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We all want to live off the grid, free and independent. We also all love to travel, we love to garden and have a place to call home. We want our own cabin, our own place, our freedom, and a cabin. For some of us it’s simple, a cabin in the mountains, solar power, a good old truck, and a nice garden. We want to live off grid, but we also want to travel.

It’s an age old dichotomy, but we’re both homesteaders and nomads. We want a place of our own, but we also want to go see the world. We love nature, peace and quiet. We are in tune with the earth and don’t mind getting our hands dirty. We love the smell of the cool fresh breeze on a spring morning and we appreciate the little things life has to offer. We seek happiness in our homestead. We like to be well rooted like a strong oak, but we’ve also got a wanderlust.

Some of us are like tumbleweeds, blown about by the wind, transient by choice, always moving, exploring, resting in a place for a short period of time and moving on. Most of us just want a place to call our own. But the Earth is free. It’s not ours to own. We’re mere custodians, caretakers for short a time. We make our marks on the land, gouge out rows for crops, stake up fences to keep livestock in, and people out. This is not the way.

So what is? How do we do it? How do we go off grid? To do that, we must first change our outlook, view things differently, and become part of something bigger. How?

We share. We are a family. We are human. We belong to the largest family in the world. The human family. Ethnicity, religion, creed, gender, it makes no difference. We’re all cut from the same genetic cloth. Evolved throughout time to be a greatly diverse group, but still one people. All together on one planet. We’re all part of the same family.

We all belong to the human family. We’re all brothers and sisters, cousins, aunts, uncles, grandparents, great grandparents. Then there’s always the mothers. You know the kind of person I’m talking
The quintessential mom. There’s always a mom in every community in every part of the world. The one who is always there, who’s always helpful, who’s always offering, never expecting, never wanting, never asking. She’s the one who’s always there, for you, me, and everyone else. She loves unconditionally. She always seems to be able to put a smile on your face or cheer you up no matter how down you are.

Her energy seems limitless. Her goodness, love, caring and energy fill a room when she walks in. Everyone calls her mom. Because she is everyone’s mom. She’s your mom, she my mom.

Then there’s our great mother. Mother Earth. She gave birth to us. Delivered us from her womb, and gave us life. Not in a religious way mind you, or some supernatural way. But in a connected, deeply fulfilling almost spiritual kind of way. It’s appreciation. It’s caring. It’s that warm fuzzy feeling you get while standing atop a mountain overlooking the valley and you realize how small you really are. It’s that feeling you get when you realize that you are part of something much greater than yourself. Our planet. Our home.

We’ve grown in number and populated our planet...
from every ocean to every shore. From every forest and desert to every jungle and plain. The Earth is teeming with life. We are everywhere.

Yet we build borders and walls and fences and tell our fellow brothers and sisters, our family to stay out. That they are not welcome. That they would do good to heed our warnings and not trespass on ‘our land’.

We chop a section out of the earth, put up a fence and call it ours. We have a sense of ownership. That the Earth is ours to do with as we please. That we have some inherent right to section off portions of our great planet and tell others that they cannot come in.

We love the earth, but we think we own it. We are part of it, a small part of the whole. We live in a system, and ecosystem of animals and plants, air and water, forest and plain, land and sea.

Somehow in our great ignorance and rush to own, we’ve forgotten our place in the world. Some people put themselves above all. They think conquering and dominion is the way, and they are the ones who build the border, walls, and fences that divide the world into temporary sections. This is the way
of those selfish kind who do not care for others the way we do. They are the elites, the rich, who bar you from access. Who tell you you have no permission, and tell your to keep out. They put up “No Trespassing” signs. They live in perpetual competition, and seem to not understand the word cooperation.

Then there are those of us who share and cherish and love the earth. Not in a religious way, but in a caring and far-sighted way. Always living in the present, but looking forward to the future and the care of our planet.

We are the sharers of the earth. We let the earth take care of us, and we take care of the earth in return. It’s a long lasting relationship. Our family is dependent on the earth and the sun for all our resources and we realize that we’re all only temporary planetary custodians. We understand the importance of caring now so we have later.

We live for the earth and have a deep appreciation for nature. We love the outdoors, and immerse ourselves in nature and are not afraid to get our hands dirty and don’t mind dirt under our fingernails.

We plant our crops, grow our gardens, and till the
soil with knowledge and appreciation for the earth. We build cabins and homes, and open our doors to others. We share our food, our bounty and our abundance. We’re rich in life and love and we realize that true wealth is knowing the earth, enjoying it, taking care of it and sharing that joy with others in our family.

Humanity is one big family and we realize that to preserve the earth we must share or it will be chopped into bits and grinded into dust. We are all about living and growing not just ourselves, but our family.

This is why Off Grid World was created. To give, share, and grow our whole world of knowledge about living sustainably in harmony with the planet and our great family.

We’re all one. We truly are. We’re all part of one big family of human beings, billions strong.

We’re here to bring people together living a sustainable long lasting, open and free lifestyle which isn’t new at all. Native people’s from the beginning
of time have lived in harmony with the earth for thousands of years.

Now we have an opportunity to do it all again. To grow and join together, to help each other. To share our knowledge and to live that life we all want to live. A free life. A sustainable life. One where we can come and go as we please.

We all want that place to go to where we know everyone and everyone is treated like family. Where we all share what we have and where everyone helps everyone build, grow and live.

We can all live this life. It’s not just a dream anymore. It’s right here inside us all. It’s right there in front of you. All we have to do is do it.

Let’s grow together.

*** OGL ***
Having been full time off grid for over 15 years I have tried just about every type of solar panel type made so I thought I would share my advice from an off grider perspective as to which panels are best.

You have 4 basic solar panel types and each have pro's and con's based on application, efficiency and expense.

1- Chip panels. These are small panels made from pieces of a silicon wafer wired together. The Harbor Freight 45 watt kits fall into this category. Efficiency is low at about 6% and because they have more wiring involved they tend to fail over time and average about 10 years with no warranty. The set includes three 15 watt panels,
mounting frame, Controller with 12 volt and USB plugs, battery cables and two 12 volt lights. For $199 they are kind of expensive for the watt output but with the extras included it is still a good starter kit for off gridders that just want to get their feet wet with solar and will not be using the system full time.


2- Thin Film Amorphous Flexible Panels. These are used primarily for gadget charging or where weight is an issue. Efficiency is 7-13% though some claim higher. Good choice for an RV or camper where you need to keep the weight down. They stay cooler because of the thin construction and are fairly durable. No warranty for most brands and average 10 years life. They are more expensive and average $188 for a 100 watt panel.

http://amzn.to/23CMkJd

3- Polycrystalline panels. Made from larger silicon ingots cut into squares. Efficiency 13-16%. Good all around panels used by many off gridders. Can be hooked in parallel or series to boost volts up to 24 or 48. May be less efficient in very hot or cold climates than monocrystalline. Less prone to shading issues than Mono. Average
cost around $1 a watt or less in bulk. Most brands have a 25 year output warranty.

http://amzn.to/1OcmSZe

4- Monocrystaline panels. Uses a solid silicon ingot. Efficiency 15-20% with some claiming higher. Can be hooked in parallel or series for higher volts. Handles cold and hot temperatures very well. More prone to shading issues than poly.

Used in many industrial and grid tied applications. Most brands have a 25 year output warranty. Average $1.30 a watt.

http://amzn.to/24HdWzd

So those are your choices at present and I have used all of them at one time on my homestead. I started with the Harbor Freight 45 watt kit when they first came out and were expensive.

That kit ran some lights, a small DC TV and my 12 volt water pump while I lived in a camper and worked great but panels did start failing after about 10 years.

I had a 580 watt system of mix and match poly panels on my cabin for about 8 years and they are good all around panels that can stand up to the weather with a decent output. They are larger than mono panels if space is an issue.
My current system is 400 watts and four of the Renogy 100 watt monocrystaline panels are hooked up with a Bluesky MPPT controller to three 125 AH Vmaxtank AGM batts stored inside the cabin. The batts are usually recharged by 10AM on a sunny day and output is good even under cloudy skies and in cold or hot weather.

That system powers many LED lights, 12 volt water pump, laptop, flat screen TV, range hood, ARB fridge and many gadgets and rechargeable tools.

For full time off gridding I would recommend the Mono first and then poly if you have temperature extremes. The thin film flexible are good for campers and to take along as backup power or charging gadgets.

Here is my youtube video with examples of each type of panel and my own system: https://youtu.be/fl4skasaHmM

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*** OGL ***
The World is Running Out of Fresh Water

by Justin Zimmer

The NASA GRACE satellite system has been studying the Earth’s aquifer system and it’s official: we’re screwed!

We’re taking out more than Mother Nature is putting back in and most of it is evaporating or getting dumped into the oceans. GRACE has been studying the shift in the Earth’s gravitational pull when over these Aquifers (yes, we can do that, YAY SCIENCE!) over a ten year period from 2003 to 2013.

The droughts in California have aggravated the situation, but with the average global temperature rising, the equatorial regions are just going to keep getting drier, and the warmer air will be more reluctant to give up its moisture.

The Washington Post has this to say:

The world's largest underground aquifers – a source of fresh water for hundreds of millions of people — are being depleted at alarming rates, according to new NASA satellite data that provides the most detailed picture yet of vital water reserves hidden under the Earth's surface.

Twenty-one of the world’s 37 largest aquifers — in locations from India and China to the United States and France — have passed their sustainability tipping points, meaning more water was removed than replaced during the decade-long study period, researchers announced Tuesday. Thirteen aquifers declined at rates that put them into the most troubled category. The researchers said this indicated a long-term problem that’s likely to worsen as reliance on aquifers grows.

Scientists had long suspected that humans were taxing the world's underground water supply, but the NASA data was the first detailed assessment to demonstrate that major aquifers were indeed struggling to keep pace with demands from agriculture, growing populations, and industries such as mining.

“The situation is quite critical,” said Jay Famiglietti, senior water scientist at NASA's Jet Propulsion Laboratory in California and principal investigator of the University of California Irvine-led studies.
Underground aquifers supply 35 percent of the water used by humans worldwide. Demand is even greater in times of drought. Rain-starved California is currently tapping aquifers for 60 percent of its water use as its rivers and above-ground reservoirs dry up, a steep increase from the usual 40 percent. Some expect water from aquifers will account for virtually every drop of the state’s fresh water supply by year end.

For the off-grid warrior, this information directly impacts your homestead. How are you going to get the water you need if and when your well dries up? Should you be putting down roots on a property that, according to the above map, is not replenishing its aquifer fast enough to keep up with demand? Can you handle your water needs without the need to dip into the aquifers?

If you’re building this lifestyle for your children, remember that they and their children will likely be the generations most impacted by vanishing aquifers. Just imagine this future: the aquifers dry up, and the soil begins to dry along with it. Dry soils lead to dead plants...
and suddenly there is nothing to hold the topsoil together and you get dust.

With extra heat energy going into the climate, the whole system picks up momentum and you suddenly have large wind storms. Wind picks up dust and now you’ve got destructive dust storms. We get these in Arizona, and they suck, but they are also only common in the summers and the local fauna has adapted to dry conditions enough to mitigate these storms.

But in areas where nature has not had enough time to adapt, especially in large plains areas where wind picks up speed, or even turns into a tornado, dust storms can be a tragic addition to an already miserable situation. Perhaps it may be ideal to transplant native desert plants into areas that are drying out. This is blasphemy from an ecological conservation standpoint, but hey, the world is changing, and we’ve got to survive!

So, how do we solve this problem? We kind of have to, you know. California recently implemented groundwater regulations that will take 20 years to fully implement, and even then, moderation can only go so far when the number of thirsty, hungry humans isn't on a complementary decline. Obviously this water isn't just vanishing into nothingness, it's just becoming less accessible.

The moisture in the air can be collected with atmospheric water generators or wind condensers, but eventually
we're going to need to pull our drinking water right out of the oceans. Desalination takes a lot of energy though, so those technologies need to be improved and renewable energy sources need to become more efficient.

This is a global problem with many technological implications that need good innovation and engineering to solve. This is a problem for everyone, so all the makers out there, listen up: This is your chance to save the future!

We need tangible, affordable solutions to our freshwater problem that doesn't only benefit the richest nations. We also need better water management systems, and to encourage the use of drought resistant food crops that require little water to grow but can provide ample nutrition. Tepary beans, mesquite beans, squash, just look to the desert peoples of yore and how they survived in an environment with little water. There are also more efficient ways to grow crops that don't rely on spraying valuable fresh water onto large open fields of dirt.

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