SLOW SAND FILTER
TO PURIFY WATER FOR DRINKING

MATERIALS

1. 50-gal plastic drum: washed
2. 5-6 buckets fine sand: 1/8"-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"
7. Pipe cap
8. Bulkhead fitting w/fem. threads
9. 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.