

Preliminary 2007 Prince William Sound MD Report

The 2007 Prince William Sound marine debris remediation project occurred in two phases. The first phase occurred from May 18 through May 20, when approximately 100 volunteers, including two Forest Service crews, and 12 support vessels cleaned shorelines on Naked, Peak, Storey, Bass, Goat, Axel Lind, Little Axel Lind, Eaglek, The Dutch Group, Lone, Bald Headed Chris, Ragged, Jenny, and No Name Island. This effort collected 740 ALPAR bags of MD and about 50% more debris too large to bag. The second phase of the cleanup began May 21 and continued through June 19 with Gulf of Alaska Keeper's 7-man field crew's continued beach cleanup in the same general area as the volunteer effort. The GoAK crew picked up another 2000 bags of debris in addition to what the volunteer effort collected and approximately 50% more debris such as plastic buckets, drums, fuel tanks, large Styrofoam blocks, nets, hawsers fishing floats, plastic pipes and numerous other large plastic items.

GoAK cleaned the shorelines on thirteen islands and associated islets during the 2007 MD project. Approximately 111 total miles of shoreline were thoroughly cleaned. The 2740 bags and other debris collected in 2007 were considerably heavier than that removed during the 2006 cleanup, because the 2007 debris contained many heavier items such as large nets, hawser, lines and high-density plastic items. We believe currents and winds segregated and deposited heavier debris on shorelines in northern PWS as opposed to lighter items along shorelines further south. Our best estimate is that the total weight of the plastic MD removed from PWS beaches during the 2007 cleanup was approximately 38 to 40 tons. GoAK hauled eighteen heavy boatloads of debris to Whittier for disposal in dumpsters.

Per mile, the island beaches in north central PWS were much dirtier than those cleaned in 2006 around the Knight Island archipelago. In 2007, GoAK removed 2740 bags (ALPAR bag equivalents) of debris from 111 miles of beach, or 24.7 bags of MD per mile. In 2006, we collected 2200 bags from 350 miles of beach, or 6.3 bags of MD per mile. Simply put, the Naked Island beaches were nearly 4 times as dirty as Knight Island beaches. The Naked Island group apparently catches large quantities of debris flushing through Hinchinbrook Entrance into PWS. The south and east sides of these islands were loaded with debris as was McPherson Passage. All these areas face the prevailing wind and currents coming from McPherson Passage.

Throughout the summer and into the fall, with the assistance of volunteers and donated vessels, GoAK conducted MD surveys on beaches in the southern portion of PWS and on northern Montague Island. Over four hundred miles of coastlines on Green, Little Green, Smith, Little Smith, Montague, Evans, Bainbridge, Ellrington and LaTouche Islands were closely surveyed for MD deposits. While significant portions of the southern PWS coastline is relatively clear of MD, there are significant deposits in nearly every area surveyed. Unexpectedly, there is much more MD deposited on shorelines within the Sound proper than there is on shorelines exposed directly to the Gulf of Alaska. That is probably so because the outer PWS coast is very high energy and most of the beaches are extremely steep. There simply are not many catchments basins in that area that would

capture and hold MD. In the Sound, lower gradient beaches with large log berms that are relatively protected from high-energy surf all seem to be heavily littered with MD. Northern areas of Montague, Green and LaTouche Islands all have extensive heavy MD deposits. All the other islands have significant MD deposits in areas away from high energy beaches.

GoAK's cleanup success is in a large part due to volunteer efforts which support our professional MD crew. GoAK relies heavily upon volunteer labor to conduct MD cleanups, surveys and monitoring projects. Including organizational time, 3200 hours of labor were donated to the May 3-day volunteer cleanup. In addition, 12 power vessels, 20 kayaks and 9 skiffs were donated to transport and house cleanup volunteers for the 3-day event, as well as use to haul collected MD.

Four donated power vessels, 4 skiffs and 6 volunteers conducted MD surveys in two trips totaling nine days in southern PWS. 380 volunteer hours and 19 donated vessel days were expended to conduct these surveys.

GoAK established 16 MD monitoring plots in PWS during the summer of 2006. Each of these areas was initially cleaned of MD in 2006. In the summer of 2007, 12 of the monitoring plots were again cleaned and all of the collected MD quantified and removed. 3 monitoring plots established on the Gulf side of Montague Island were not revisited in 2007 primarily because of weather related problems. All of the monitoring plot assessment was done with volunteer labor utilizing donated vessels. 5 volunteers using two donated vessels over 4 days spent 110 hours assessing the 12 monitoring plots.

Altogether, 3690 volunteer hours were donated to 2007 GoAK PWS MD projects. Over the course of the 2007 Prince William Sound MD projects, there were also 63 vessel days donated.