

The "Leader" Fishy name is taken from the type of fish found in the reservoirs, the design has taken into careful consideration the guidelines as it incorporates all of the leading components of a permaculture design and satisfies most of the five leading ideals for the design .

To start the placement for this could be anywhere within the sight parameters but I chose the spot just south of the reservoir not only for its beauty but also its utility of keeping the house cool in the summer and extra reflection from the lake into the electrical system It is situated facing south east so that the winter suns warmth will be available especially to the front or the mouth of the design which is the green house the green house can produce a plethora of food crops for the kitchen located just behind the 'trumb' wall . This wall is a thick stone wall that absorbs the suns energy all day so that at night the heat can dissipate into the living space especially the kitchen and the green house.

The design is ready to catch seasonal rain run off that would be stored in underground storage tanks that could then be pumped up into the house for all the water needs such as showers, laundry and dishes. The sink water would have an additional three tier water filtration system to be sure of eliminating any contaminants, dirt or debris. The water would also serve to keep the interior landscape as well as the exterior landscape watered all the long summer season. The amount of water collected is incalculable as the rains are of short duration but usually are plentiful enough to fill the four stainless steel 3500 gal water tanks the design calls for . With a simple hand pump the water can come directly into the house for the myriad tasks we all consume water for. The grey water from laundry would go directly into the gardens where the kitchen grey water would flow into a four or five chamber water filtration system that would utilize the undissolved particles of food etc. from the kitchen feeding fish, and water plants such as water cress, lettuces, etc.

The roof would be in two basic parts the back half would be a living roof that would be accessed by the occupants so that one could stride along the ridge beam of the fishy, the leading half would be covered in Tesla, solar glass tiles so that the entire fish roof could capture the suns energy all year long storing it in a battery bank especially designed to collect and have ready the energy collected.

To make doubly sure the design is always acquiring energy it will also be fitted with 'Vortex' bladeless wind turbine that will also filter its wind caught energy into the electrical system. The vortex wands would be placed on the spine of the design to give the Fishy spines that not only look interesting and help shape the fishes spine but are also accessible for any adjustment via the spine walkway.

There would also be an opportunity to heat up water via the green house glazing allowing a latent water system that flows naturally from cool areas to warmer the action called a 'heat pump' this would ensure that the stone floors would be comfortable to walk on as the heated water would pump through the subfloor to keep the floor warm in the night channeled either through the green house or a fire place outfitted with an electric pump. this would work well as preheat for showers, cooking, and cleaning .

There seems to be a certain ease with which storage containers make their way out to the burn, we would utilize one or even two of these to rest the entire building on. either as underground pontoons or just a 10 x 20 or 40 basement storage as well as where cooling air could be circulated from bottom to top of the sculptural house for natural air circulation .

The walls would be made from up cycled material from the last burn or could be found in a myriad of places including the local vendors of building supplies. two different thoughts one would be 3/4 inch or one inch floor type panels in the shape of the roof design, or we could utilize 6x6 or 8x8 lumber for a timber frame style barn truss system to create our straw bale infill form works. in between the the posts we would stack local straw bales on edge for an "r" factored wall of r45 before it is parged . We would utilize local straw and clay and sand and lime to make a natural wall coating. with exterior walls treated with boiled linseed and beeswax while the interior would be lime paint and cactus juice mix. The exact formula would have to be worked out from local clay samples.

The building could be constructed for a larger group of three or five members or smaller ones could be made to accommodate two people .. The dimensions could multiply to encompass an entire community. The design could travel to most places incorporating the local straw, clay and plant life. The super insulated building will be easy to heat and cool as the interior could have a remaining temperate constant of 50 to 55 degrees.

