

Shore Survey Summary Data 2006-2008

| | Melissa 2008 | Sallie 2008 | Long 2007 | Wine 2008 | Sand 2006 | Big Det 2008 | Lit Det 2008* | Curfman 2007 | Glawe 2006 | Muskrat 2007 | Mill 2007 | Loon 2006 |
|--|-----------------|----------------|--------------|--------------|--------------|-----------------|------------------|-----------------|---------------|-----------------|--------------|--------------|
| Disturbance | | | | | | | | | | | | |
| Natural | 8 | 19 | | 2 | 7 | 15 | | 7 | 10 | 12 | 38 | 4 |
| Minimal | 17 | 16 | | 2 | 2 | 8 | | 16 | 4 | 5 | 11 | 4 |
| Moderate | 19 | 12 | | 0 | 1 | 68 | | 2 | 0 | 7 | 1 | 0 |
| Great | 338 | 176 | | 0 | 0 | 227 | | 0 | 0 | 2 | 5 | 0 |
| Shore features | | | | | | | | | | | | |
| wetland | 0 | 1 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| emergent | 11 | 0 | | 0 | 8 | 94 | | 25 | 12 | 27 | 6 | 6 |
| bulrush | 9 | 9 | | 0 | 6 | 5 | | 5 | 0 | 0 | 4 | 4 |
| steep slopes | 16 | 28 | | 4 | 0 | 56 | | 0 | 2 | 0 | 1 | 1 |
| Restoration | 1 | 1 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| SIZ structures | | | | | | | | | | | | |
| boat hse | 14 | 3 | | 0 | 0 | 22 | | 0 | 0 | 0 | 0 | 0 |
| storage | 12 | 19 | | 0 | 1 | 15 | | 0 | 0 | 0 | 0 | 0 |
| boat launch | 4 | 2 | | 1 | 0 | 5 | | 9 | 0 | 0 | 0 | 0 |
| screen porch | | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| deck | 10 | 9 | | 0 | 0 | 12 | | 10 | 0 | 0 | 1 | 0 |
| deck w/roof | | 0 | | 0 | 0 | 0 | | 5 | 0 | 0 | 0 | 0 |
| paved area | 3 | 7 | | 0 | 0 | 3 | | 0 | 0 | 0 | 0 | 0 |
| residence struct | 21 | 21 | | 0 | 1 | 2 | | 0 | 6 | 7 | 6 | 0 |
| other struct | 1 | 1 | | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 |
| SIZ other | | | | | | | | | | | | |
| rip-rap | 160 | 131 | | 0 | 0 | 128 | | 3 | 0 | 0 | 3 | 0 |
| sand blanket | 191 | 58 | | 0 | 0 | 107 | | 7 | 0 | 0 | 0 | 0 |
| retaining wall | 57 | 19 | | 0 | 0 | 56 | | 0 | 0 | 0 | 0 | 0 |
| Docks,boats | | | | | | | | | | | | |
| docks | 290 | 187 | | 1 | 1 | 282 | | 13 | 6 | 9 | 12 | 5 |
| rafts | 9 | 4 | | 0 | 0 | 12 | | 1 | 0 | 0 | 0 | 0 |
| lift w/cover | 113 | 86 | | 0 | 1 | 207 | | 5 | 0 | 4 | 3 | 0 |
| lift w/o cover | 171 | 199 | | 0 | 0 | 182 | | 1 | 0 | 0 | 2 | 1 |
| PWC (jet ski) | 53 | 201 | | 0 | 0 | 79 | | 0 | 0 | 0 | 0 | 1 |
| Other motorized | 191 | 49 | | 0 | 2 | 319 | | 3 | 0 | 4 | 4 | 7 |
| non-motorized | 74 | 42 | | 0 | 0 | 76 | | 3 | 0 | 1 | 4 | 0 |
| weed roller | 4 | 3 | | 0 | 0 | 15 | | 0 | 0 | 0 | 0 | 0 |
| *Pictures only for Long and Little Detroit | | | | | | | | | | | | |
| arcels | 502 | 227 | 207 | 4 | 57 | 329 | 260 | 29 | 24 | 39 | 61 | 69 |
| el Length | 36099 | 30172 | 36815 | 5383 | 11670 | 42594 | 25245 | 3922 | 4913 | 11361 | 15999 | 14428 |
| rface Acres | 1820 | 1260 | 407 | 34 | 90 | 2076 | 940 | 111 | 31 | 62 | 159 | 191 |
| ine Length | 38280 | 29300 | 32000 | 5120 | 9507 | 40900 | 25295 | 9239 | 4717 | 8982 | 18615 | 13755 |
| t frontage | 72 | 133 | 178 | 1346 | 205 | 129 | 97 | 135 | 205 | 291 | 262 | 209 |
| ocks & Lifts | 583 | 476 | | 1 | 2 | 683 | | 20 | 6 | 13 | 17 | 6 |
| 0 shoreline ft | 1.6 | 1.6 | | 0.0 | 0.0 | 1.6 | | 0.5 | 0.1 | 0.1 | 0.1 | 0.0 |
| al Boats | 318 | 292 | | 0 | 2 | 474 | | 6 | 0 | 5 | 8 | 8 |
| Surface Acres | 1.7 | 2.3 | | | 0.2 | 2.3 | | 0.5 | | 0.8 | 0.5 | 0.4 |
| ures in SIZ | 65 | 62 | | 1 | 2 | 60 | | 24 | 6 | 8 | 8 | 0 |
| atly disturbed | 67% | 78% | | 0% | 0% | 69% | | 0% | 0% | 5% | 8% | 0% |
| vith rip/rap | 32% | 58% | | 0% | 0% | 39% | | 10% | 0% | 0% | 5% | 0% |
| 1 sandblanket | 38% | 26% | | 0% | 0% | 33% | | 24% | 0% | 0% | 0% | 0% |

The District's Shoreline Monitoring Program

The PRWD Managers are committed to obtaining sufficient data to characterize water quality and to ascertain those factors which influence water quality. Such information is used by Managers to make management choices about protecting or improving water quality, and to evaluate the outcomes of these choices.

One component of the District's monitoring program is to ascertain shoreline conditions around district lakes. Shoreline conditions are known to be influential in lake water quality, and are taken into account in preparing lake management plans. Information from shoreline surveys is also used in connection with implementing the District's water management rules concerning shore impact zone developments.

The District's *Shoreline Survey* approach has evolved since 1997 when data were obtained for a dozen of the main District lakes. Several more lakes were surveyed in 1998, and re-surveys of some took place in 2001 and 2003. In 2004 photography of shoreline properties became part of the survey protocol, and since 2006 the photos have been hyperlinked to taxpayer ID numbers contained in the surveys.

The data obtained by these surveys are not strictly comparable over time. In the earlier surveys, observers were asked to make judgments about certain shoreline conditions – amount of land alteration, and lake-bottom disturbance as examples; while this approach produced valid comparative results in a single survey year, changes in personnel in subsequent years reduced the validity of year-to-year comparisons. Later the emphasis was placed on more objective measures, the presence or absence of rip-rap or docks, and other structures in the shore impact zone.

*Dick Hecock
September 18, 2008*