

REF. 1994 FEIR, APPENDIX D, pg. 36

GIVEN: ① MORTALITY 1.8×10^2 TO 2.1×10^6 $\frac{\text{CM}^3 \text{ PLANKTON}}{\text{DAY}}$ (PER 1994 FEIR)

↳ THIS IS THE BASIS OF THE LESS THAN SIGNIFICANT IMPACT

② AVERAGE PLANKTON VOLUMES COLLECTED OFF ORMOND BEACH BETWEEN 1982 - 1984:

$100 \frac{\text{CM}^3 \text{ PLANKTON}}{1000 \text{ M}^3 \text{ SEAWATER}}$ TO $1,200 \frac{\text{CM}^3 \text{ PLANKTON}}{1000 \text{ M}^3 \text{ SEAWATER}}$
(PER 1994 FEIR)

③ MAXIMUM SEAWATER INTAKE FLOW @ 10,000 AFY = 15,898 gpm

↳ 10,000 AFY W/ ONE FILTER IN BACKWASH

$15,898 \text{ gpm} = \underline{22.91 \text{ MGD}}$

↳ NOTE 1994 FEIR SAYS 500,000 GALLONS PER DAY - HOWEVER - SEE FOLLOWING CALCS.

ESTIMATED IMPACT BASED ON 22.91 MGD

$$\frac{22.91 \times 10^6 \text{ GAL}}{\text{DAY}} \left| \frac{\text{M}^3}{264.17 \text{ GAL}} \right| \left| \frac{1200 \text{ CM}^3 \text{ PLANKTON}}{1000 \text{ M}^3 \text{ SEAWATER}} \right|$$

$$= 104,059 \frac{\text{CM}^3 \text{ PLANKTON}}{\text{DAY}} \quad \text{MAXIMUM}$$

$$\frac{22.91 \times 10^6 \text{ GAL}}{\text{DAY}} \left| \frac{\text{M}^3}{264.17 \text{ GAL}} \right| \left| \frac{100 \text{ CM}^3 \text{ PLANKTON}}{1000 \text{ M}^3 \text{ SEAWATER}} \right|$$

$$= 8,672 \frac{\text{CM}^3 \text{ PLANKTON}}{\text{DAY}} \quad \text{MINIMUM}$$

ACTUAL MORTALITY RANGE: 86.72×10^2 TO 0.104×10^6 $\frac{\text{CM}^3 \text{ PLANKTON}}{\text{DAY}}$

BECAUSE 86.72×10^2 TO 0.104×10^6 IS WITHIN
THE ENVELOPE OF 1.8×10^2 TO 2.1×10^6 $\frac{\text{CM}^3 \text{ PLANKTON}}{\text{DAY}}$

THE IMPACT IS STILL LESS THAN SIGNIFICANT.