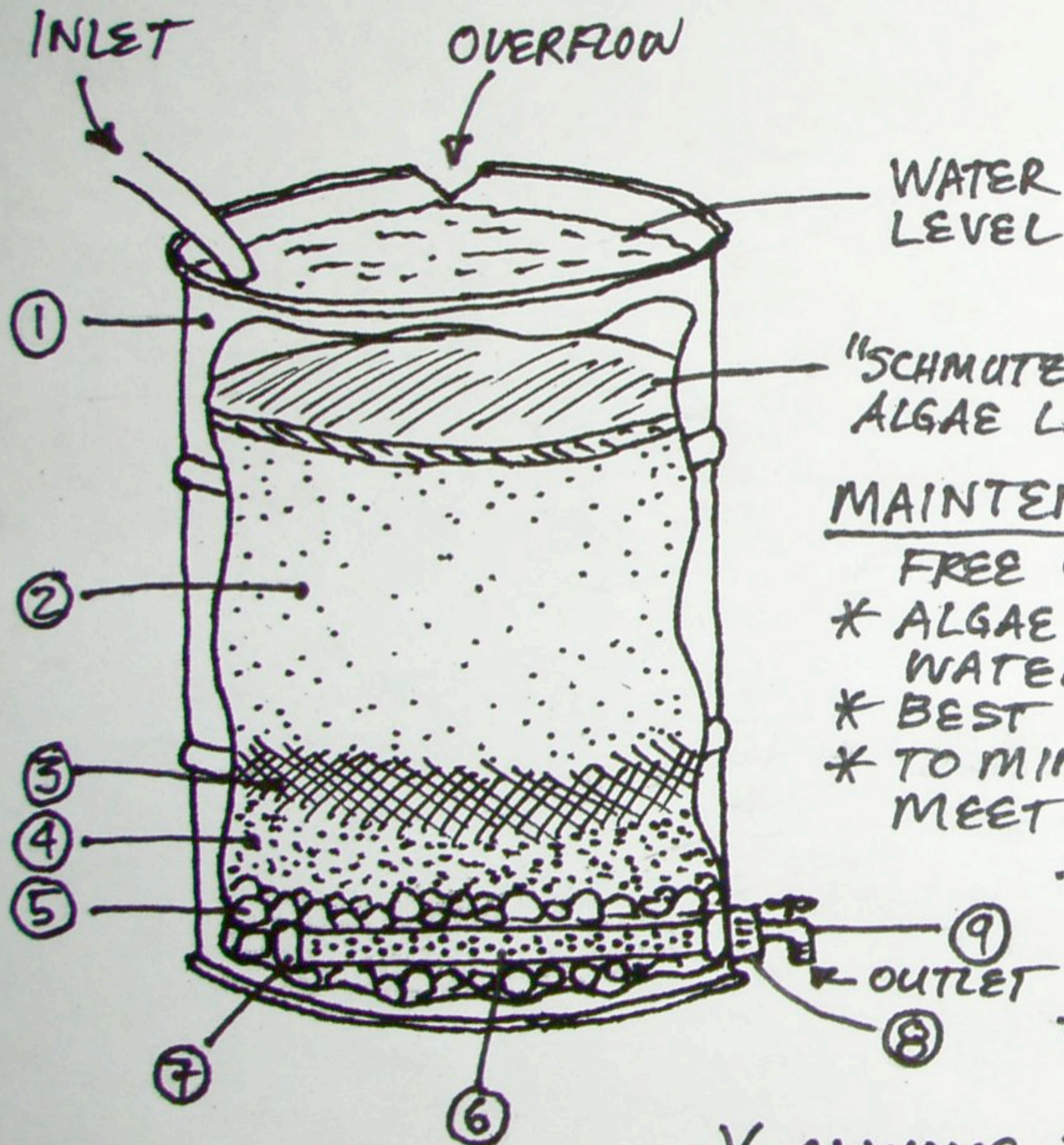


# SLOW SAND FILTER

www surferswithoutborders.org

TO PURIFY WATER FOR DRINKING



## MATERIALS (BUCKET=5gal)

- ① 50gal PLASTIC DRUM: WASHED
- ② 5-6 BUCKETS FINE SAND:  $\frac{1}{16}$ " -  $\frac{1}{8}$ " dia. WASHED & FREE FROM ORGANIC MATTER
- ③ 2 BUCKETS CHARCOAL: CRUSHED & COMPACTED W/NO STICKS
- ④ 2 BUCKETS GRAVEL:  $\frac{1}{4}$ " -  $\frac{1}{2}$ " 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/ $\frac{1}{8}$ " HOLES DRILLED EVERY  $\frac{1}{2}$ "
- 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