

FOR A CARDEN AS PLEASING TO NATURE AS TO THE EYES

A GLOSSARY OF ENVIRONMENTAL TERMS FOR "GREEN" RESIDENTIAL LANDSCAPE

<u>PLEASE NOTE:</u> ALTHOUGH MANY OF THESE TERMS MAY SEEM OBVIOUS TO THE SEASONED PROFESSIONAL, IT IS SOMETIMES WELL TO CONTEMPLATE THESE CONCEPTS, REMEMBERING THEIR VALUE FOR OUR RAPIDLY CHANGING WORLD.

FOR MUCH OF THE INFORMATION HEREIN, WE GRATEFULLY ACKNOWLEDGE REFERENCES TO H. STEVEN DASHEFSKY'S BOOK, ENVIRONMENTAL LITERACY: EVERYTHING YOU NEED TO KNOW ABOUT SAVING OUR PLANET. NEW YORK: RANDOM HOUSE, 1993; AND WIKIPEDIA.COM.

ACID RAIN: UNUSUALLY ACIDIC PRECIPITATION CAUSED PRIMARILY BY EMISSIONS OF SULFUR AND NITROGEN COMPOUNDS WHICH REACT IN THE ATMOSPHERE TO PRODUCE ACIDS.

AQUIFER: AN UNDERGROUND LAYER OF WATER-BEARING PERMEABLE ROCK OR UNCONSOLIDATED MATERIALS (GRAVEL, SAND, SILT, OR CLAY) FROM WHICH GROUNDWATER CAN BE USEFULLY EXTRACTED USING A WATER WELL.

<u>BIODIVERSITY</u>: THE VARIATION OF LIFE FORMS WITHIN A GIVEN ECOSYSTEM, BIOME, OR FOR THE ENTIRE EARTH; OFTEN USED AS A MEASURE OF THE HEALTH OF BIOLOGICAL SYSTEMS.

BIOLOGICAL CONTROL SYSTEMS: USE OF NATURAL PREDATORS TO CONTROL PESTS.

BIOFILTRATION: A POLLUTION CONTROL TECHNIQUE USING LIVING MATERIAL TOCAPTURE AND BIOLOGICALLY DEGRADE POLLUTANTS. EXAMPLES INCLUDE: BIOSWALES; CONSTUCTED AND NATURAL WETLANDS; AND LIVING WALLS.

<u>CIRCLE OF POISON</u>: REFERS TO THE SALE OF PESTICIDES BANNED IN THE U.S. BUT EXPORTED TO OTHER COUNTRIES, WHERE THEY ARE USED FOR CROPS THAT ARE THEN IMPORTED TO THE U.S. FOR SALE IN AMERICAN MARKETS, BEARING PESTICIDE RESIDUES.

 $\underline{\text{CISTERN}}$: A RESERVOIR, TANK, OR OTHER CONTAINER FOR CAPTURING AND STORING RAIN WATER

<u>CLEARCUTTING</u>: FOREST LOGGING METHOD IN WHICH EVERY TREE IS CUT, DEVASTATING THE ECOSYSTEM BY DESTROYING HABITAT, INCREASING SOIL EROSION, AND INCREASING BIOSPHERIC CARBON DIOXIDE LEVELS. OFTEN ADAPTED BY DEVELOPERS, UNDERMINING THE POTENTIAL ENERGY EFFICIENCY OF SUBSEQUENT BUILDING AND DEFACING THE CULTURAL AND PHYSICAL IDENTITY OF A SPECIFIC PLACE.

COMPREHENSIVE WATER MANAGEMENT PLANNING: INTEGRATION OF MANY AGENCIES IN COLLECTING AND ANALYZING DATA, DETERMINING PROBLEMS, AND RECOMMENDING SOLUTIONS.

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<u>COMPOSTING</u>: CONVERTING ORGANIC WASTES INCLUDING FOOD SCRAPS, GRASS CLIPPINGS, LEAVES, ANIMAL WASTES AND SEWAGE SLUDGE FOR USE AS FERTILIZER AND SOIL CONDITIONER. SOME COUNTRIES PRACTICE COMPOSTING ON A LARGE SCALE, REDUCING OR ELIMINATING THE NEED FOR LANDFILLS.

<u>CONSERVATION DISTRICTS</u>: LOCAL ORGANIZATIONS WHICH PROTECT THE ENVIRONMENTAL QUALITY OF A TOWN, CITY OR AREA; AUTHORIZED TO ASSESS ENVIRONMENTAL PROBLEMS, SET PRIORITIES, AND COORDINATE AND IMPLEMENT LOCAL EFFORTS TO ADDRESS THESE ISSUES.

<u>CRADLE TO CRADLE:</u> THE MAIN TITLE OF 2002 BOOK BY WILLIAM MCDONOUGH & MICHAEL BRAUNGART, CONSIDERS ALL MATERIALS EITHER TECHNICAL (RECYCLABLE) OR BIOLOGICAL (COMPOSTED OR CONSUMED); ADOPTING THIS CONCEPT, NOTHING IS EVER WASTED, BUT RATHER, FEEDS THE CONTINUANCE OF THE CYCLE.

<u>DEFORESTATION</u>: RAPID DESTRUCTION OF FORESTS TO MAKE WAY FOR CROPS, LIVESTOCK, TIMBER AND DEVELOPMENT; BURNING AND LOSS OF VEGETATION CONTRIBUTE TO AIR POLLUTION AND GLOBAL WARMING, LOSS OF HABITAT, REDUCED BIODIVERSITY AND SPECIES EXTINCTION. LESS THAN 7% OF THE EARTH'S TOTAL FORESTS THAT WERE STANDING IN 1950 REMAIN.

DELL: A SMALL, USUALLY WOODED, VALLEY; VALE

<u>DENIZEN</u>: A PLANT THAT APPEARS TO GROW WILD BUT IS BELIEVED TO HAVE BEEN INTRODUCED BY HUMANS FOR CULTIVATION PURPOSES (E.G. KUDZU).

DINGLE: A DEEP, NARROW CLEFT BETWEEN HILLS; A SHADY DELL.

DOMINANT SPECIES: A SINGLE SPECIES THAT IS SO ABUNDANT THAT IT DICTATES THE OVERALL CHARACTERISTICS OF THE AREA.

<u>DREDGING</u>: MECHANICAL REMOVAL AND DISPOSAL OF ACCUMULATED CONTAMINATED SEDIMENT AT THE BOTTOM OF A BODY OF WATER—OFTEN FURTHER CONTAMINATING THE WATER AND THE AQUATIC ECOSYSTEM.

<u>EFFLUENT:</u> THE DISCHARGE AND FLOW OF LIQUID WASTE INTO THE ENVIRONMENT.

EMBEDDED ENERGY: ENERGY INCLUDED BUT OFTEN OVERLOOKED IN THE PROCESS OF HARVESTING AND TRANSPORTING MATERIALS; TRANSFORMING THEM INTO USABLE FORM; AND THE ENERGY THEY CONSUME WHILE IN USE. GENERALLY, LIGHTER CONSTRUCTION MATERIALS EMBED LESS ENERGY THAN SOLID MASONRY, BUT THE LONGEVITY OF MASONRY TENDS TO OFFSET THIS ADVANTAGE. IN DEVELOPED NATIONS, RECYCLING ACCRUES ITS OWN EMBEDDED ENERGY IN THE FORM OF ENERGY EXPENDED IN SORTING, TRANSPORTING AND DISPOSING OF NON-RECYCLABLE RESIDUES IN A LANDFILL. EMBEDDED ENERGY CAN BEST BE CONSERVED BY BUILDING FOR LONGEVITY, ESPECIALLY TAKING ADVANTAGE OF OPPORTUNITIES FOR ADAPTIVE REUSE.

<u>EXOTIC SPECIES:</u> A NON-NATIVE ORGANISM, I.E. ONE THAT IS INTRODUCED INTO A NEW AREA, OFTEN AS A BIOLOGICAL CONTROL, WITH A FREQUENT RESULT OF BECOMING A DOMINANT SPECIES, DISPLACING THE HABITATS OF NATIVE SPECIES.

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EXTINCT: SPECIES NO LONGER IN EXISTENCE; OFTEN FORCED INTO EXTINCTION WHEN THEY CANNOT ADAPT TO NATURAL OR HUMAN-INDUCED CHANGES IN THEIR ENVIRONMENT.

"FARMLAND LOST": "WHEN STATES TAX LAND ON ITS 'HIGHEST VALUE USE' WHICH IS OFTEN DEVELOPMENT, MAY FARMERS CANNOT AFFORD TO CONTINUE FARMING LAND THAT IS TAXED AS IF IT WERE DEVELOPED. THUS, THE LAND SUBSEQUENTLY IS DEVELOPED. TO SAVE FARMLAND, SOME STATES HAVE CHANGED THE LAW TO ONLY TAX LAND FOR EXISTING USE."

FLOODPLAIN: LOW LAND ALONG A RIVER WHICH IS PRONE TO PERIODIC FLOODING; EXTENT IS USUALLY CLASSIFIED BY EXPECTED SIZE OF STORM, E.G THE 100 YEAR FLOODPLAIN IS THE EXTENT OF LAND THAT MAY BE EXPECTED TO FLOOD DURING THE LARGEST STORM EVENT WITHIN A CENTURY.

GLADE: AN OPEN SPACE IN A FOREST

GLEN: A SMALL, NARROW, SECLUDED VALLEY

GRASS CYCLING: "LAWN CLIPPINGS HAVE A FERTILIZER VALUE OF 5-1-3 (NPK), SO THAT IT WOULD TAKE ABOUT 2 LBS. OF FERTILIZER PER SQ. FT. TO REPLACE THE NUTRIENTS REMOVED BY THE CLIPPINGS; WHEN LEFT ON THE LAWN, CLIPPINGS DECOMPOSE AND BECOME USEFUL TO THE GROWING GRASS WITHIN A WEEK, REDUCING THE AMOUNT OF REQUIRED FERTILIZER BY 25%. CLIPPINGS SHOULD BE DRY, AND NO LONGER THAN I", WHILE THE REMAINING GRASS SHOULD BE AT LEAST 2" HIGH SO THAT THE CLIPPINGS FALL AMONG TALLER GRASS RATHER THAN ON TOP OF 1T."

GREEN MANURE: ONE OF THREE TYPES OF ORGANIC FERTILIZERS; REFERS TO ANY PLANT THAT IS TILLED INTO THE SOIL TO IMPROVE FERTILITY BY INCREASING THE AMOUNT OF ORGANIC MATTER FOR THE NEXT CROP—E.G. ALFALFA, RYEGRASS.

<u>GREEN ROOF:</u> A ROOF WITH VEGETATIVE COVER PLANTED OVER SOIL OR ANOTHER GROWING MEDIUM AND A WATER PROOFING MEMBRANE, SOMETIMES WITH ADDITIONAL LAYERS SUCH AS ROOT BARRIER AND DRAINAGE AND IRRIGATION SYSTEMS.

<u>GREY WATER:</u> NON-INDUSTRIAL WASTEWATER GENERATED FROM DOMESTIC PROCESSES SUCH AS DISHWASHING, LAUNDRY, AND BATHING, COMPRISING 50-80% OF RESIDENTIAL WASTEWATER.

GROUNDWATER: WATER THAT IS ABSORBED INTO THE EARTH'S CRUST AND STORED IN AQUIFERS; ALTHOUGH IT REPRESENTS ONLY ABOUT .5 PER CENT OF ALL WATER, IT SUPPLIES AT LEAST HALF OF ALL U.S. DRINKING WATER; OFTEN POLLUTED BY PESTICIDES, LEACHATE, AND HAZARDOUS WASTE.

<u>HABITAT</u>: A PLACE, EITHER AQUATIC OR TERRESTRIAL, WHERE AN ORGANISM LIVES AND ITS SURTVUVAL NEEDS ARE MET. MICROHABITAT REFERS TO HABITAT RESTRICTED TO A VERY SMALL AREA, SUCH AS UNDER A ROCK OR LEAF.

HARDPAN: SOIL, USUALLY IN FOREST LAND, IN WHICH LARGE AMOUNTS OF CLAY HAVE ACCUMULATED AND CREATED AN IMPERMEABLE LAYER.

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HAZARDOUS WASTE: SUBSTANCES THAT NEGATIVELY AFFECT THE HEALTH OF ORGANISMS; CAN BE CHRONIC, CAUSING CANCER, BIRTH DEFECTS OR GENETIC DEFECTS GRADUALLY OVER TIME (E.G. MERCURY OR LEAD); OR ACUTE, LETHAL THROUGH A SINGLE LARGE DOSE (E.G. CHEMICAL PLANT DISASTERS, OIL SPILLS).

["AS OF 1993, THE V.S. MILITARY GENERATED MORE HAZARDOUS WASTE ANNUALLY, INCLUDING CONTAMINATED WASTE WATER, THAN THE TOP FIVE CHEMICAL COMPANIES COMBINED. 66% OF HAZARDOUS WASTE WAS BEING DUMPED INTO OR ONTO THE GROUND IN THE NATION'S 75,000 INDUSTRIAL LANDFILLS AND 180,00 PONDS AND LAGOONS—IN ADDITION TO INNUMERABLE STEEL DRUMS IN STORAGE FACILITIES AND DEEP-WELL INJECTION SITES WHERE WASTE WAS BEING DEPOSITED TWENTY TO SEVERAL THOUSAND FEET INTO THE EARTH—ALL OF WHICH H CAN CONTAMINATE AQUIFERS."]

HEAVY METALS: NATURAL ELEMENTS SUCH AS MERCURY, CADMIUM, LEAD, CHROMIUM AND NICKEL. IN ALL, 35 ARE HEALTH HAZARDS TO HUMANS AND THE ENVIRONMENT. THEY ARE USED IN SUCH PRODUCTS AS PAINT, FUNGICIDE, GASOLINE, AND CAR BATTERIES, AND THE ELECTROPLATING PROCESS.

<u>INVASIVE SPECIES</u>: NON-NATIVE PLANTS OR ANIMALS THAT HAVE AN ADVERSE INFLUENCE— ECONOMICALLY, ENVIRONMENTALLY, OR ECOLOGICALLY—ON THE HABITATS THEY COME TO DOMINATE.

JIMSONWEED: A PLANT DISCOVERED TO NEUTRALIZE SOILS CONTAMINATED BY RADIOACTIVITY.

<u>LAWN MOWER POLLUTION</u>: "IN ONE HOUR OF TIME, A GASOLINE DRIVEN LAWN MOWER PRODUCES THE SAME AMOUNT OF HYDROCARBONS AS A CAR DRIVEN FOR THE SAME AMOUNT OF TIME. ELECTRIC LAWN MOWERS ARE A BETTER ALTERNATIVE."

<u>LEACH FIELD:</u> SEPTIC DRAIN FIELD COMPOSED OF A SYSTEM OF UNDERGROUND PERFORATED PIPE, USUALLY LAID IN A GRID PATTERN, FROM WHENCE IT CAN LEACH INTO THE SOIL.

<u>LEED</u> (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN): GREEN BUILDING RATING SYSTEM DEVELOPED BY THE U.S. GREEN BUILDING COUNCIL (USGBC), PROVIDING STANDARDS FOR ENVIRONMENTALLY SUSTAINABLE CONSTRUCTION.

<u>LIVING WALLS:</u> WALLS COMPOSED OF PRE-VEGETATED PANELS OR FABRIC SYSTEMS ATTACHED TO A STRUCTURAL WALL OR FRAME, FUNCTIONING TO COOL A BUILDING'S INTERIOR, FILTER POLLUTANTS, MAKING THE BEST USE OF VERTICAL SURFACES IN URBAN AREAS, WHERE SPACE IS LIMITED; AND IN ARID AREAS, WHERE THE WATER IS LESS LIKELY TO EVAPORATE.

MONOCULTURE: GROWING VAST AREAS OF A SINGLE CROP, POTENTIALLY INCREASING THE SPREAD OF PESTS AND DISEASES, AND REDUCING GENETIC DIVERSITY.

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NATURAL SWIMMING POOL: CHEMICAL FREE SWIMMING POOL DESIGNED INTEGRALLY WITH ITS NATURAL SURROUNDINGS SO THAT IT EMULATES A NATURAL POND; CONSISTS OF A CENTRAL DEEP AREA FOR SWIMMING AND A SHALLOWER AREA WITH A SMALL FILTER TO EXTRACT DEBRIS, AND SPECIALLY SELECTED PLANTS—OF WHICH ABOUT HALF ARE AQUATICS --FOR PURIFYING THE WATER. COOLER AND WARMER WATER ARE CIRCULATED BY MEANS OF A SMALL PUMP.

<u>NATIVE</u> (SYN. INDIGENOUS): ORGANISMS THAT ORIGINALLY LIVED IN A GIVEN AREA, AS OPPOSED TO THOSE INTRODUCED FROM ELSEWHERE.

<u>ORGANIC FERTILIZER</u>: THREE TYPES OF FERTILIZER DERIVED FROM ORGANIC MATTER, INCLUDING ANIMAL MANURE, GREEN MANURE (PLANTS PLOWED INTO THE SOIL), AND COMPOST.

<u>ORGANIC MATTER</u>: CARBON BASED MATERIAL THAT COMPOSES OR DERIVES FROM LIVING ORGANISMS.

<u>PERMACULTURE:</u> AGRO-ECOLOGICAL TERM COINED BY AUSTRALIANS BILL MOLLISON AND DAVID HOLMGREN DURING THE 1970S TO PROMOTE SELF-SUFFICIENT HUMAN SETTLEMENTS THAT REDUCE SOCIETY'S RELIANCE ON INDUSTRIAL SYSTEMS OF PRODUCTION AND DISTRIBUTION, WHICH MOLLISON IDENTIFIED AS FUNDAMENTALLY AND SYSTEMATICALLY DESTROYING THE EARTH'S ECOSYSTEMS.

<u>PERMEABLE PAVING</u> (SYN. PERVIOUS PAVING, POROUS PAVEMENT): KEY COMPONENT IN LOW IMPACT DEVELOPMENT, IN WHICH ROADS, PARKING LOTS AND WALKWAYS ARE CONSTRUCTED OF MATERIAL THAT ALLOWS STORMWATER TO PASS THROUGH IT AND INFILTRATE THE SOIL BELOW, ULTIMATELY RECHARGING AQUIFERS.

<u>PESTICIDES</u>: OVER 4 BILLION POUNDS OF PEST KILLERS ARE USED ANNUALLY WORLDWIDE, OFTEN LEACHING INTO WATER SOURCES. THEY ACCOUNT FOR OVER 50,000 CASES OF DIRECT POISONING ANNUALLY IN THE U.S. MANY OF THE TARGETED PESTS BECOME RESISTANT THROUGH NATURAL SELECTION; AND THEY ALSO KILL PREDATORS WHICH NORMALLY MAINTAIN MANAGEABLE NUMBERS OF HARMFUL PESTS;

<u>PLANT COMMUNITY</u> (SYN. BIOCOENOSIS): ALL THE INTERACTING PLANTS LIVING TOGETHER IN A SPECIFIC HABITAT.

<u>RAIN BARREL</u>: A CONTAINER USED TO COLLECT AND STORE RAINWATER RUNOFF, TYPICALLY FROM ROOFS VIA RAIN GUTTERS; STORED WATER CAN BE USED FOR WATERING GARDENS, AGRICULTURE, FLUSHING TOILETS, WASHING CARS, AND IN WASHING--REDUCING DEPENDENCE ON MUNICIPAL WATER SOURCES. IN EXTREME CASES, WHEN OTHER SUPPLIES ARE UNAVAILABLE, UNAFFORDABLE OR OF POOR QUALITY, MAY BE FILTERED FOR USE AS DRINKING WATER.

<u>RAIN CHAIN:</u> AN ALTERNATIVE TO THE DOWNSPOUT COMPONENT IN TRADITIONAL RAIN GUTTER SYSTEM; TYPICALLY, A SERIES OF METAL CUPS WITH A HOLE IN THE BOTTOM OF EACH, OR CHAIN LINKS THAT SPAN VERTICALLY, FUNNELING RAIN WATER FROM THE GUTTER TO A COLLECTION SYSTEM OR TO THE GROUND.

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<u>RAIN GARDEN:</u> CONCEPT INITIATED IN THE 1990S IN MISSOURI, CONSTITUTING A PLANTED DEPRESSION THAT ABSORBS RAINWATER RUNOFF FROM IMPERVIOUS AREAS (E.G. ROOFS, DRIVEWAYS, WALKWAYS, AND COMPACTED LAWN AREAS); SPECIAL TYPES OF PLANTS ARE SELECTED TO WITHSTAND BOTH DROUGHT AND SHORT PERIODS OF INUNDATION, THEREBY FILTERING POLLUTANTS, REDUCING RUNOFF AND FLOODING, AND IMPROVING THE QUANTITY AND QUALITY OF GROUNDWATER.

<u>REMEDIATION(OF HAZARDOUS WASTES)</u>: THE REMOVAL OF POLLUTION OR CONTAMINANTS FROM SOIL, GROUNDWATER, SEDIMENT OR SURFACE WATER FOR THE PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT, OR FROM A BROWNFIELD SITE INTENDED FOR REDEVELOPMENT. BIOREMEDIATION INVOLVES USING MICROBES THAT EAT HAZARDOUS WASTES, WHILE PHTYOPREMEDIATION USES PLANTS TO ABSORB HAZARDOUS WASTES.

<u>RUNOFF</u>: THE PORTION OF PRECIPITATION THAT IS NOT ABSORBED BY SOIL, AND WASHES AWAY. RUN-OFF FROM MAN-MADE STORM DRAINS OFTEN CONTAINS POLLUTANTS INCLUDING BUT NOT LIMITED TO GASOLINE, ROAD SALT, PLASTIC PRODUCTS, AND RESIDUES FROM FERTILIZERS AND PESTICIDES.

<u>SINK HOLE</u>: COLLAPSE OF SATURATED EARTH FOLLOWING SEVERE REDUCTION OF GROUND WATER BY DROUGHT OR WATER MINING.

<u>SLUDGE</u>: "THICK, GOOEY MASS OF MICROBES, ORGANIC MATTER, AND OTHER SOLIDS THAT IS REMOVED FROM WASTEWATER IN SEWAGE TREATMENT PALNTS; AFTER TREATMENT TO REMOVE TOXIKNS, CAN SOMETIMES BE TRANSFORMED INTO COMPOST AND BUILDING MATERIALS SUCH AS BRICK, CARDBOARD, AND PAVING MATERIALS."

"SOFT" PESTICIDES: PESTICIDES THAT DECOMPOSE INTO HARMLESS CHEMICALS WITHIN A FEW HOURS OR DAYS, NO MORE THAN 12 WEEKS AT MAXIMUM. AMONG THESE, ORGANIPHOSPHATES (OPS, ONCE FOUND IN MALATHION, DIAZINON/SPECTACIDE, FLEA COLLARS AND PEST STRIPS) ARE LESS PERSISTENT BUT MORE TOXIC; CARBAMATES ARE A BETTER ALTERNATIVE. (AS OPPOSED TO "HARD" PESTICIDES, WHICH RETAIN THEIR TOCICITY FOR 2-15 YEARS)

<u>SOIL EROSION</u>: MOVEMENT OF SOIL BY WIND OR WATER TO ANOTHER PLACE; OCCURS NATURALLY AS RUNOFF FROM STREAMS AND RIVERS, AND IS EXACERBATED BY DROUGHT OR FLOODING. IT TAKES FROM200 -1,000 YEARS TO REPLENISH ONE INCH OF TOPSOIL, WHICH CAN BE ERODED AWAY IN JUST A FEW DAYS.

<u>SOIL PROFILE</u>: VERTICAL SECTION OF SOIL REVEALING THE SOIL HORIZONS, THREE MAIN HORIZONTAL BANDS INCLUDING TOPSOIL, SUBSOIL, AND PARENT ROCK.

<u>SOIL TEST</u>: ANALYSIS OF A SOIL SAMPLE TO DETERMINE NUTRIENT CONTENT, COMPOSITION, CONTAMINANTS, AND OTHER CHARACTERISTICS. TESTS ARE USUALLY PERFORMED TO MEASURE FERTILITY AND INDICIATE DEFICIEINCIES THAT NEED TO BE REMEDIED.

SOIL TEXTURE: VARYING MIXTURE OF SOIL PARTICLES: SAND, SILT AND CLAY. THE "IDEAL" SOIL, LOAM, CONSISTS OF 40% EACH OF SAND AND SILT, AND 20% CLAY. "SANDY" SOIL IS AT LEAAST 85% SAND, AND CLAY SOILS ARE AT LEAST 40% CLAY.

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<u>STRIP CROPPING</u>: REDUCING SOIL EROSION BY ALTERNATING ROWS OF CROPS TO BE HARVESTED WITH A ROW OF COVER CROPS, TO BE CULTIVATED INTO THE SOIL, TO ABSORB RUNOFF FROM THE MAIN CROP, ENRICH THE SOIL, AND MINIMIZE THE SPREAD OF PESTS AND DISEASE.

<u>SUCCESSION, PRIMARY</u>: PROGRESSIVE STAGES OF DEVELOPMENT OCCURRING WITHIN AN ECOSYSTEM, THAT ALTER THE COMPOSITION OF THE ENVIRONMENT, PROGRESSING FROM THE SIMPLEST *PIONEER* STAGE TO THE MOST COMPLEX *CLIMAX* STAGE. *SECONDARY SUCCESSION* OCCURS WHEN AN EXISTING ECOSYSTEM IS DESTROYED BY A NATURAL OR HUMAN INDUCED DISASTER.

<u>SUSTAINABLE DEVELOPMENT</u>: AS DEFINED BY THE 1983 BRUNDTLAND REPORT, DEVELOPMENT THAT "MEETS THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS." CHARACTERIZED BY ENVIRONMENTAL, ECONOMIC AND SOCIO-POLITICAL INITIATIVES.

SUDD: A LARGE, FLOATING MASS OF PLANTS THAT CAN CLOG STREAMS, RIVERS OR DAMS.

SUSTAINABLE SITES INITIATIVE: "INTERDISCIPLINARY PARTNERSHIP BETWEEN THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, THE LADY BIRD JOHNSON WILDFLOWER CENTER, THE WHITED STATES BOTANIC GARDEN AND A DIVERSE GROUP OF STAKEHOLDER ORGANIZATIONS TO DEVELOP GUIDELINES AND STANDARDS FOR LANDSCAPE SUSTAINABILITY. THE MOTIVATION BEHIND THIS INITIATIVE STEMS FROM THE DESIRE TO PROTECT AND ENHANCE THE ABILITY OF LANDSCAPES TO PROVIDE SERVICES SUCH AS CLIMATE REGULATION, CLEAN AIR AND WATER, AND IMPROVED QUALITY OF LIFE. SUSTAINABLE SITESTM IS A COOPERATIVE EFFORT WITH THE INTENTION OF SUPPLEMENTING EXISTING GREEN BUILDING AND LANDSCAPE GUIDELINES AS WELL AS BECOMING A STAND-ALONE TOOL FOR SITE SUSTAINABILITY." (SUSTAINABLESITES.ORG)

<u>TERRACING</u>: SOIL CONSERVATION TECHNIQUE TO CAPTURE MORE WATER AND DISPERSE IT MORE SLOWLY, THEREBY DECREASING EROSON ON STEEP SITES.

TOPSOIL: LAYERS OF SOIL AT THE TOP OF THE SOIL PROFILE THAT CONTAIN LARGE AMOUNTS OF ORGANIC MATTER.

TRACE ELEMENTS: ELEMENTS ESSENTIAL TO LIFE THAT OCCUR IN MINUTE AMOUNTS (E.G. COPPER, ZINC, MAGNESIUM)

<u>URBAN HEAT ISLAND</u>: ACCUMULATED EFFECTS OF CARS, FACTORIES, FURNACES, ASPHALT, CONCRETE, STEEL, AND OTHER CONSTRUCTION MATERIALS THAT ABSORB AND RETAINS VAST AMOUNTS OF HEAT, CAUSING CITIES TO BE FIVE TO TEN PER CENT WARMER IN SUMMER THAN THE SURROUNDING COUNTRYSIDE; OFTEN CREATES A BUBBLE OVER THE CITY, WITH ITS OWN WIND CURRENTS AND MICROCLIMATE THAT TRAP POLLUTANTS.

VALE: VALLEY

<u>WATER MINING:</u> MEETING THE DEMANDS OF IRRIGATION, RESIDENTIAL, AND INDUSTRIAL USES BY PUMPING WATER OUT OF THE GRUND FASTER THAN IT IS REPLENISHED, THEREBY LOWERING THE WATER TABLE.

<u>WATER TABLE</u>: UPPER LEVEL OF THE "ZONE OF SATURATION" (THE AREA BETWEEN AN AQUIFER AND THE SURFACE OF THE EARTH) WHICH IS READILY AVAILABLE FOR HUMAN CONSUMPTION; THE ZONE OF SATURATION CONTAINS FORTY TIMES AS MUCH WATER AS ALL SURFACE WATER COMBINED.

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 $\underline{WATERSHED}$: DRAINAGE BASIN FOR A GIVEN REGION, BASED ON ITS TOPOGRAPHY AND DRAINAGE PATTERNS.

<u>WETLAND</u>: SPECIFIC TYPES OF HABITAT REPRESENTING AMONG THE HIGHEST LEVELS OF DIVERSITY IN THE WORLD, AND CONTAINING SOME OF THE MOST PRODUCTIVE AND USEFUL ECOSYSTEMS—MINIMIZING FLOODING BY STORING EXCESS WATER; BUFFERING COASTLINES FROM EROSION; AND FILTERING NUTRIENTS, THEREBY MAINTAINING WATER QUALITY IN RIVERS AND STREAMS; PROTECTED BY TENETS OF THE CLEAN WATER ACT.

<u>WIND POWER</u>: THE CLEANEST, LEAST EXPENSIVE AND MOST EFFICIENT OF ALTERNATIVE ENERGY SOURCES.

XERISCAPING: TERM COINED BY COMBINING XEROS (THE GREEK WORD FOR DRY) WITH LANDSCAPE, TO REFER TO LANDSCAPING IN WAYS THAT DON'T REQUIRE SUBSTANTIAL IRRIGATION--ESPECIALLY PROMOTED IN AREAS LACKING EASILY ACCESSIBLE SUPPLIES OF FRESH WATER. THE PRACTICE EMPHASIZES SITE SPECIFIC PLANTS WHICH ARE MANAGED FOR MINIMAL WATER LOSS FROM EVAPORATION AND RUNOFF.

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