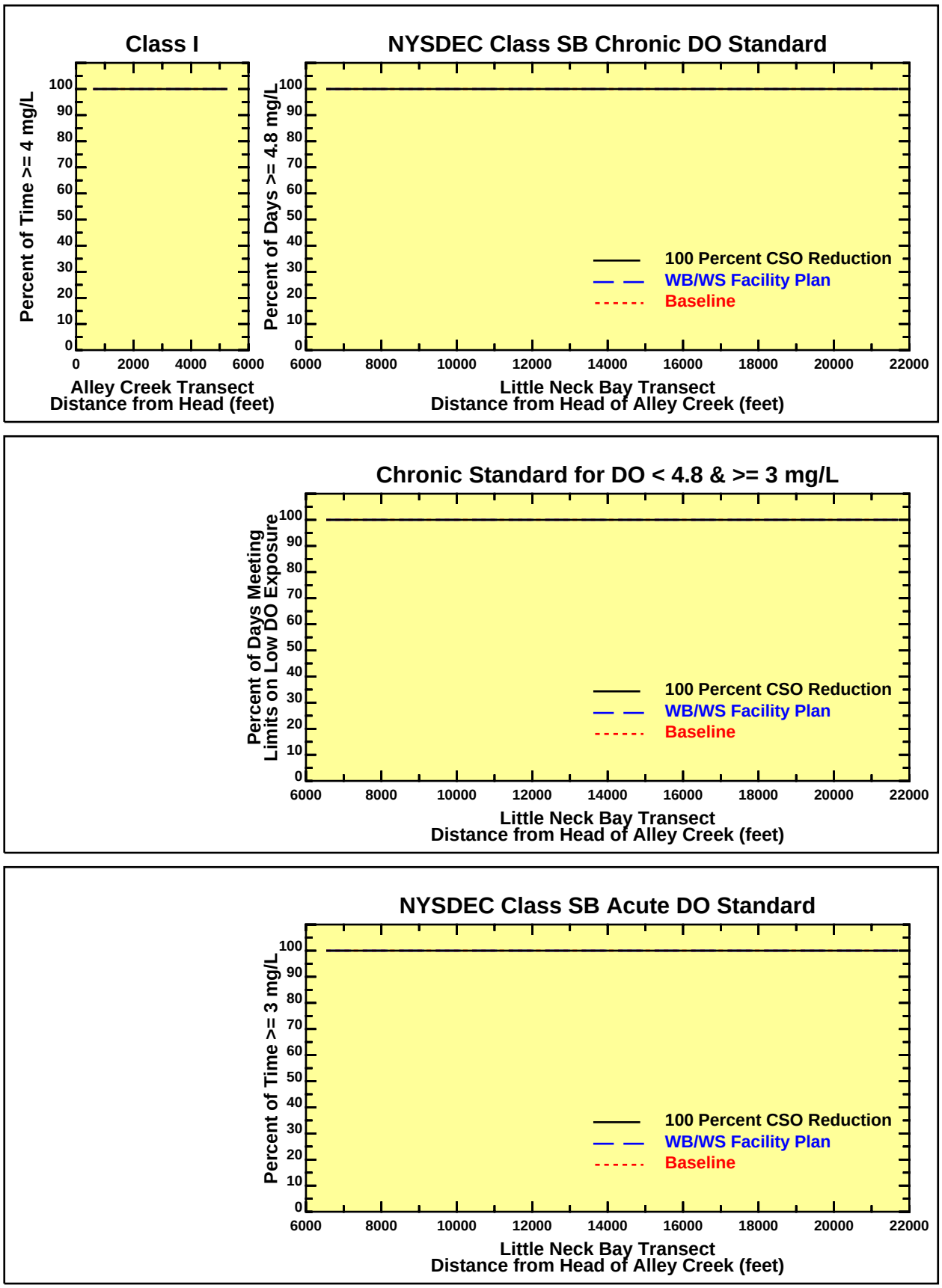
GOHJ0010
November 4, 2008



Dissolved Oxygen Alternatives Comparison for November
Alley Creek and Little Neck Bay Transect

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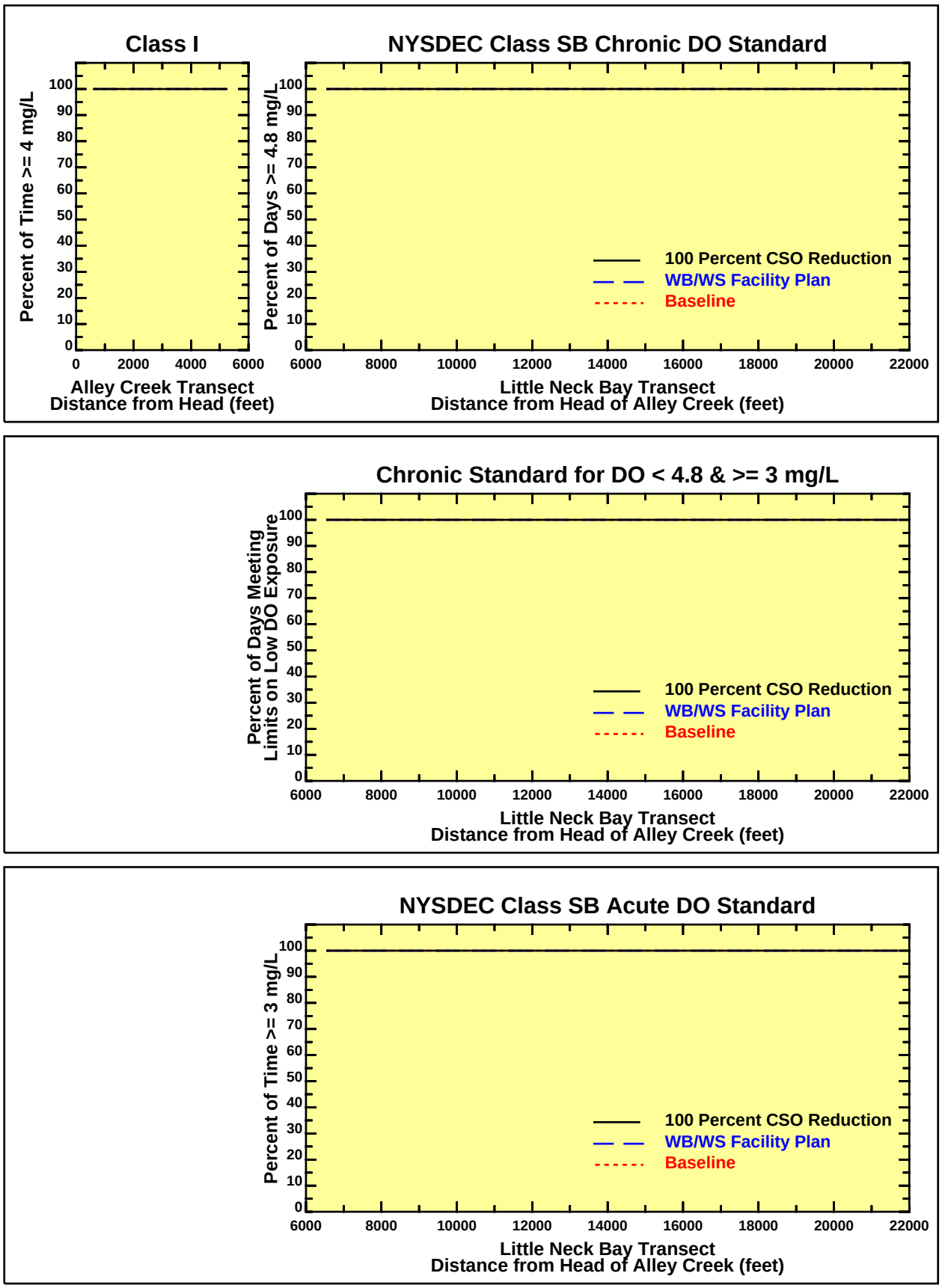
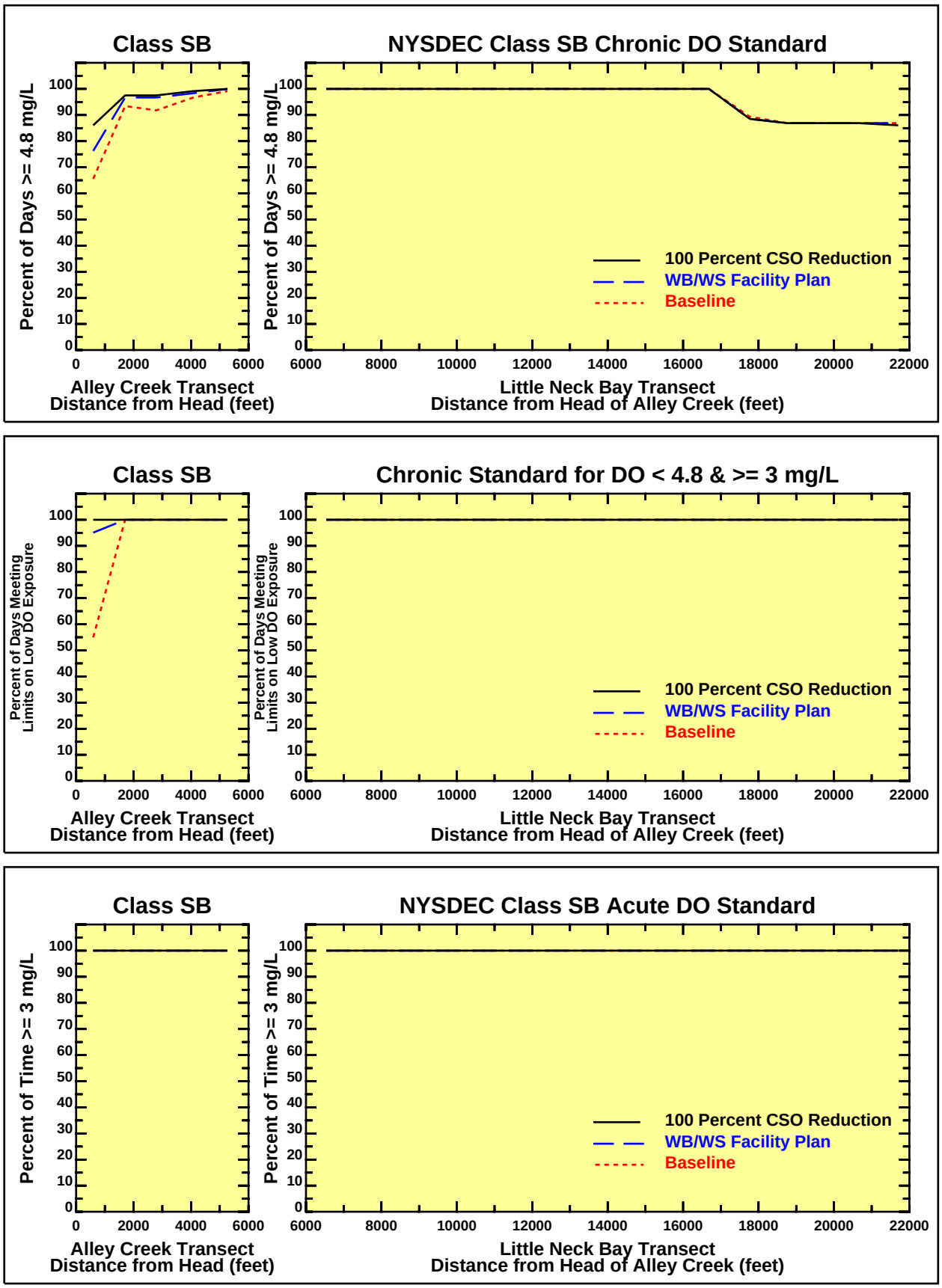
GOHJ0010
November 4, 2008



Dissolved Oxygen Alternatives Comparison for December
Alley Creek and Little Neck Bay Transect

3case_spat01.gdp
GOHJ0010
November 4, 2008



Dissolved Oxygen Alternatives Comparison for Summer
Alley Creek (Class SB) and Little Neck Bay Transect

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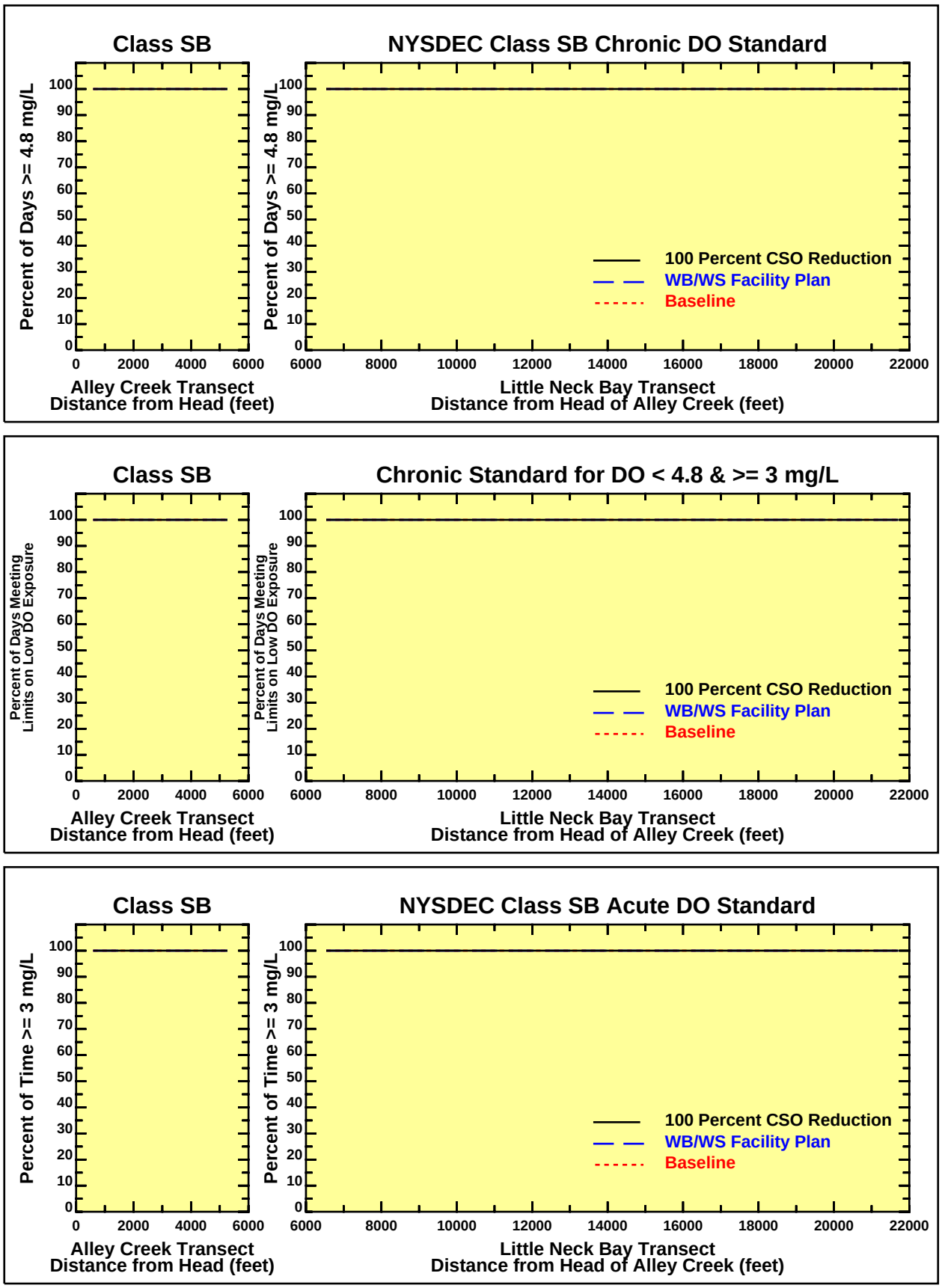
GOHJ0010
November 26, 2008



Dissolved Oxygen Alternatives Comparison for January
Alley Creek (Class SB) and Little Neck Bay Transect

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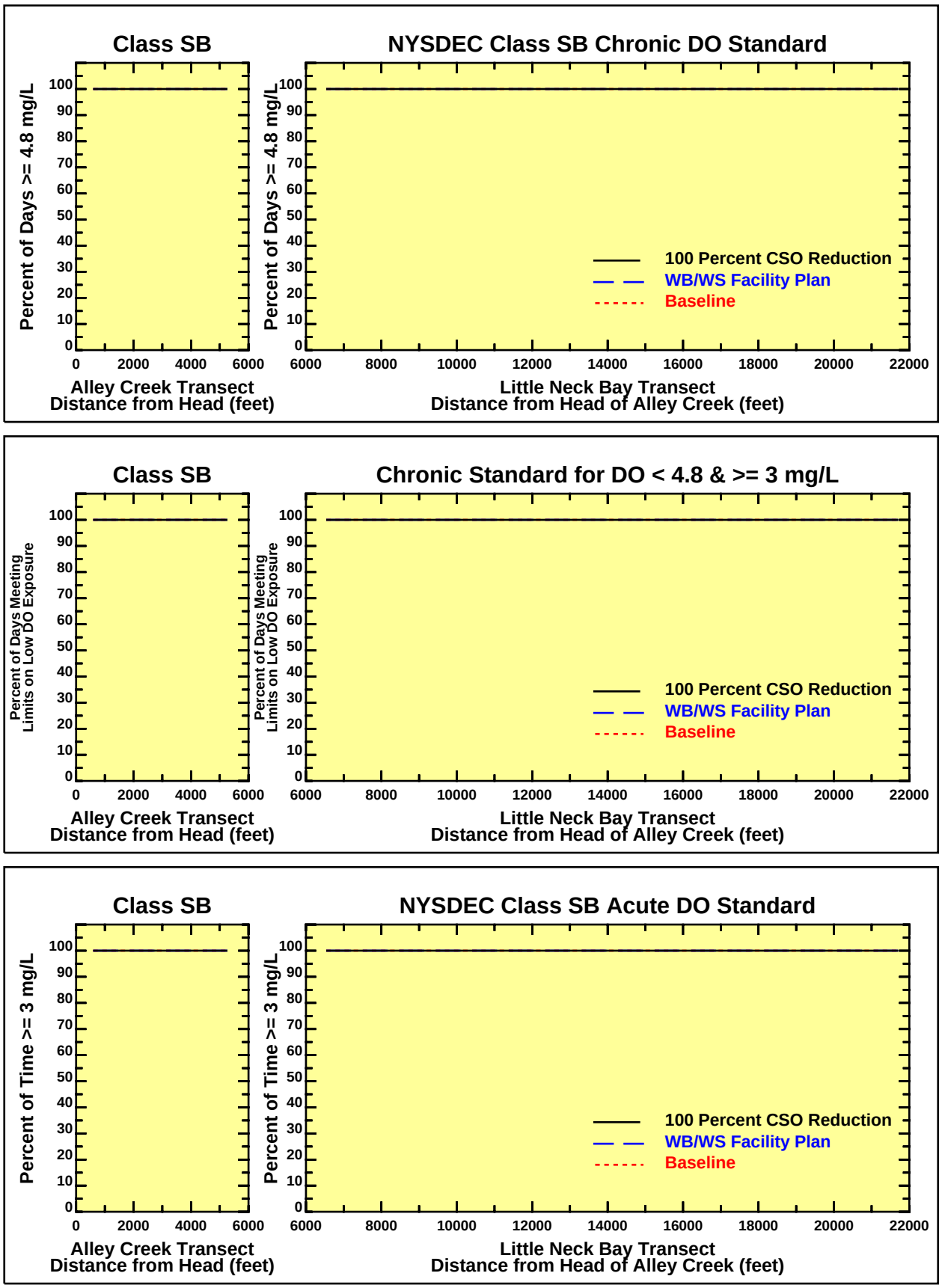
GOHJ0010
November 26, 2008



Dissolved Oxygen Alternatives Comparison for Febuary
Alley Creek (Class SB) and Little Neck Bay Transect

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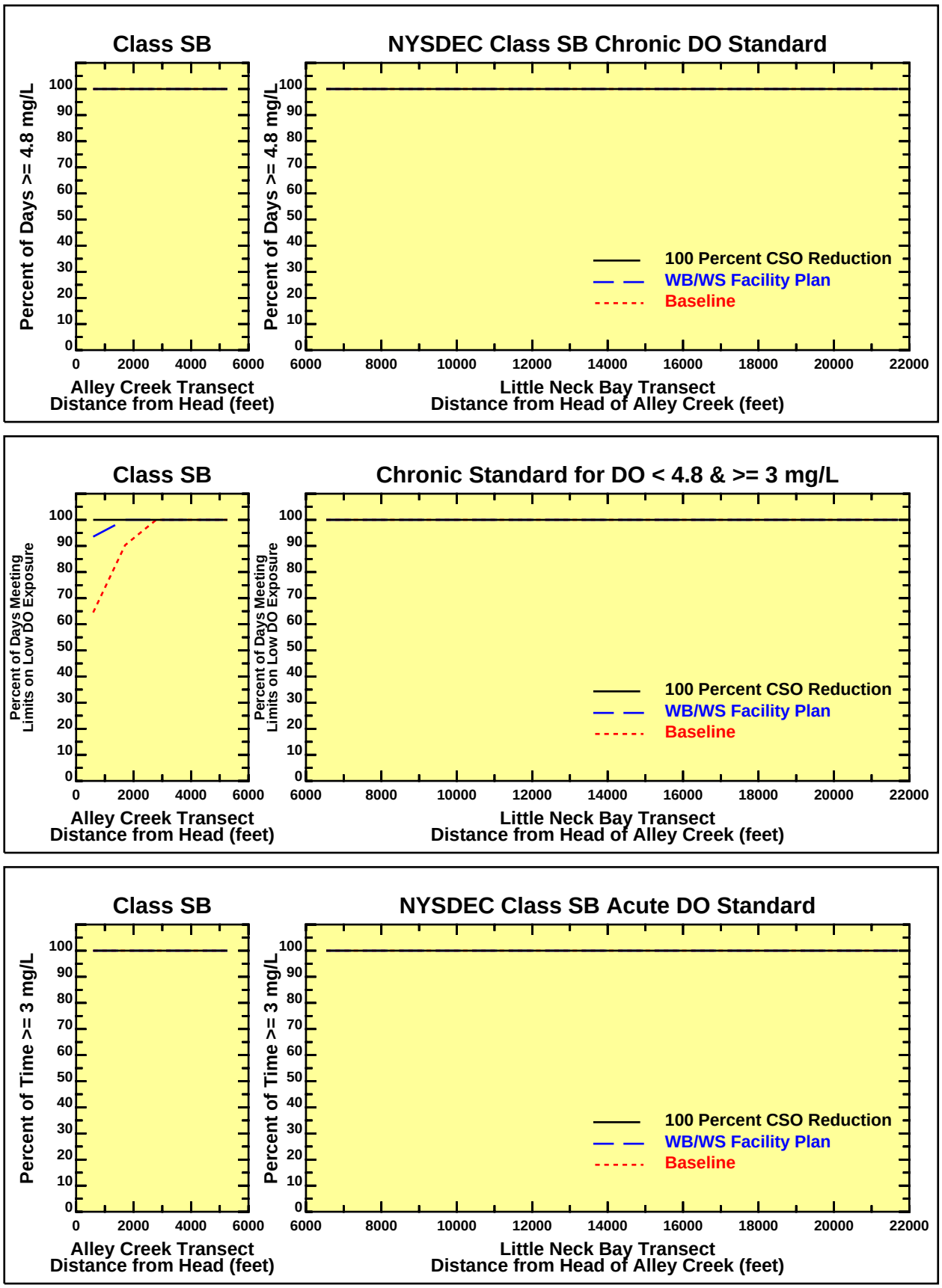
GOHJ0010
November 26, 2008



Dissolved Oxygen Alternatives Comparison for March
Alley Creek (Class SB) and Little Neck Bay Transect

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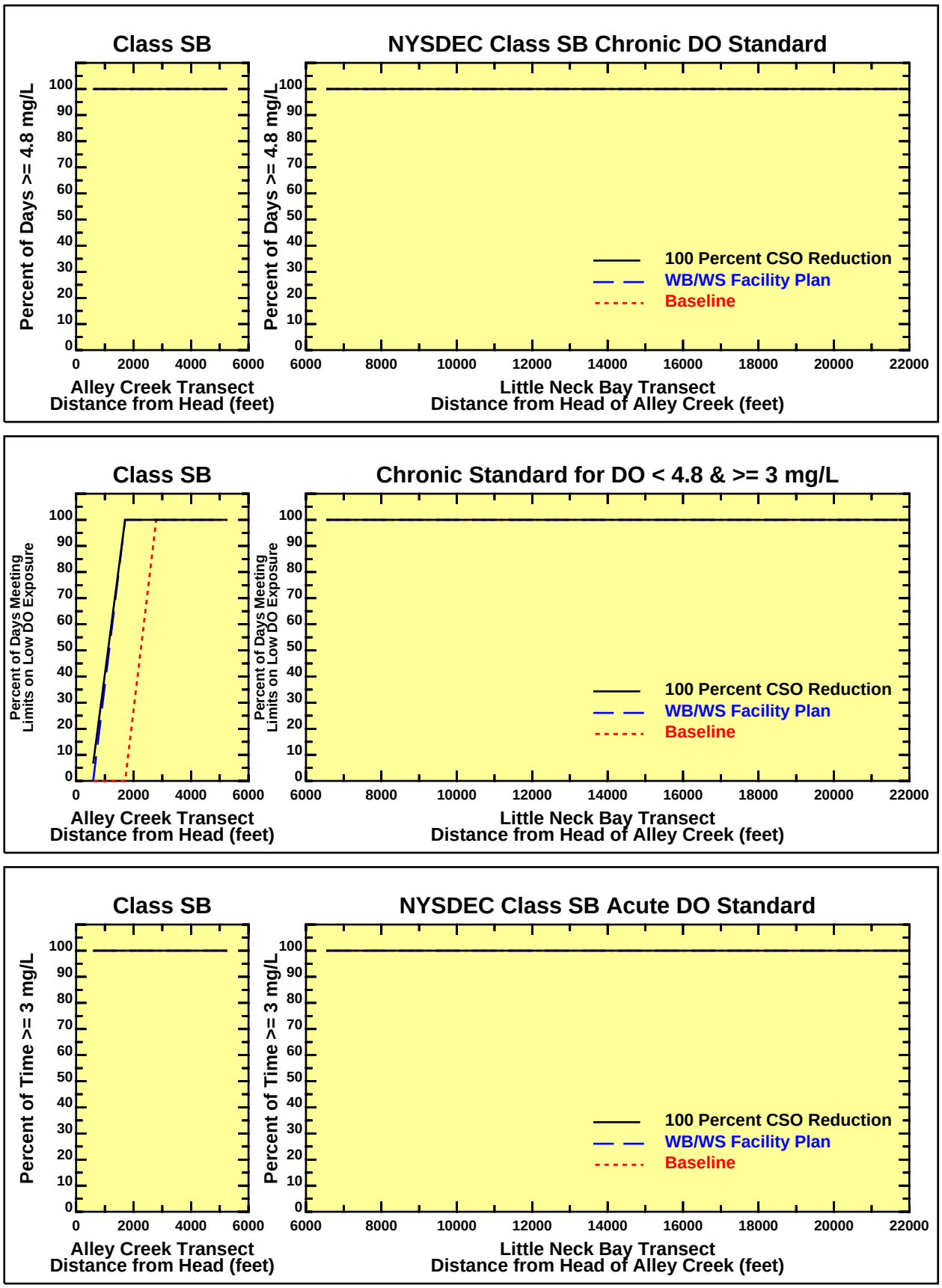
GOHJ0010
November 26, 2008



Dissolved Oxygen Alternatives Comparison for April
Alley Creek (Class SB) and Little Neck Bay Transect

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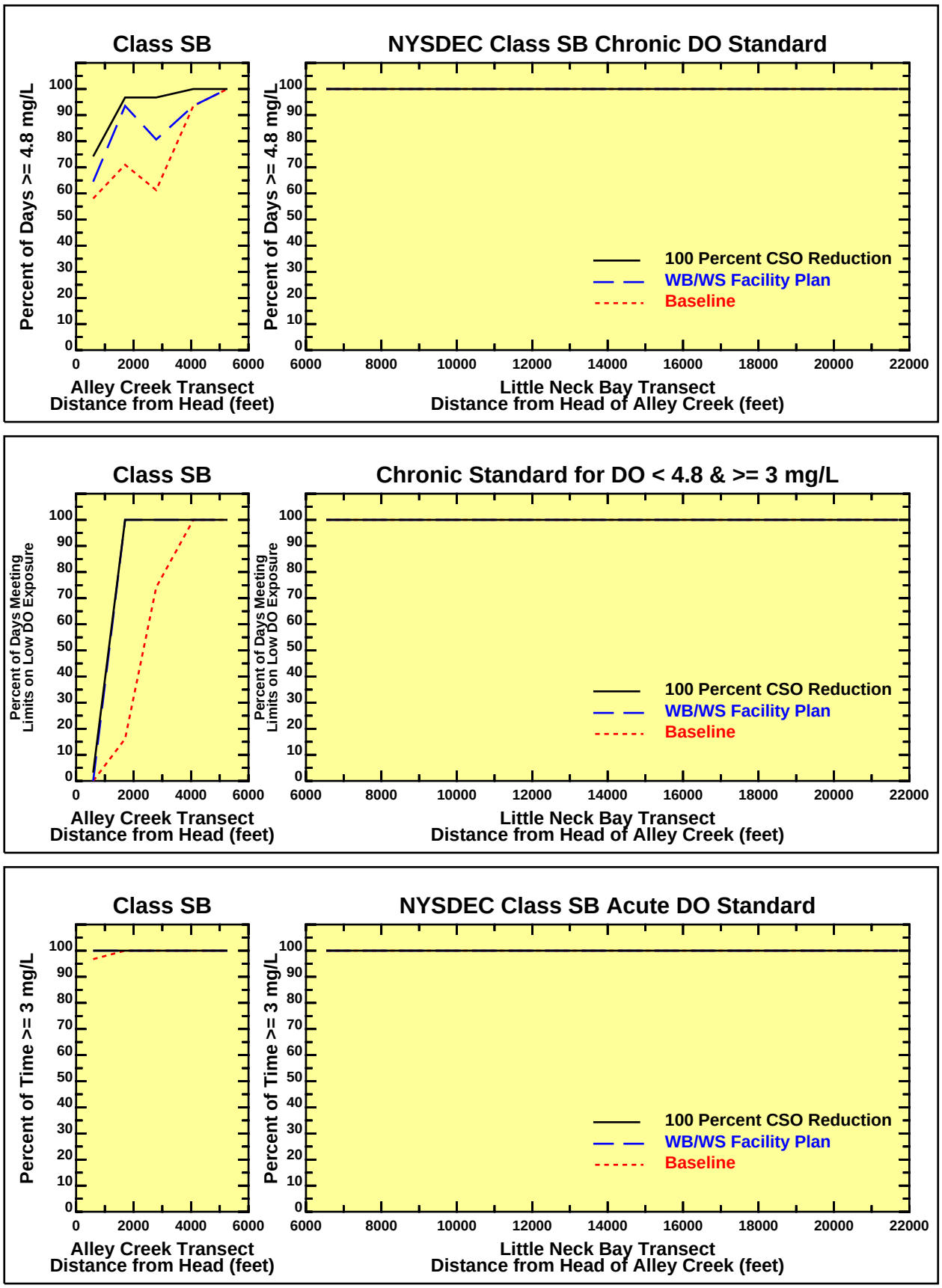
November 26, 2008



Dissolved Oxygen Alternatives Comparison for May
Alley Creek (Class SB) and Little Neck Bay Transect

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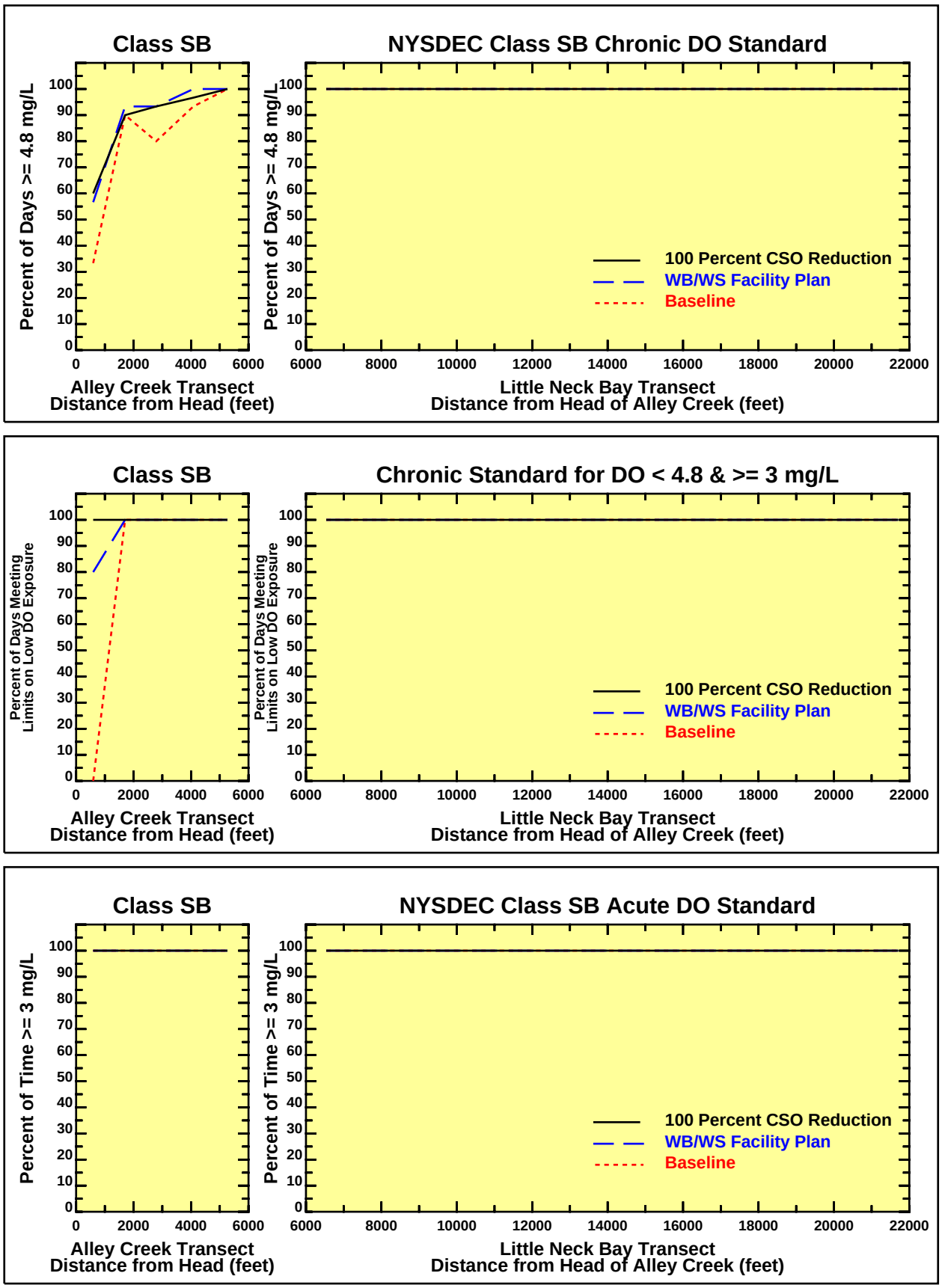
November 26, 2008



Dissolved Oxygen Alternatives Comparison for June
Alley Creek (Class SB) and Little Neck Bay Transect

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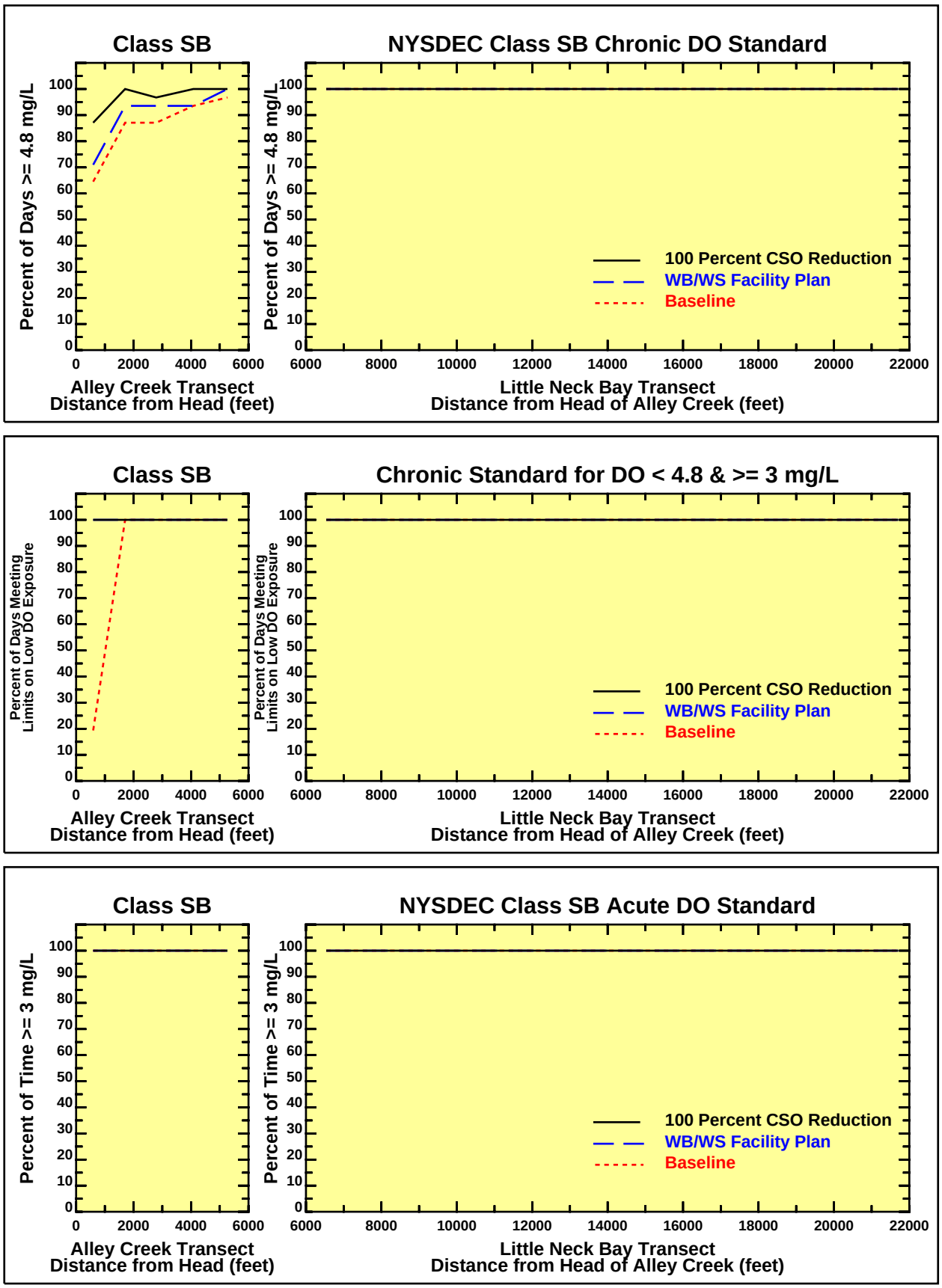
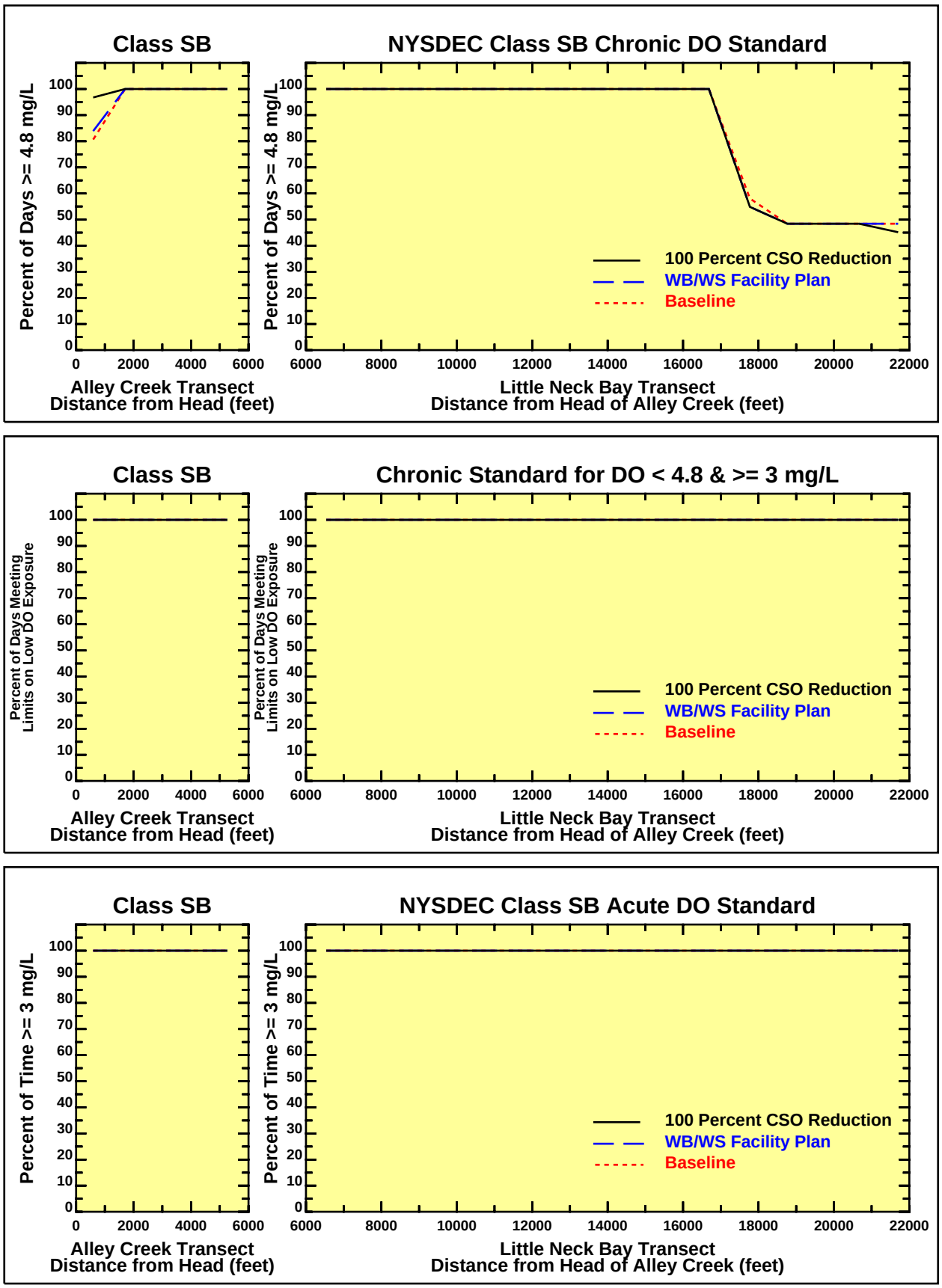
November 26, 2008



Dissolved Oxygen Alternatives Comparison for July
Alley Creek (Class SB) and Little Neck Bay Transect

3case_spat02.gdp
GOHJ0010
November 26, 2008



Dissolved Oxygen Alternatives Comparison for August
Alley Creek (Class SB) and Little Neck Bay Transect

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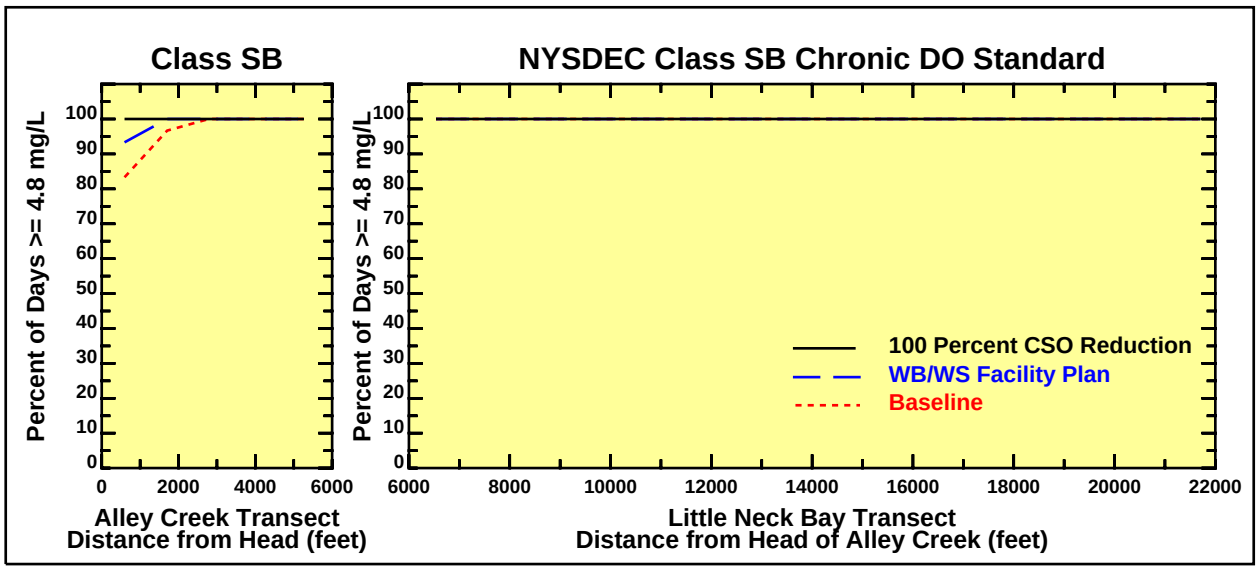
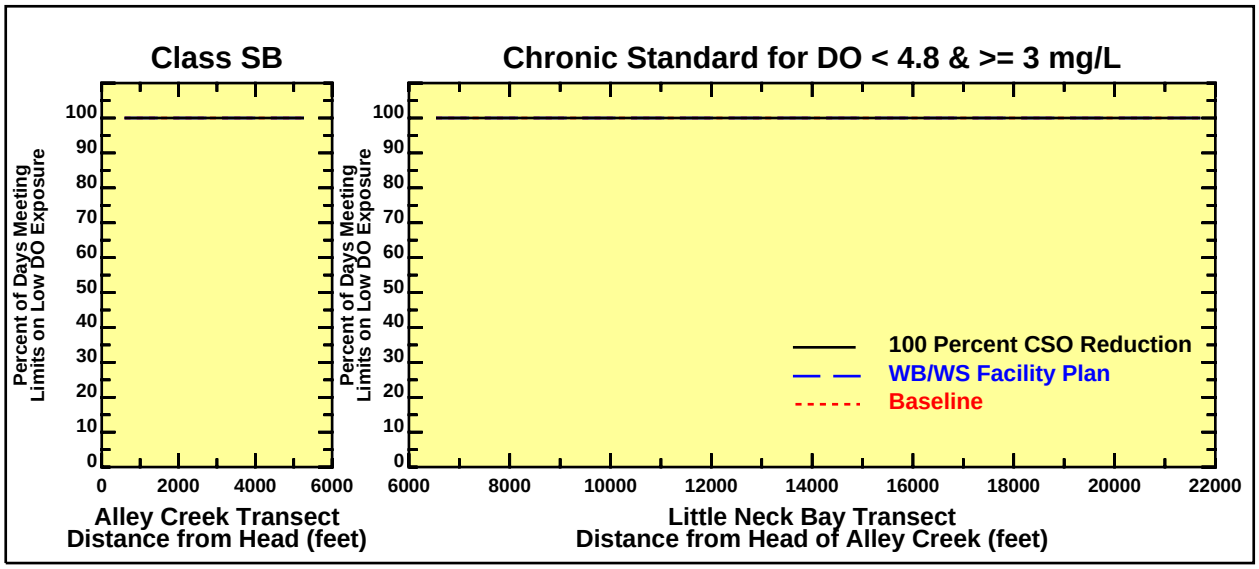
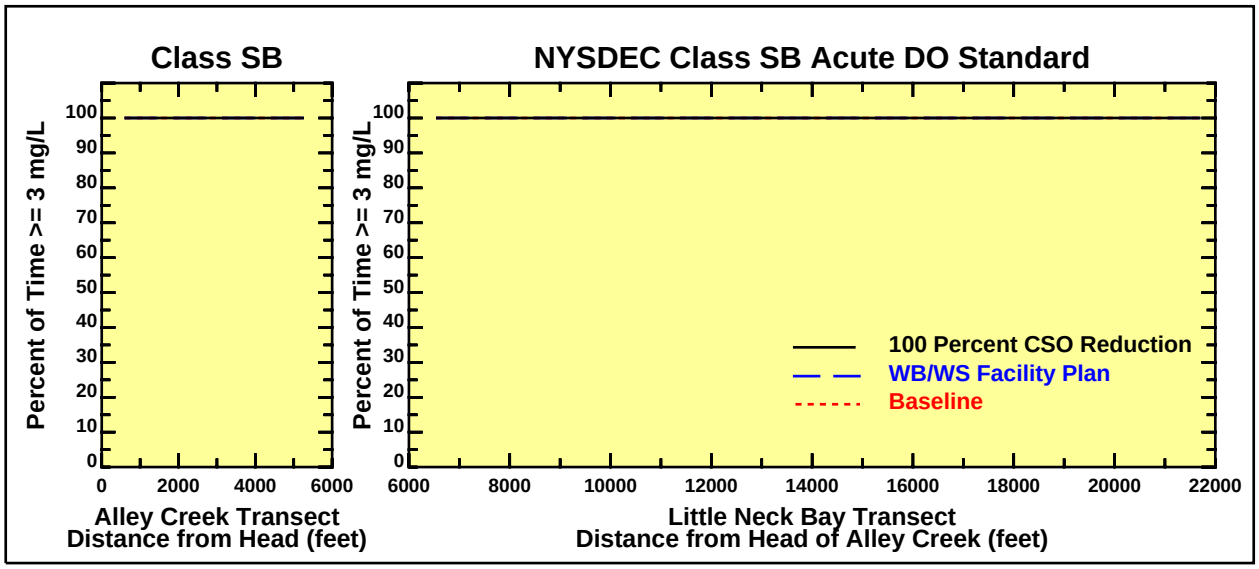
November 26, 2008







Dissolved Oxygen Alternatives Comparison for September
Alley Creek (Class SB) and Little Neck Bay Transect

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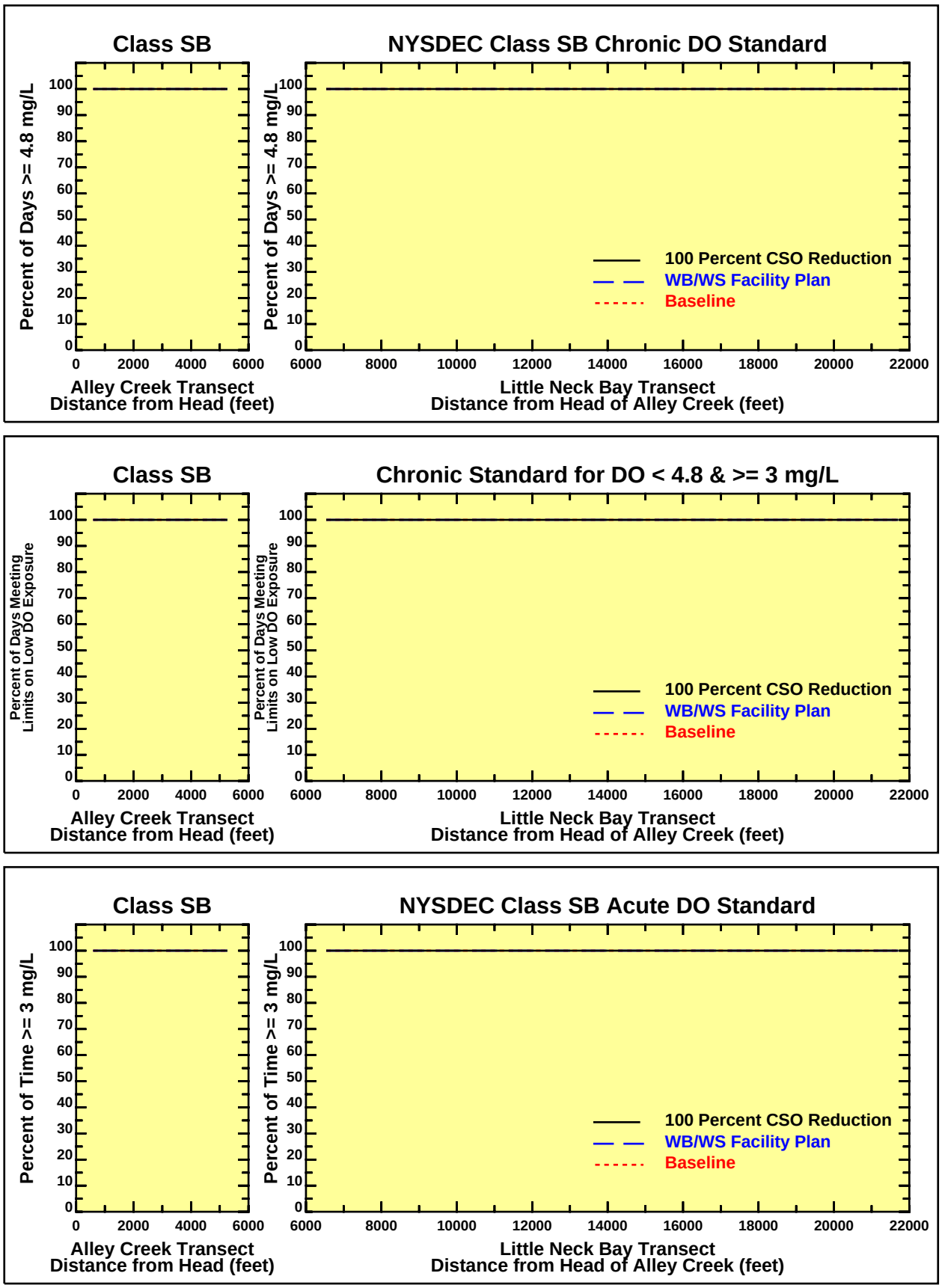
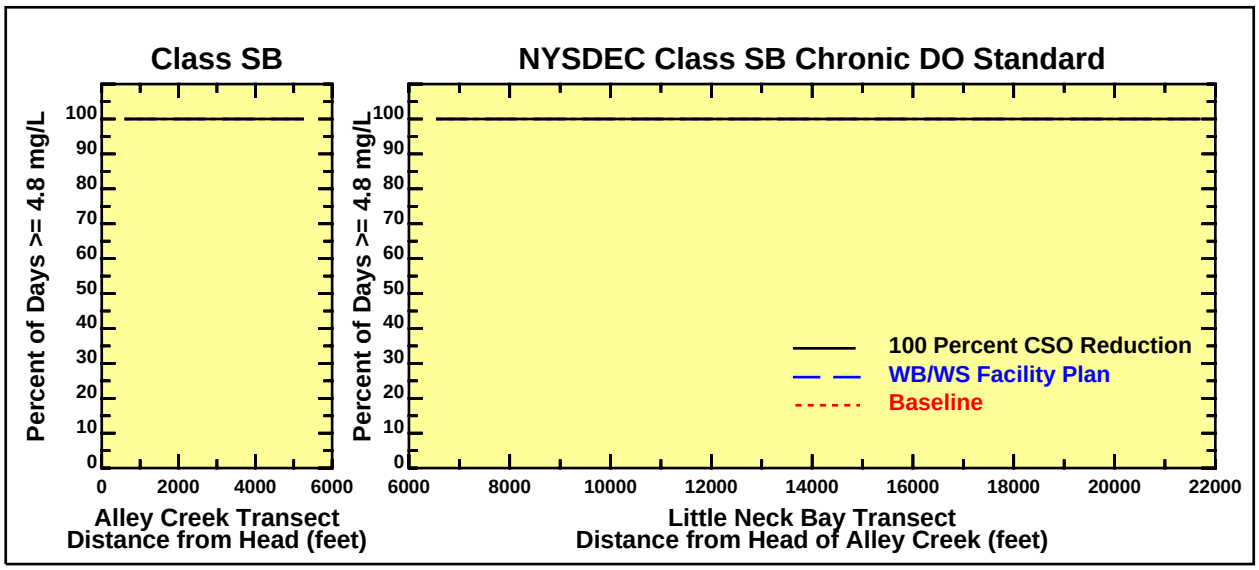
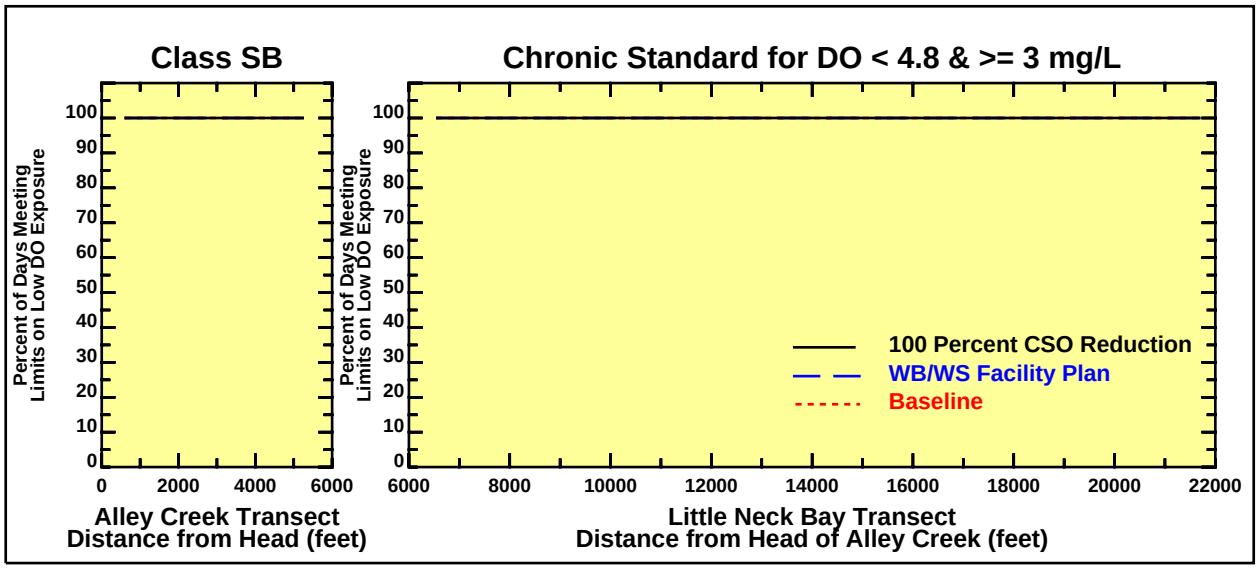
GOHJ0010
November 26, 2008

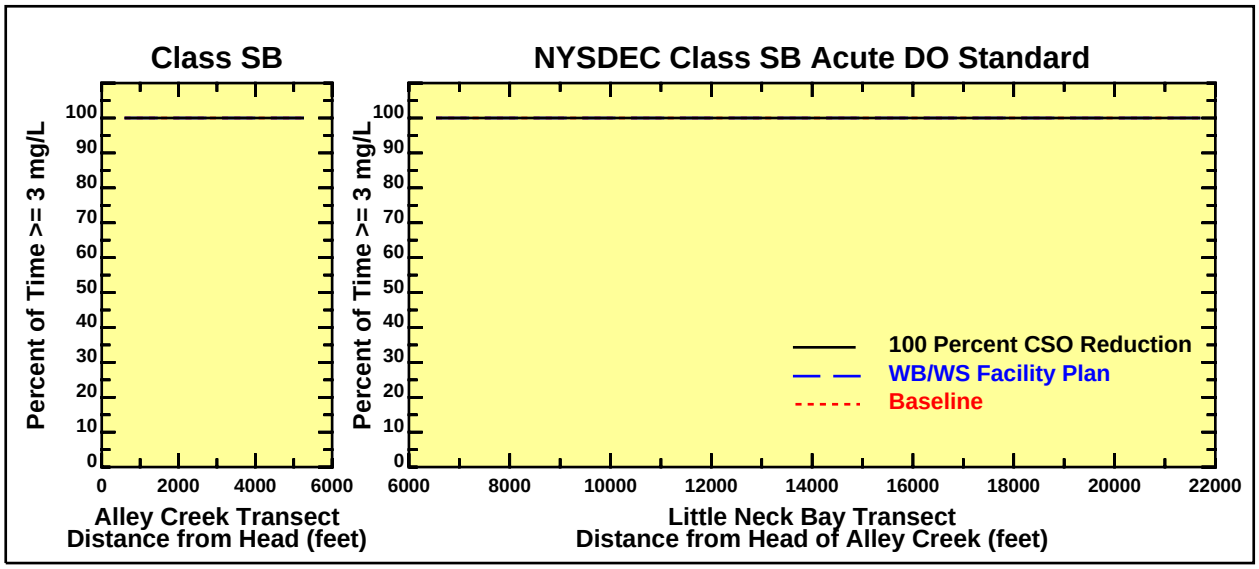


Dissolved Oxygen Alternatives Comparison for October
Alley Creek (Class SB) and Little Neck Bay Transect

3case_spat02.gdp
GOHJ0010
November 26, 2008

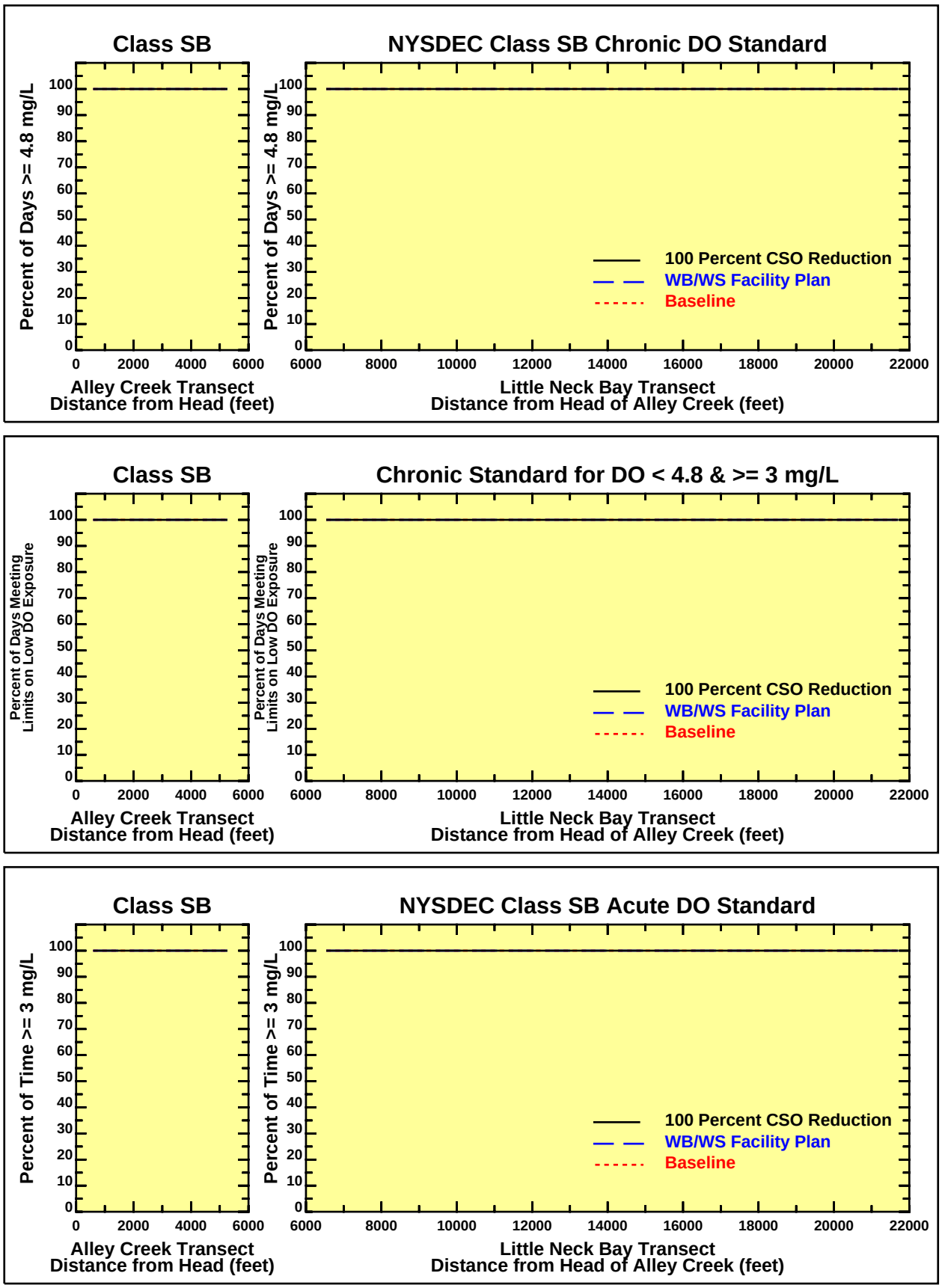






Dissolved Oxygen Alternatives Comparison for November
Alley Creek (Class SB) and Little Neck Bay Transect

3case_spat02.gdp
GOHJ0010
November 26, 2008

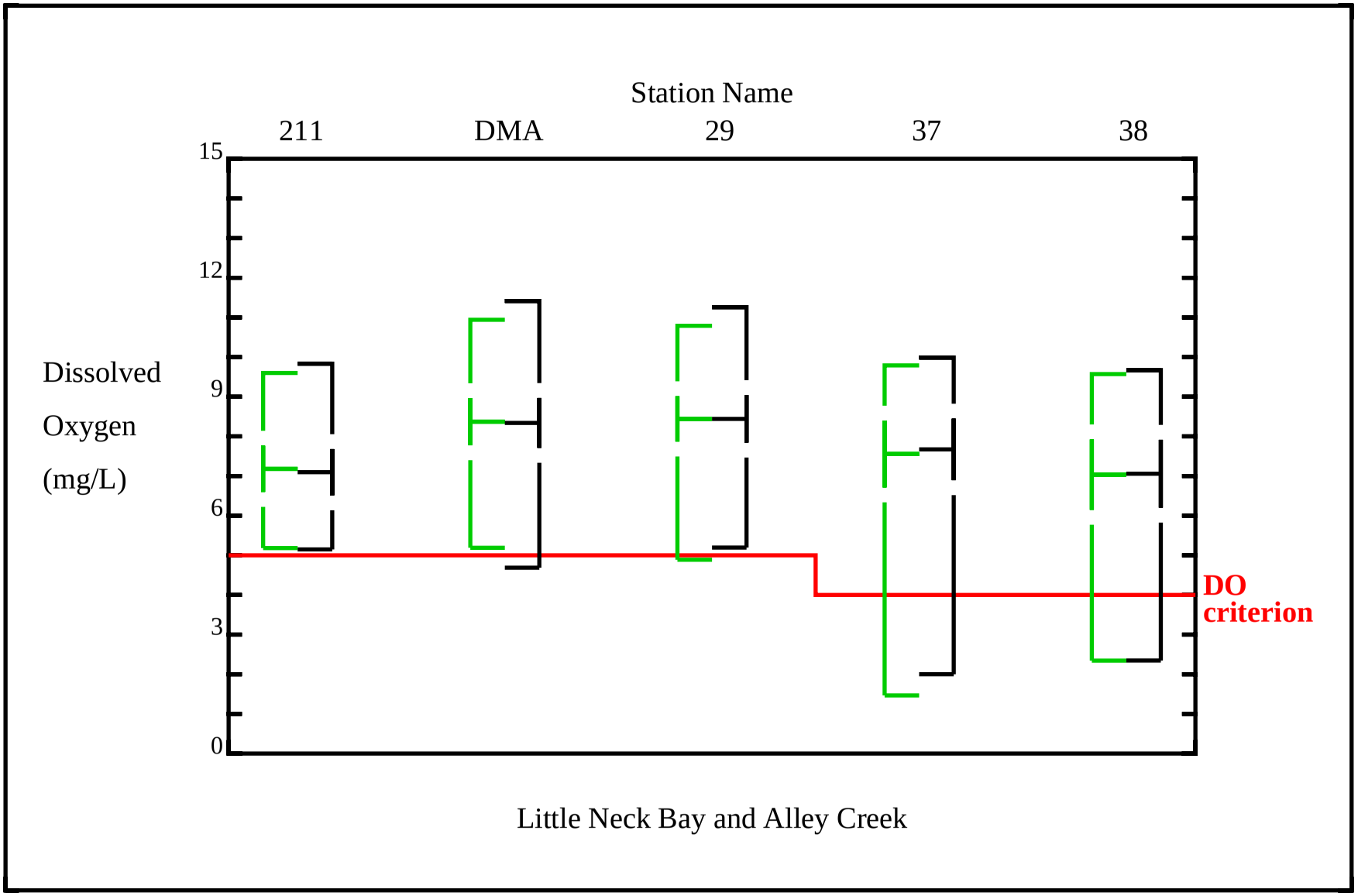


Dissolved Oxygen Alternatives Comparison for December
Alley Creek (Class SB) and Little Neck Bay Transect

3case_spat02.gdp
GOHJ0010
November 26, 2008

DISSOLVED OXYGEN PROJECTIONS

SEASONAL COMPARISON OF WATERBODY/WATERSHED FACILITY PLAN WITH BASELINE



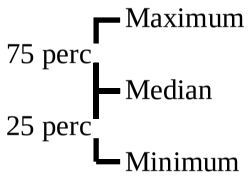
Autumn (September-November), comparison based on hourly average DO

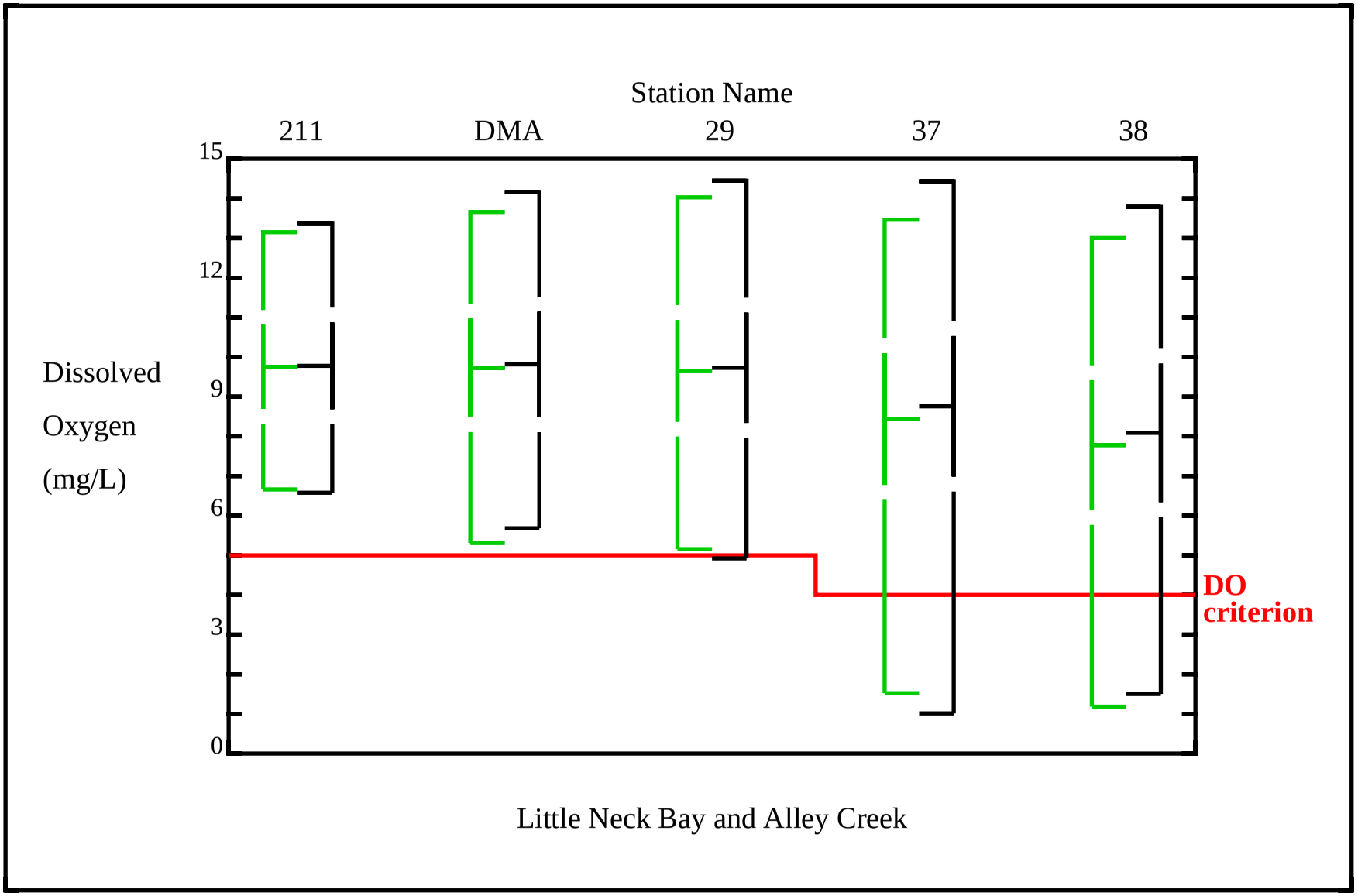
ERTM RUN88-T4-06-01 YR5 vs ERTM RUN88-B2-06-02 YR5

BLACK ERTM LTCP-T4 (AC Run33), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR5,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

GREEN ERTM LTCP-B2 (New BS), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR4,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

DATE: 9/26/2006 TIME: 9: 3:24





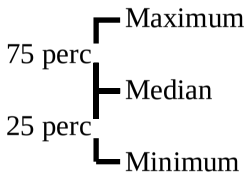
Spring (March-May), comparison based on hourly average DO

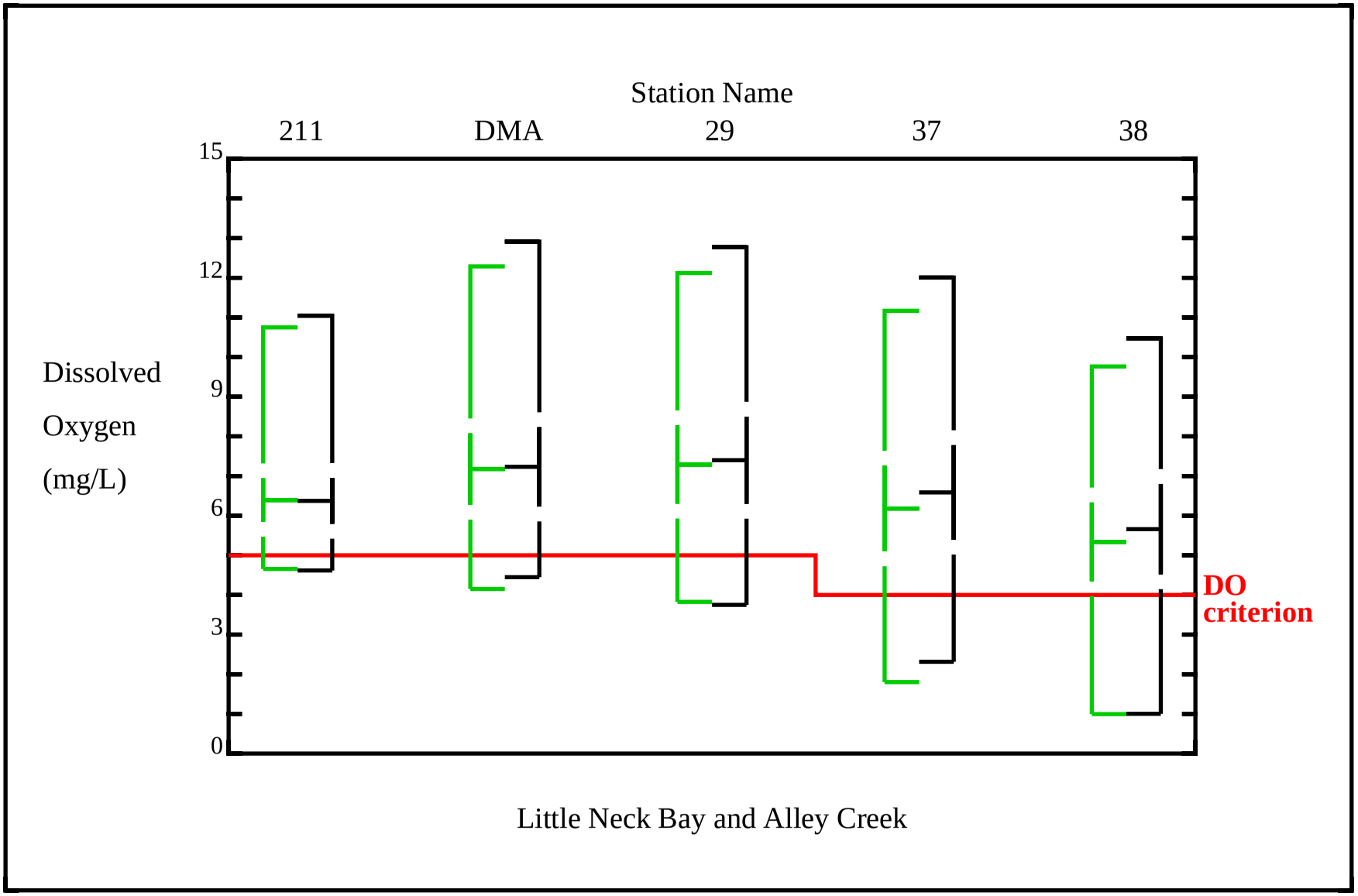
ERTM RUN88-T4-06-01 YR5 vs ERTM RUN88-B2-06-02 YR5

BLACK ERTM LTCP-T4 (AC Run33), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR5,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

GREEN ERTM LTCP-B2 (New BS), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR4,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

DATE: 9/26/2006 TIME: 9: 2:50





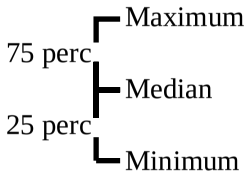
Summer (June-August), comparison based on hourly average DO

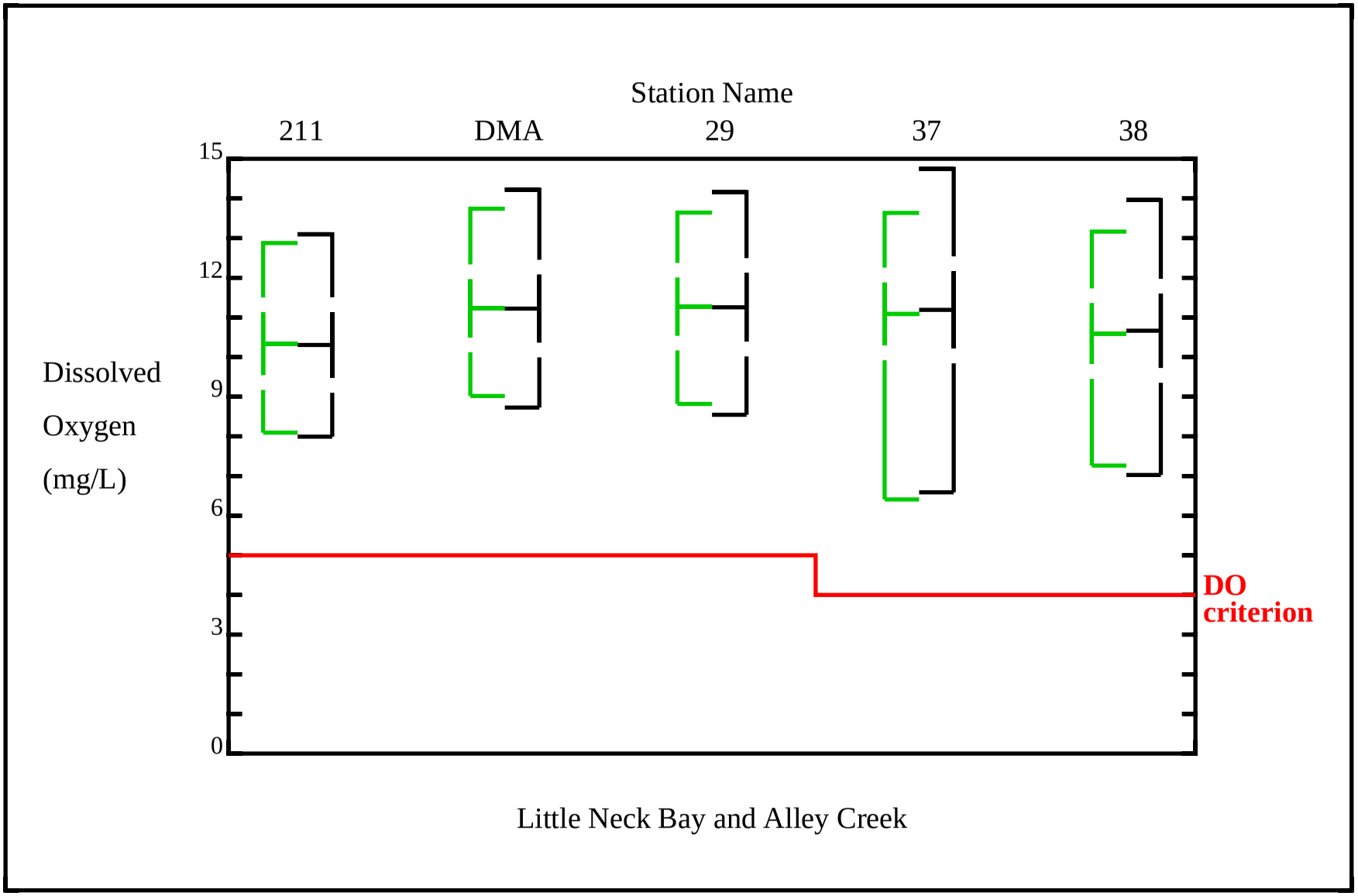
ERTM RUN88-T4-06-01 YR5 vs ERTM RUN88-B2-06-02 YR5

BLACK ERTM LTCP-T4 (AC Run33), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR5,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

GREEN ERTM LTCP-B2 (New BS), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR4,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

DATE: 9/26/2006 TIME: 9: 3: 7





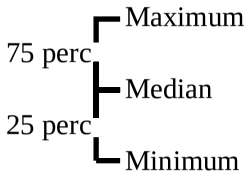
Winter (December-February), comparison based on hourly average DO

ERTM RUN88-T4-06-01 YR5 vs ERTM RUN88-B2-06-02 YR5

BLACK ERTM LTCP-T4 (AC Run33), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR5,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

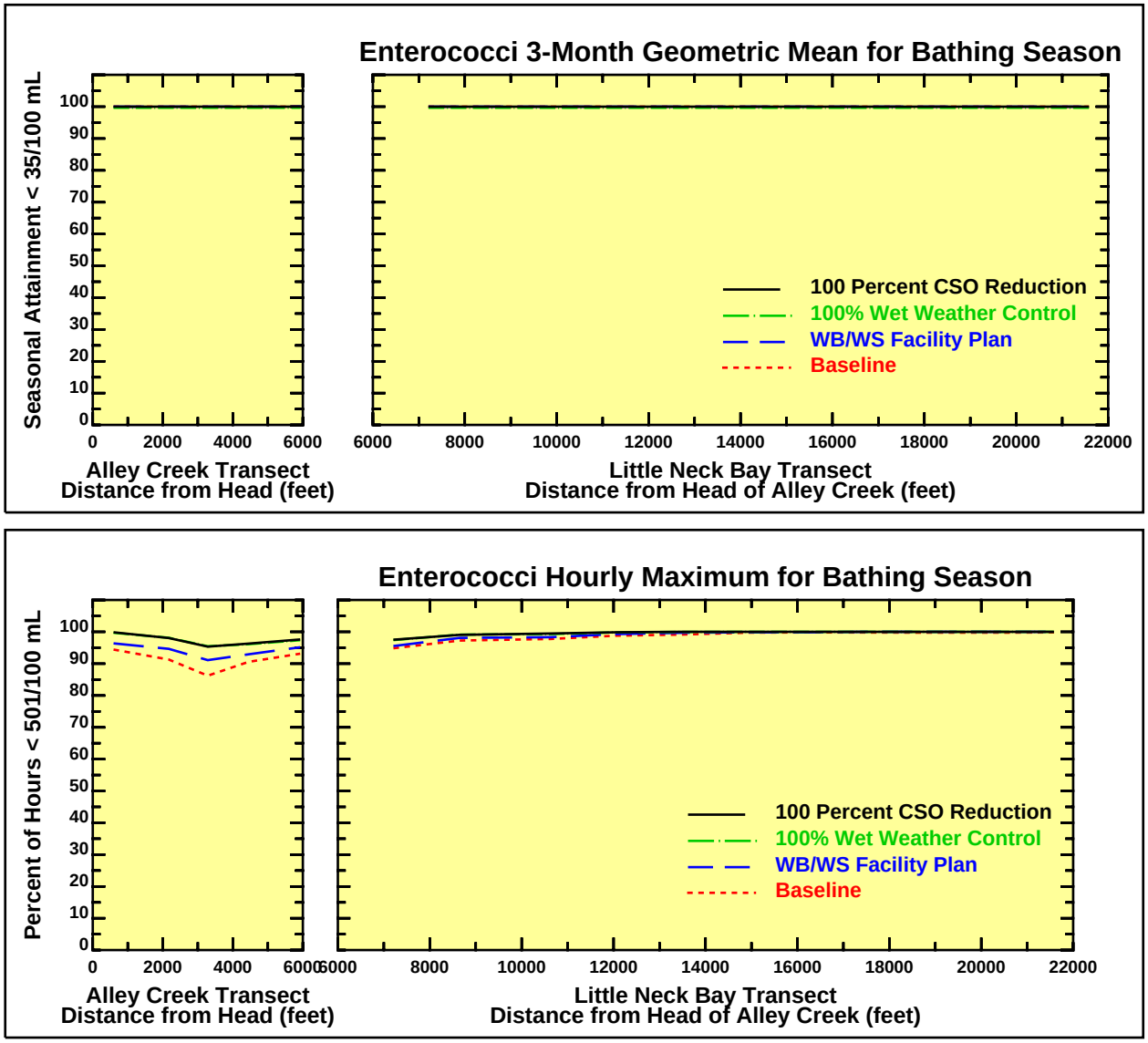
GREEN ERTM LTCP-B2 (New BS), NAPOC5-BASED FL XR=2.75+,EZ8,100xRXY,ER1KEB,0.2BB,HYDR4,DDAC,RIV5-2,VSt,SKEOC=1.5e-3

DATE: 9/26/2006 TIME: 9: 2:32

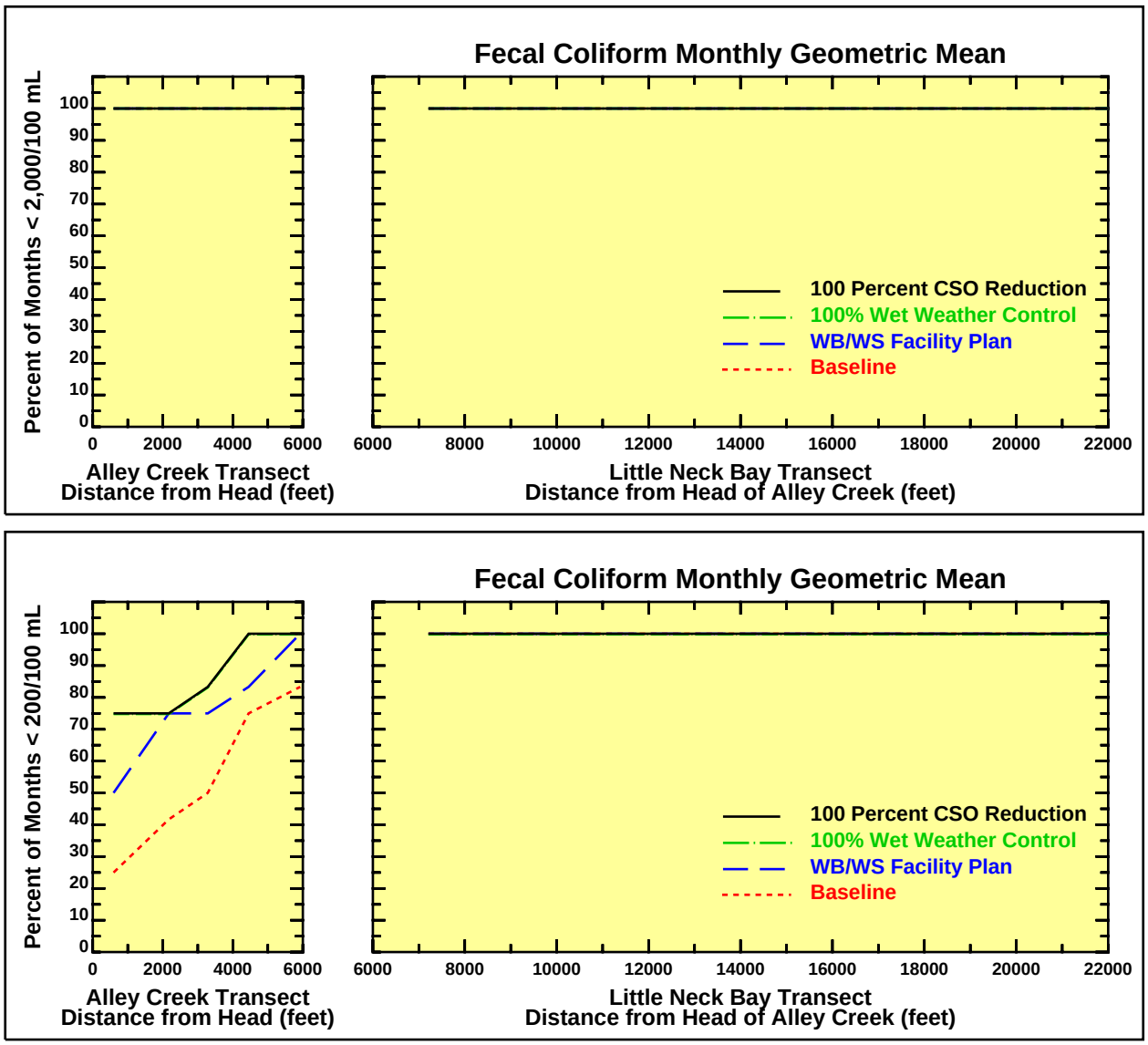


SPATIAL PATHOGEN RESULTS

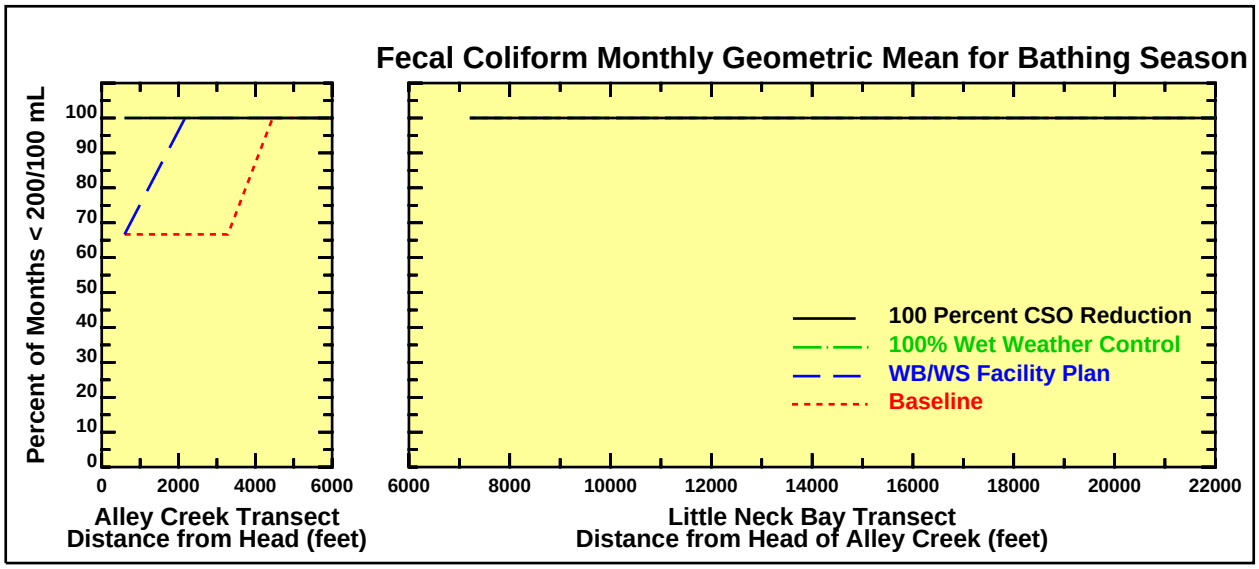
BATHING SEASON AND ANNUAL COMPARISON OF BASELINE, 100 PERCENT CSO REDUCTION AND WATERBODY/WATERSHED FACILITY PLAN



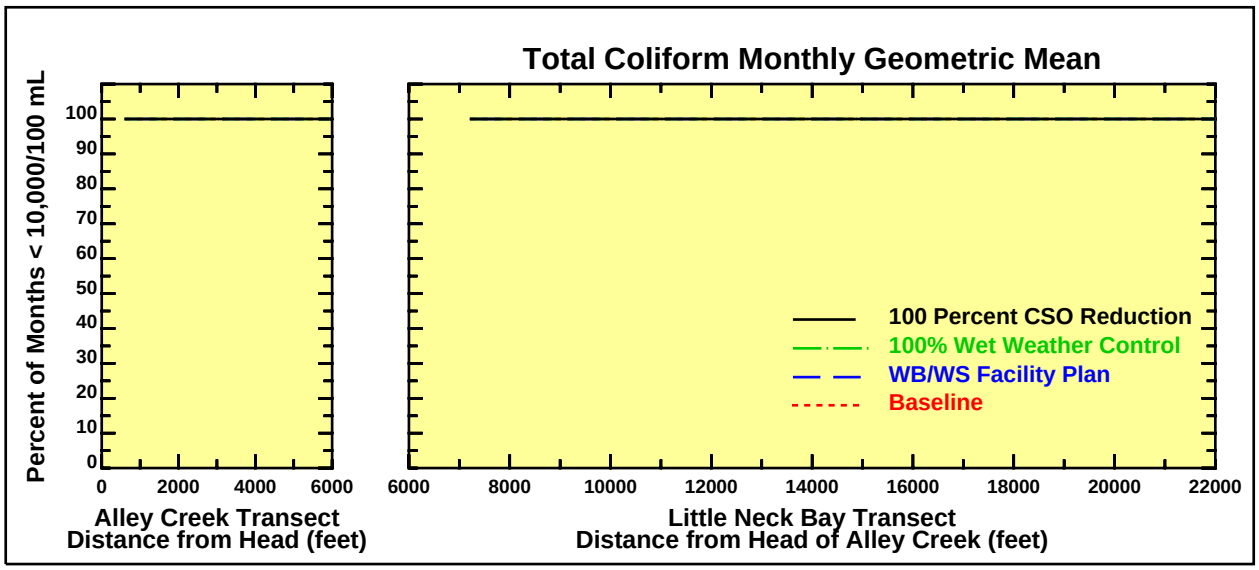
Alley Creek and Little Neck Bay Enterococci Bathing Season Projections

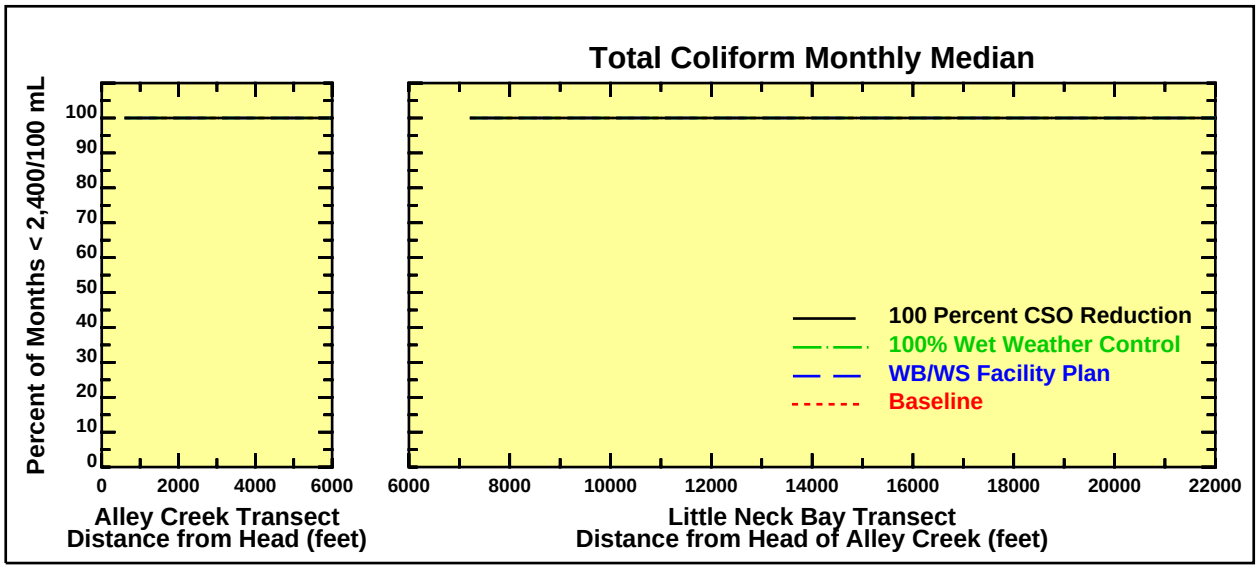


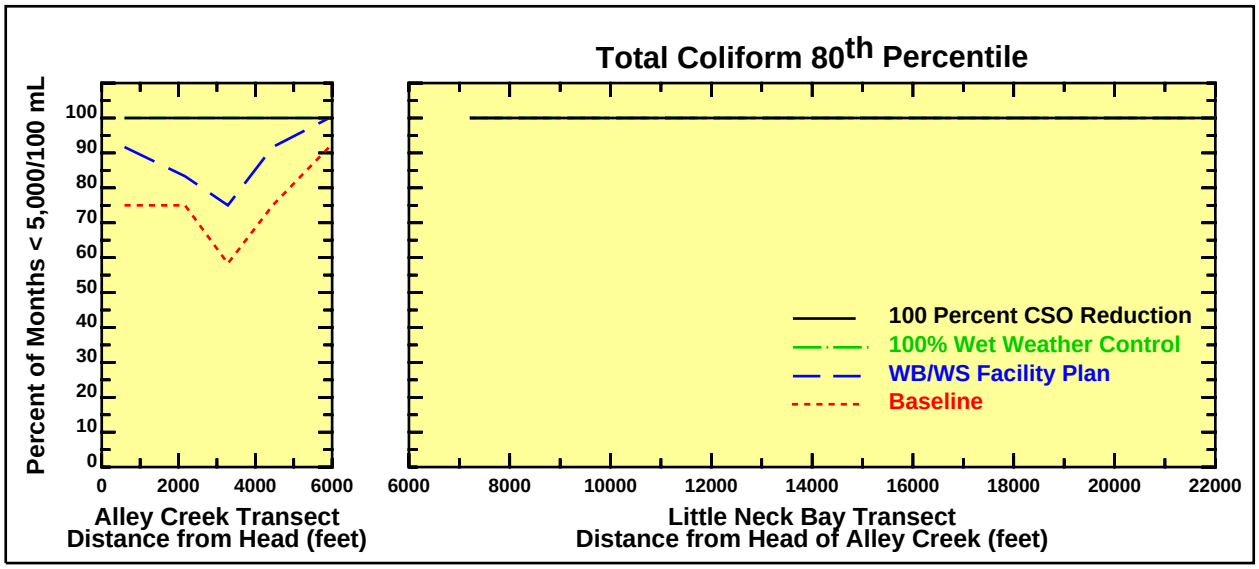
Alley Creek and Little Neck Bay Fecal Coliform Annual Projections



Alley Creek and Little Neck Bay Fecal Coliform Bathing Season Projections

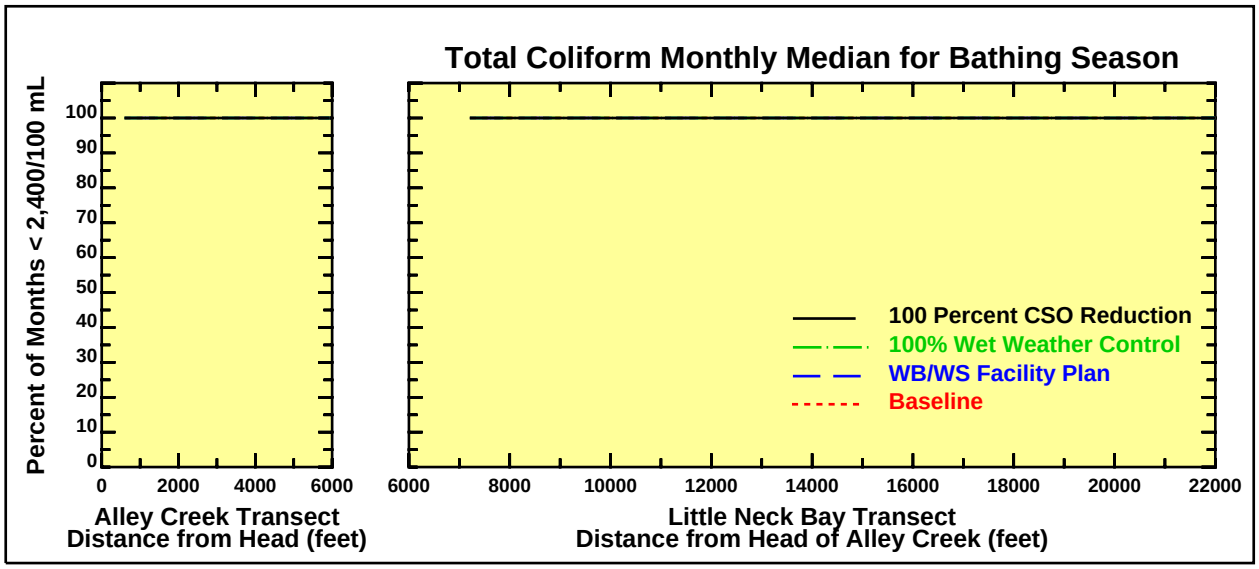


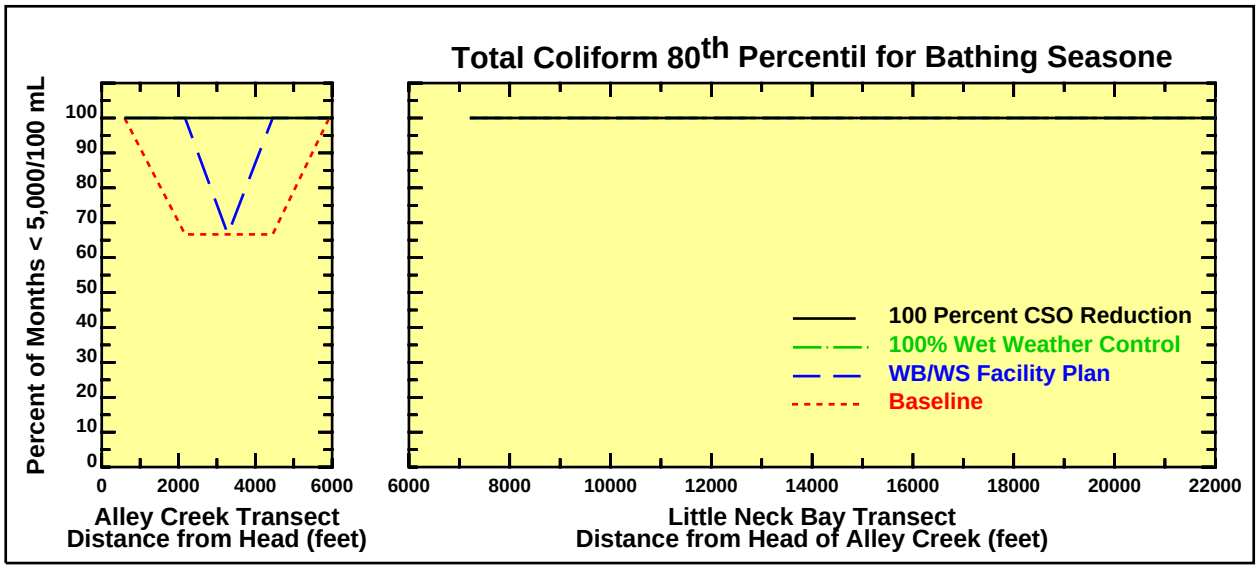




Alley Creek and Little Neck Bay Total Coliform Annual Projections

November 7, 2006
GOHJ0010





Alley Creek and Little Neck Bay Total Coliform Bathing Season Projections

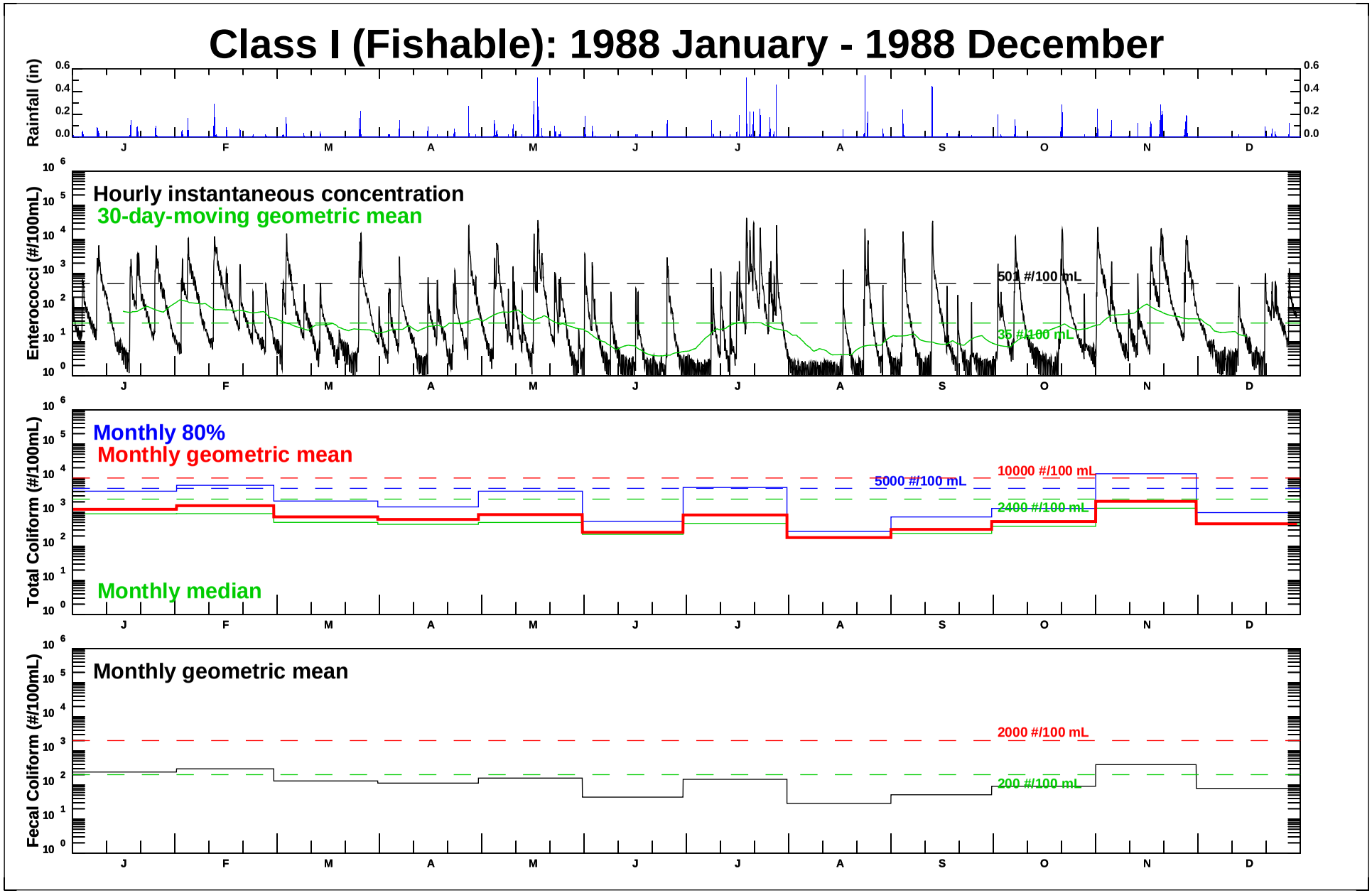
November 7, 2006
GOHJ0010

PATHOGEN PROJECTIONS

TEMPORAL RESULTS AT KEY LOCATIONS

- HEAD END OF ALLEY CREEK
- MOUTH OF ALLEY CREEK
- DMA BEACH
- NEAR BAYSIDE MARINA
- UDALLS COVE
- OPEN WATER OF LITTLE NECK BAY

Class I (Fishable): 1988 January - 1988 December

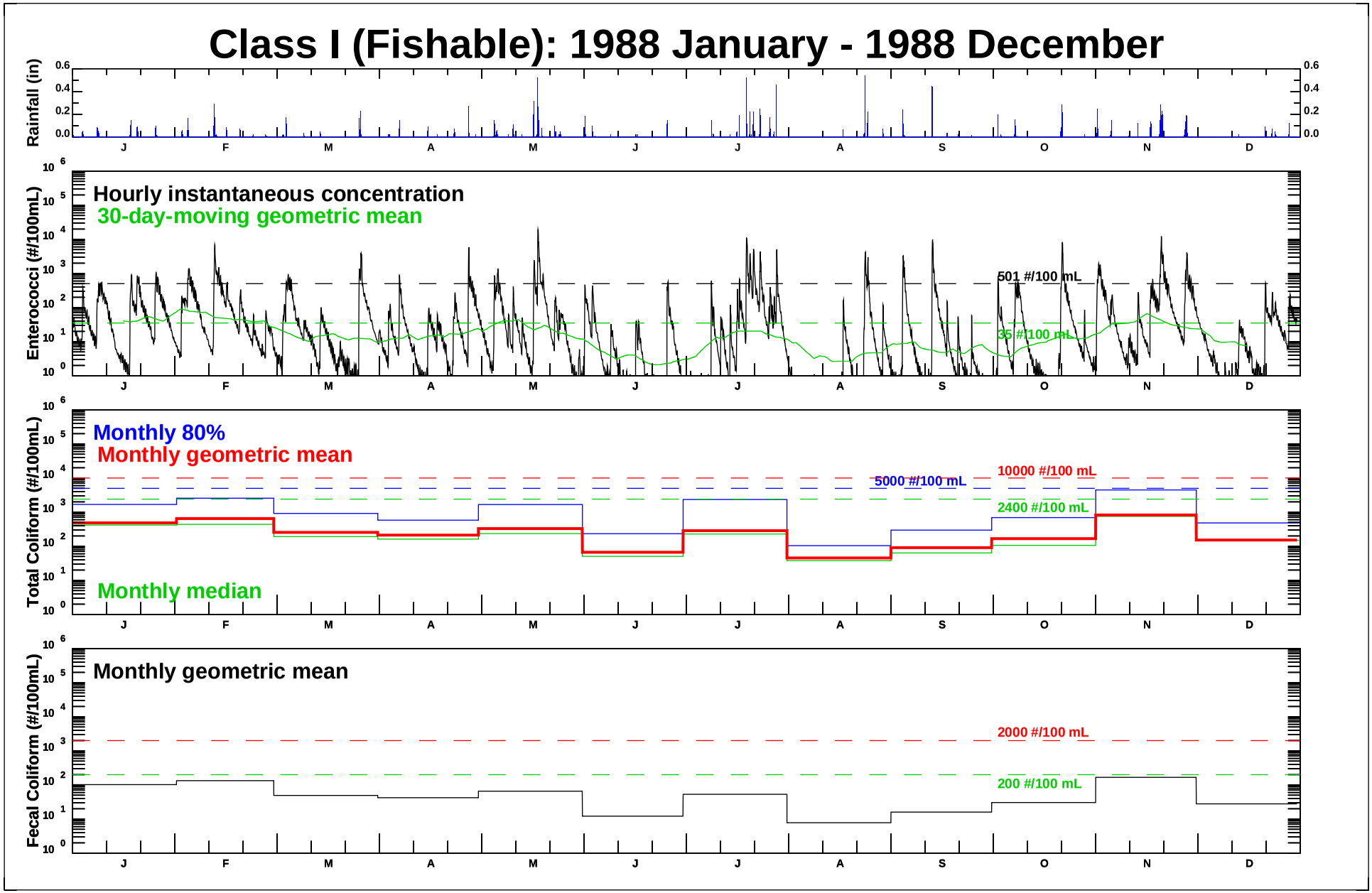


Alley Creek ST AC1
ERTM Cell (53,16), H=2.1m

ERTM 1988 Facility Plan, RUN 197 (88-T4_AC33)

DATE: 10/03/2006 TIME: 9:38:10

Class I (Fishable): 1988 January - 1988 December

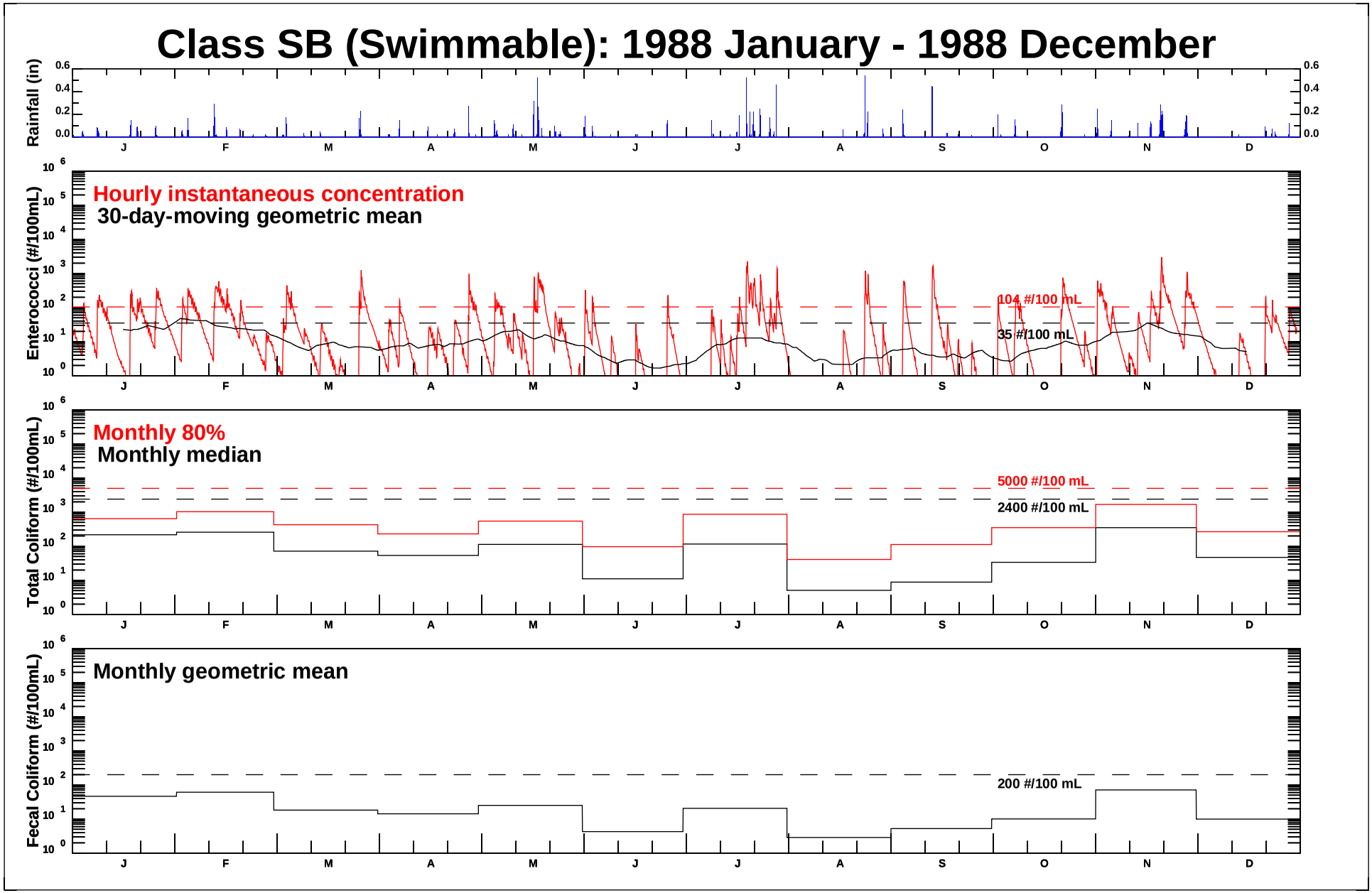


Alley Creek ST S01
ERTM Cell (53,18), H=2.2m

ERTM 1988 Facility Plan, RUN 197 (88-T4_AC33)

DATE: 10/03/2006 TIME: 9:38: 7

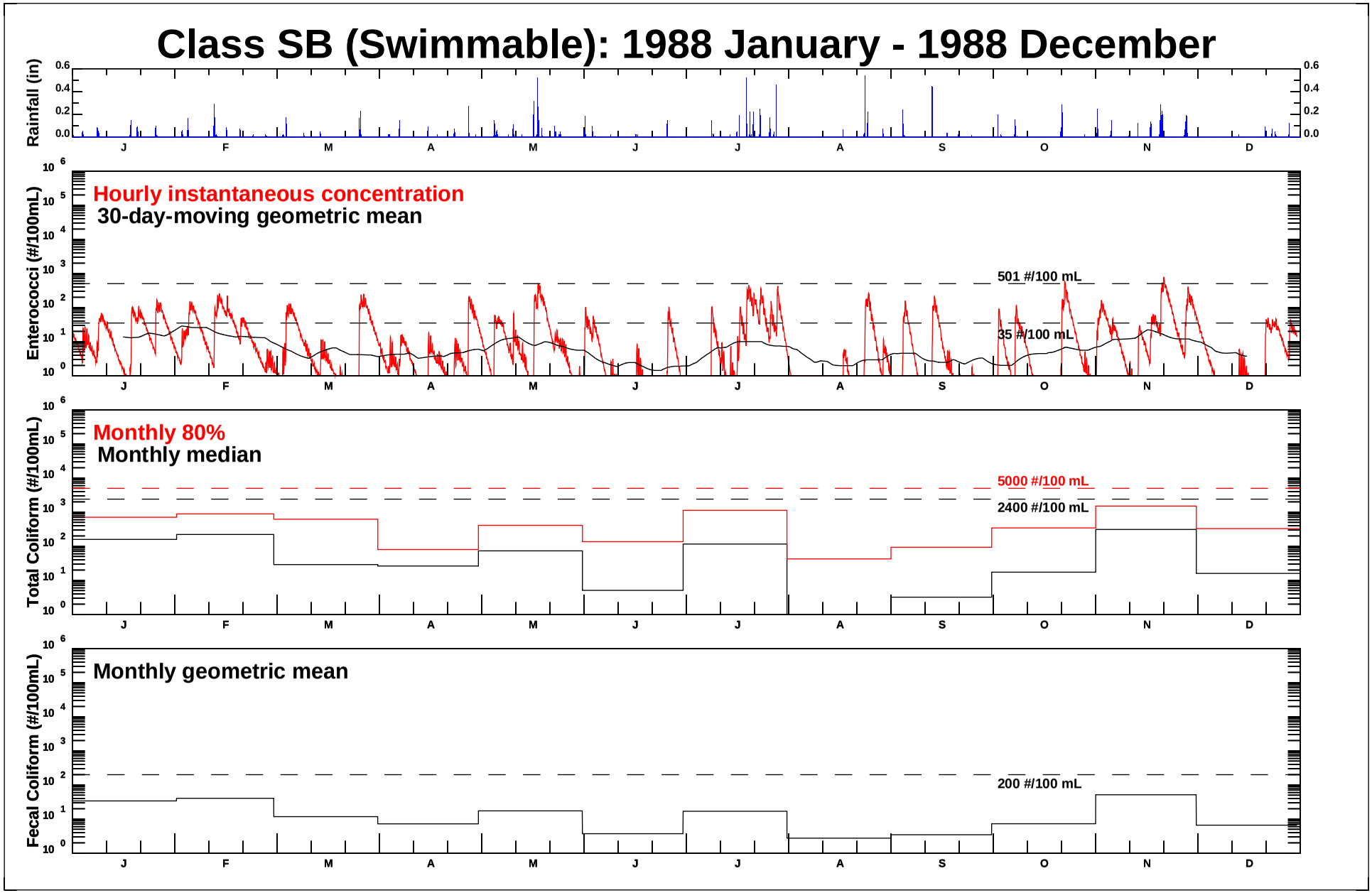
Class SB (Swimmable): 1988 January - 1988 December



Douglaston Manor Beach ST B06
ERTM Cell (54,20), H=2.6m

ERTM 1988 Facility Plan, RUN 197 (88-T4_AC33)

DATE: 10/03/2006 TIME: 9:38:12



Little Neck Bay ST LB1
ERTM Cell (54,26), H=4.3m

ERTM 1988 Facility Plan, RUN 197 (88-T4_AC33)

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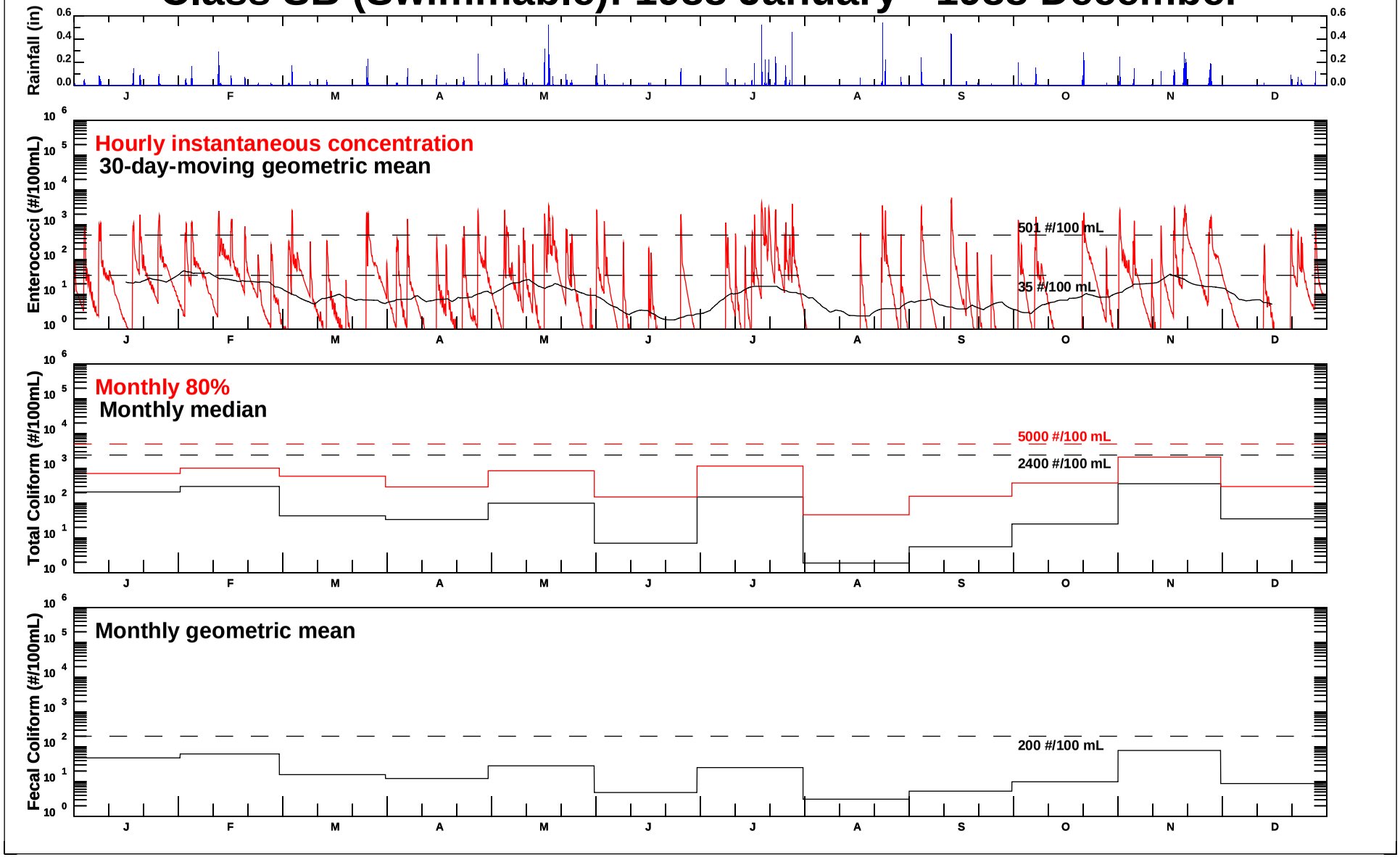
Class SB (Swimmable): 1988 January - 1988 December

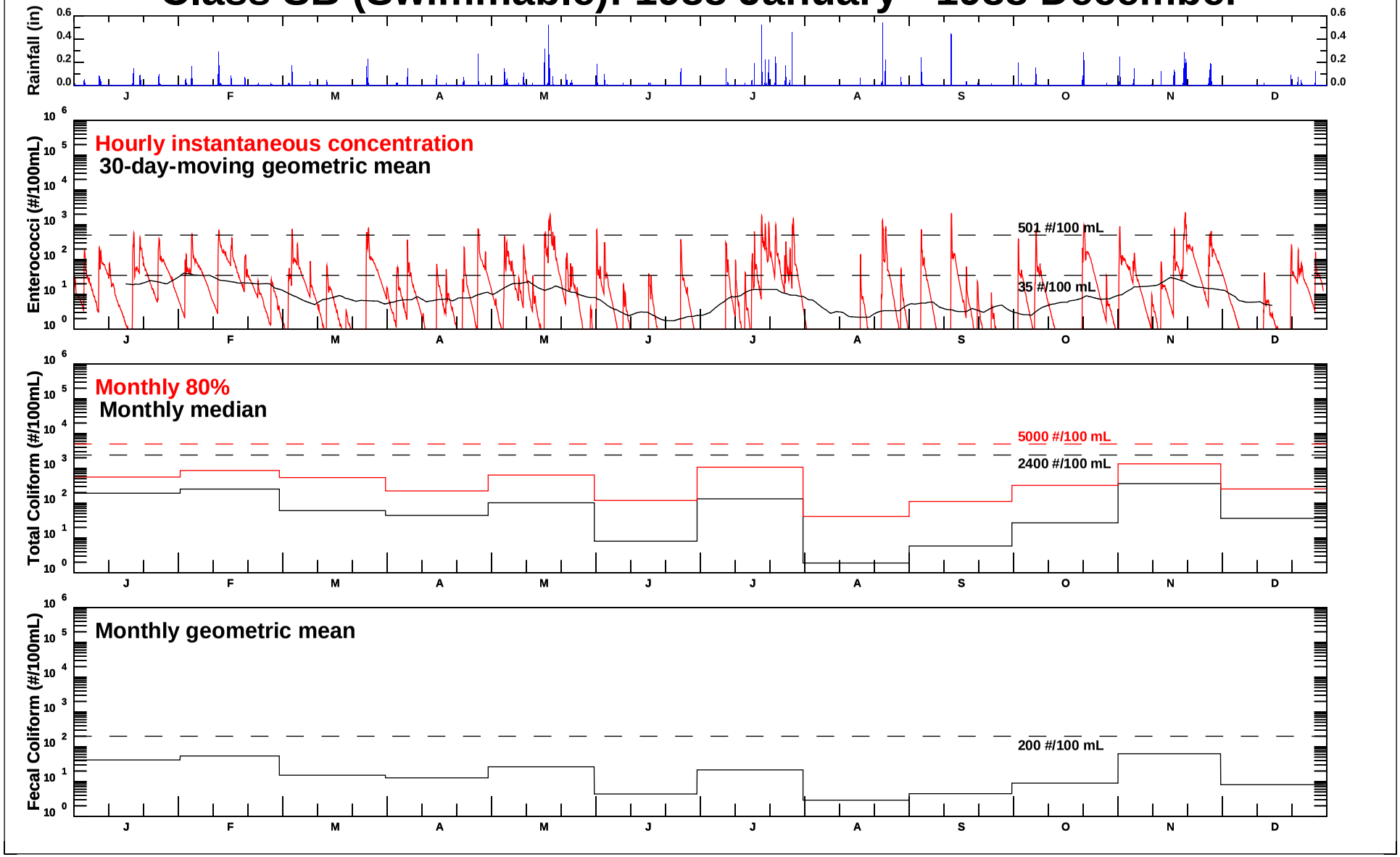


Little Neck Bay ST S02
ERTM Cell (55,21), H=2.8m

ERTM 1988 Facility Plan, RUN 197 (88-T4_AC33)

DATE: 10/03/2006 TIME: 9:38:15

Class SB (Swimmable): 1988 January - 1988 December



Little Neck Bay ST S64
ERTM Cell (53,22), H=2.7m

ERTM 1988 Facility Plan, RUN 197 (88-T4_AC33)

DATE: 10/03/2006 TIME: 9:38:17