SLOW SAND FILTER
www.surferswithoutborders.org

TO PURIFY WATER FOR DRINKING

MATERIALS (BUCKET=59gal)

1. 50gal PLASTIC DRUM: WASHED
2. 5-6 BUCKETS FINE SAND: 1/6"-1/8" dia. WASHED & FREE FROM ORGANIC MATTER
3. 2 BUCKETS CHARCOAL: CRUSHED & COMPACTED W/NO STICKS
4. 2 BUCKETS GRAVEL: 1/4"-1/2" dia. WASHED & FREE FROM ORGANIC MATTER
5. ENOUGH ROCKS (2-3 BUCKETS) TO COVER OUTLET PIPE: 2"-4" dia.
6. OUTLET PIPE: PVC OR HDPE PIPE W/1/8" HOLES DRILLED EVERY 1/2" PIPE CAP
7. BULKHEAD FITTING W/FEM-THREADS
8. HOSE VALVE W/MALE THREADS

MAINTENANCE

* SOURCE WATER SHOULD BE RELATIVELY FREE OF SUSPENDED MATERIALS
* ALGAE LAYER MUST BE PRESENT & COVERED WITH WATER AT ALL TIMES FOR FILTER TO WORK
* BEST TO RUN FILTER CONTINUOUSLY
* TO MINIMIZE OVERFLOW, ADJUST INLET VOLUME TO MEET OUTLET FLOW
* WHEN OUTLET FLOW DECREASES, CLEAN FILTER BY REMOVING TOP 1"-2" OF SAND & BACK-FLUSHING WATER THROUGH OUTLET
* IT MAY TAKE SEVERAL DAYS FOR FILTER TO RE-COLONIZE ALGAE LAYER

* ALWAYS TEST WATER BEFORE DRINKING!

* SURFERS WITHOUT BORDERS ASSUMES NO RESPONSIBILITY FOR ILLNESSES RESULTANT FROM THE MISUSE OF THIS DESIGN. PLEASE BE SMART - EDUCATE YOURSELF.