Appendix E. Preliminary LDW clam sampling results, August 8, 2003

Beach 8 - 1st Ave South bridge, W side of LDW

Sample	Abundance
1	0
2	0
3	0
4	0
5	6
6	0
7	2
8	0
9	0
10	5
11	1
12	8
13	0
14	0
15	2
16	0
17	0
18	0
19	3
20	1
21	0
22	2
23	0
24	1
25	0
26	0
27	0
28	3
29	0
30	0
31	0
32	0
33	0
34	1
35	1
36	0
37	1
38	0
39	0
40	0
41	0
42	0
43	0
44	6
45	0
46	1

Each sample covered 1 square foot

Approximate area of beach sampled (N) in square feet

54000 (area will be verified later, does not affect variability calcs)

Mean number of clams per square foot sample

0.94

Total population estimate (equation 1 from QAPP)

50694 $\widehat{T} = N\widehat{\mu}$

One-half the 95% confidence interval (B; equation 2 from QAPP)

27887 $B = 2\sqrt{N^2 \frac{\sigma^2}{n}}$

Ratio of B to T

0.55

Is B more than 30% of T?

yes

number of samples needed for B to be 30% of T

(i.e., set B equal to 0.3 of T; equation 3 from QAPP)

165 $n = \frac{N^2 \sigma^2 4}{B^2}$

Beach 8 - 1st Ave South bridge, W side of LDW	
47	1
48	1
49	0

Beach 1a - Terminal 105, W side of LDW	
Sample	Abundance
50	1
51	0
52	0
53	0
54	0
55	0
56	0
57	1
58	0
59	0
60	0
61	0
62	0
63	0
64	0
65	0
66	0
67	0
68	0
69	0
70	0
71	2
72	0
73	0
74	0
75	1
76	2
77	1
78	2
79	0
80	0
81	0
82	0
83	0
84	0
85	1
86	0
87	0
88	0
89	0

Each sample covered 1 square foot

Approximate area of beach sampled (N) in square feet

57000

Mean number of clams per square foot sample

0.28

Total population estimate (equation 1 from QAPP)

15675 $\widehat{T} = N\widehat{\mu}$

One-half the 95% confidence interval (B; equation 2 from QAPP)

10790 $B = 2\sqrt{N^2 \frac{\sigma^2}{n}}$

Ratio of B to T

0.69

Is B more than 30% of T?

yes

number of samples needed for B to be 30% of T

(i.e., set B equal to 0.3 of T; equation 3 from QAPP)

211 $n = \frac{N^2 \sigma^2 4}{B^2}$