



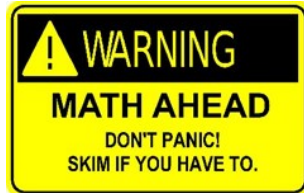
SEQUIM OPERATIONAL AREA 2022 Issue 13



A discussion on Solar Batteries/Generators

Hi, my name is **Keith Koehler**. I am the **Deputy Division Chief for the Sequim Division of CERT** here in the Sequim area. I am a retired Electrical Engineer / IT (Information Technology IE: Computer) person.

I am often asked how big do I need? We are talking about an emergency power system be it a generator or a solar power source. My answer is always "It depends on what you want to operate with this emergency power?" So, in this article we will take a look at some common items you may wish to keep powered in times of disaster and then relate that to both generators and solar systems to help you make an informed choice.



Many of us here in the Sequim area live in the rural part which means we are on a water well to supply water to our home so for us one of the items we would like to have power to is our water supply (Water Well Pump and Controls). So, lets look at the typical water well system. If you go to your breaker panel and find your water well pump power source you will read that the pump is protected by a 20 to 30 amp 220- or 240-Volt breaker.

So, the simple gross estimate of the power required is to take the voltage lets use the bigger number "240" and multiply it by the amperage so lets again use the bigger number "30", So $240 \times 30 = 7,200$ and that 7,200 is watts. Since power supplied by emergency power systems is typically measured is Kilowatts, we would take that 7,200 and divide it by 1,000 to convert to Kilowatts. So, this water well takes 7.2 Kilowatts to operate it. Now at the opposite end for this water supply system is the $220 \times 20 = 4,400$ watts or 4.4 Kilowatts for the smallest water well system.

Ok, now let's look at emergency power systems. From the numbers above we can see that our emergency power system just to operate our water well will need to be able to provide 7.2 Kilowatts of power and since a water pump is an electric motor connected to a water pump it is a motor load which means we need extra power available to allow the motor to start, so $7.2 / .75 = 9.6$ Kilowatts, so a 10-Kilowatt emergency power source is needed just to operate the water system. If you are at the lower requirement then you will need $4.4 / .75 = 5.9$ Kilowatts so a 6-Kilowatt system is needed.

FYI the .75 is a factor that is commonly used in these calculations to ensure that the power source will be able to operate the motor load. But motor loads vary widely and a more precise calculation can be made with the specific motor / pump data for your water supply system. Also, your circuit breaker is sized larger than the actual load requirement for your water pump so I would be comfortable with saying that the large water supply system is around an 8.5-Kilowatt actual requirement, but more precise calculations can be made.



So now let's look at generators. They show a running and a peak "W" or watt outputs. So, from COSTCO they have a \$970 unit that provides 8200W running and 10,000W peak that should operate our water supply system, even the large one.

Now let's look at fuel to supply it, it runs on gasoline and has a 7-gallon fuel tank, the specifications say it will run for 7.5 hours at 50% load, and as we do not run our water supply system continuously, this is likely the fuel consumption we will see. So, if we are going to operate our water supply for 30 days without new fuel supply, we will need $7 \times 30 = 210$ gallons of gasoline "Ouch" that is a lot.

**Cascadia
Rising
June 13-16
2022
Mark Your
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Let's Show
Everyone
The Results
Of All
Our Hard
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So, what about a generator that runs on propane? Well, COSTCO also sells the \$1,000 “Firman” Tri-Fuel generator that is 8450W peak and 6750W running (on Propane “LPG”) which would run our smaller water supply system but may not operate our large water supply system. The book states that the system needs 31 cubic feet an hour to operate at half load so for a 7.5-hour operational day and 30 days we would need $31 \times 7.5 \times 30 = 6,975$ cubic feet of propane “LPG” to operate the generator. So, we will need $6,975 / 35.65 = 200$ gallons of propane or $200 / 5 = 40$ barbeque bottles of propane gas. (Editor’s note: Propane has doubled in price lately!)



So, as we can see, keeping the water running is a big deal and not a small cost either. But what about a whole home unit? Let’s go back to COSTCO. They also sell the Honeywell Whole Home 22KW generator. The specification sheet says that this unit needs 2.36 gallons of propane” LPG” an hour to operate, so back to our 7.5-hour day for 30 days we need $2.36 \times 7.5 \times 30 = 531$ gallons of propane or $531 / 5 = 107$ barbeque bottles of propane gas.

Ok, what about solar? Solar units are available in several forms but let’s look first at the whole home types. These are Grid connected or not Grid connected (Grid connected allows you to sell power back to your provider) and of those systems there are those with and without local battery storage. If your unit is Grid connected without battery storage it may or may not operate without any grid power. You will need to check your specific unit for details. If your unit has battery storage the next thing is how much? Battery storage systems are rated in KWH or Kilowatt Hours which means that they can supply the rated kilowatts for one hour or 1 kilowatt for the rated hours.

So, for our water supply systems, the large system will need $(7.2 \times 7.5) / 2 = 27$ Kilowatt Hours of stored power just for water. This is 2-\$6,000 for each wall mounted battery system just for water, plus what ever else you need to run. Also be aware that your solar panels will need to be able to charge the batteries and operate the home even during over-cast days. You can reduce battery size by only operating the water system during the day when the solar panels are providing power.



Ok, what if I only want to operate my CPAP machine(s) and a small refrigerator? So, the CPAP draws 1.5 A at 110 V for $1.5 \times 110 = 165$ Watts. With 2 users in the home, that is 330 Watts. A small refrigerator draws 85 Watts so now we have a total of $330 + 85 = 415$ Watts. But let’s be practical. The refrigerator needs to run all day but the units cycle so let’s say $\frac{1}{4}$ of the day or 8 hours. The CPAPS only need to operate for 8 to 10 hours, so let’s use the middle and say 9 hours which means our system will need to supply $(330 \times 9) + (85 \times 8) = 3,650$ Watthours of power.

Goal Zero sells a solar battery/generator unit that will do this but it is \$8,000 and please always look at the charge times from the solar panels for this unit it is 18 hours with good sun so this may not do all you need.

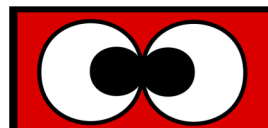
What about batteries for my CPAP? Well the units above use 104 Watts at 24 Volts DC (Battery) that means we need a battery capable of 24 Volts and $9 \times 104 = 936$ Watthours of storage capacity. The 1000WH solar battery units will provide the Watthours, but not the voltage so you are stuck getting the CPAP manufacturers battery system and finding a way to charge it or having something highly custom made. Many of the systems say that they will operate your CPAP for 2-7 days, but be careful as this may not be true for your specific machine, and when I run the math it doesn’t add up. The machine I used in the above math is the ResMed 10 which is a very common machine for most people.

So, what if I do not use heat on my hose and chamber. This will make your CPAP unit use less power but you may not be able to get the sleep you need under those conditions, IE: cold and dry air, so consider carefully. I used normal heated use in my calculations.

So, what does all this mean? Well, it depends on what you want to power from your emergency power source, and that will be different for each of us, some will need whole home, others will need minimal to no power.

I hope this has provided some clarity as to what you might need for emergency power, Fuel sourced or Solar and how much. If you are confused, seek out help when sizing and always remember the sales brochures are just that...sales brochures. They are designed to sell units and do not consider all the factors that affect the selection of the proper unit for each individual's needs.

ISN'T MATH FUN!?!



SEQUIM OPERATIONAL AREA



CITY OF
SEQUIM



Emergency Preparedness Partnership



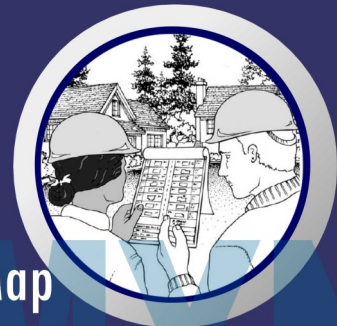
Open hearts. Open minds. Open doors.
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CLALLAM COUNTY FIRE DISTRICT 3
Eastern Clallam Co. / Western Jefferson Co.



Map
Your
Neighborhood

Cascadia Rising Challenge from Butch Zaharis, CERT 13 Deputy Captain

Walk, Walk, Walk. Are you Ready?



Cascadia Rising 2022 June 13th, 14th, 15th and 16th will be a full scale training and readiness exercise where all involved, Citizens, CERT members and agencies will test their catastrophic emergency response and mitigation strategies.

CERT members will be deployed from 0900-1300 all four days of operation. We're being asked to walk our neighborhoods and surrounding search areas then report, via radio our findings to the appropriate Divisions. Look at this as a sort of a meet and greet with folks in your area. We get to discuss preparedness, the CERT Program and leave them with food for thought in an informational brochure.

The question here is How Prepared Are You and How is your Walking stamina?

Now is the perfect time to begin a progress walking regime and be ready for our June 13th deployment. I've always found it motivating and challenging to do something like this with others. Encourage your squad's involvement so everyone is prepared.

[walking_program_handout.pdf](#) is a 12-week walking schedule from the National Heart, Lung, and Blood Institute that can start you on the path to better health and be ready. But before starting this walking plan, talk with your doctor if you have serious health issues, or if you're older than age 40 and you've been inactive recently.

Aim to walk at least five days a week. Start out warming up with a five-minute, slower paced walk. Slow your pace to cool down during the last five minutes of your walk.

Start at a pace that's comfortable for you. Then gradually pick up speed until you're walking briskly - generally about 3 to 4 miles an hour. You should be breathing hard, but you should still be able to carry on a conversation. Each week add about two minutes to your walking time. After you've tried the walking schedule for 12 weeks, aim to increase the time you're walking briskly even more, from 30 to 60 minutes a day.



Always carry your ID and a contact person's information on your person. Should anything happen that keeps you from being able to speak, first responders can call that designated person.

On The Go!! MYN Neighborhoods Getting Ready For Cascadia Rising 2022

ROYAL LOOP Neighborhood Disaster Readiness Report

Dianne Luce

The Sun Meadows/Royal Loop MYN Story

My husband and I moved to Sequim in April of 2018 from Hawaii. We were excited to plan our golden years of retirement around our three beautiful granddaughters who were fast reaching school age and lived only 90-minutes away in Edmonds.

Upon getting settled into our new Sun Meadows/Royal Loop subdivision, I was actively looking for ways to get involved with the 20+ home community and introduce myself to the neighbors. Through our church, I learned about the “Map Your Neighborhood” program and how important it was to be prepared for earthquakes in this area of the world. I was directed to Lynne Schlosser who briefed me on the process for initiating an MYN plan in Sun Meadows/Royal Loop, and we scheduled our first meeting a few weeks later.

I had fun going around and inviting the neighbors to our home for the kick-off! There was a 95% response, and not only did we have an informative session with Lynne and two accompanying CERT TEAM members, but we planned for a follow-up meeting the next month to review the preparations we had made according to MYN instructions. Again, the session was well-attended, and everyone was assigned an area of responsibility to deal with the aftermath of an earthquake.

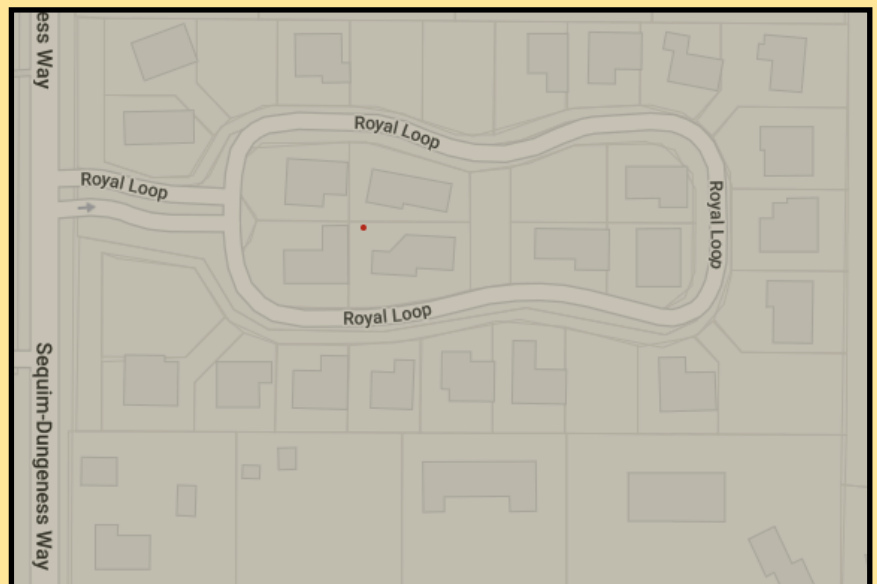
Needless to say, Covid slowed our meeting progress over the past two years, but we DID manage to squeeze in an October '21 update at Sequim Community Church (SCC) to prepare for the “Cascadia Rising” event this June! Materials were distributed to new neighbors who have moved in since our inception, and every single person has been given the opportunity to learn what they need to know in case of an earthquake! I feel good about that!!!

One lady outside our neighborhood was there as a guest, and “caught the vision” to introduce MYN to her own neighborhood! I LOVE WHEN THAT HAPPENS!

Our next planned event was back at SCC on Saturday, March 26th. Once again, I was excited to meet and greet new people into the MYN program. There is an incredible blessing in knowing you CAN make a difference by simply reaching out to touch folks in a caring way. Best of all, the “strangers” in my neighborhood are now friends!



Dianne Luce, Director
MYN Sun Meadows/Royal Loop



PHENOLOGY: NATURE'S CALENDAR

Excerpted from *The Old Farmer's Almanac—2022*

Study nature, love nature, stay close to nature. It will never fail you.

Frank Lloyd Wright, American Architect (1867-1959)

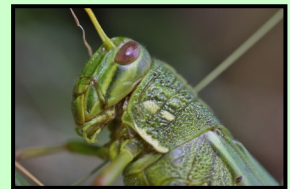
VEGETABLES

- Plant peas when forsythias bloom.
- Plant potatoes when the first dandelion blooms.
- Plant beets, carrots, kale crops (broccoli, brussels sprouts, collards) lettuce, and spinach when lilacs are in the first leaf or dandelions are in full bloom.
- Plant corn when oak leaves are the size of a squirrel's ear (about ½ inch in diameter). Or, plant corn when apple blossoms fade and fall.
- Plant bean, cucumber, and squash seeds when lilacs are in full bloom.
- Plant tomatoes when lilies-of-the-valley are in full bloom.
- Transplant eggplants and peppers when bearded irises bloom.
- Plant onions when red maples bloom.



FLOWERS

- Plant morning glories when maple trees have full-size leaves.
- Plant zinnias and marigolds when black locusts are in full bloom.
- Plant pansies, snapdragons, and other hardy annuals when aspens and chokecherries have leafed out.



INSECTS

- When purple lilacs bloom, grasshopper eggs hatch.
- When chicory blooms, beware of squash vine borers.
- When Canada thistles bloom, protect susceptible fruit; apple maggot flies are at peak.
- When foxglove flowers open, expect Mexican beetle larvae.
- When crabapple trees are in bud, eastern tent caterpillars are hatching.
- When morning glory vines begin to climb, Japanese beetles appear.
- When wild rocket blooms, cabbage root maggots appear.



Attention MYN Captains and hosts.

Plenty available.

This bag is about 14" wide and 17" tall.

The construction is good and it will hold something as wide as a helmet.

Consider for one of your underbed supply bags.

Contact Lynne or Cindy.

ATTENTION GARDENERS!

Still Available from Seller



IM4000 Dual Chamber
Tumbling Composter
37 gallon capacity
Still in the box!
Contact Lynne for more info

SANTA'S CERT HOLIDAY HELPERS by Dennis Blair, CERT 13 Echo Squad Leader

When we got our 2021 white Christmas I wondered whether my neighbors here in the Monterra Homeowners Association had what they needed to cope with the slippery stuff. After enlisting two couples who have the right vehicles and the willingness to drive to town if necessary, I contacted all of the residents on the two streets nearest me to see if they were caught short on essentials like medication and food staples. Then I remembered that there is a whole squad of nearby CERT elves who can always be counted on to assist at times like this, and of course they did after I emailed them.

Dawn Wolff, who doubles as a Monterra Board member, sent an e-blast to the rest of the Board asking the members to expedite the offers of help by contacting the residents on the four Monterra streets that I hadn't yet reached. She demonstrated her skill in creating a force multiplier by engaging the Board in this way. Veronica Weber used her car to clear paths to all of our mailboxes, while Janice Palmiter and her husband Dan pushed a U.S. Postal Service vehicle out of some drifted snow as the mail carrier made his rounds. David Iezzi volunteered by shoveling several walkways when asked.

It was an impromptu action that Echo Squad took last December, but it really showed the commitment to service that is so typical of the entire CERT organization. I'm proud of my CERT neighbors, and I thank them for coming together so spontaneously.



SOMEBODY ASKED FOR PET FUNNIES...



Wellness During an Emergency or Disaster

How to Find Hope in Hopeless Situations

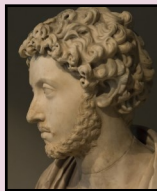
Excerpted from *Ready Nutrition* by Lisa Egan



Part of being preparedness-minded is keeping up with current events in order to be ready for anything. This means we are bombarded with bad news nearly every day. Unfortunately, this can cause our views on life to be quite bleak. Sometimes being informed makes it easy to slip into feelings of despair. And when bad times do invade our lives, it can be hard to hold on to hope. Feelings of depression and anxiety become more present than positive feelings.

“When you arise in the morning think of what a privilege it is to be alive, to think, to enjoy, to love ...”

Marcus Aurelius, [Meditations](#)



Natural disasters. Economic downturns. Personal financial problems. Civil unrest. Crime.

You are likely at least somewhat physically prepared for various kinds of disasters if you are a regular Ready Nutrition reader.

But are you *mentally* prepared?

While preparing for the worst is a positive thing – it is certainly better than being blindsided by a major event and not being ready to weather the storm – it is important to your well-being to find balance.

There may come a time when all the preparation in the world doesn't matter. Bad things DO happen, even to the best of us.

But even when the worst-case scenario becomes reality, there are ways to maintain some hope. How do you push back those dark clouds of hopelessness and find the strength to dig yourself out of the problem? How do you keep going when it seems like so much is working against you?

What is hope?

Hope is an optimistic state of mind that is based on an expectation of positive outcomes with respect to events and circumstances in one's life or the world at large. As a verb, its definitions include: “expect with confidence” and “to cherish a desire with anticipation.” Hope is not your typical form of positivity, as Barbara L Fredrickson Ph.D., explains in [Why Choose Hope?](#)

Most positive emotions arise when we feel safe and satiated. Hope is the exception. It comes into play when our circumstances are dire – things are not going well or at least there's considerable uncertainty about how things will turn out. Hope arises precisely within those moments when fear, hopelessness or despair seem just as likely. Perhaps you've just lost your job, your dreams for starting a new business or retiring. Hope, in times like these, is what psychologist Richard Lazarus describes as “fearing the worst but yearning for better.”

Hope literally opens us up. It removes the blinders of fear and despair and allows us to see the big picture. We become creative, unleashing our dreams for the future. This is because deep within the core of hope is the belief that things can change. No matter how awful or uncertain they are at the moment, things can turn out for the better. Possibilities exist. Belief in this better future sustains us. It keeps us from collapsing in despair. It infuses our bodies with the healing rhythms of positivity. It motivates us to tap into our signature capabilities and inventiveness to turn things around. It inspires us to build a better future.

Hopelessness can manifest in several ways.

In the book [Hope in the Age of Anxiety](#), psychology professors Anthony Scioli and Henry Biller discuss hope from a variety of different perspectives. They say there are nine forms of hopelessness, each related to the disruption of one or more of the basic needs that comprise hope; attachment, mastery, or survival, as Therese J. Borchard explains in her review titled [9 Types of Hopelessness and How to Overcome Them](#):



The 9 types of hopelessness listed in the book follow, along with some highlights from Borchard's ideas for overcoming them.

1. **Alienation:** Feeling isolated and cut off from society and unworthy of care and support, which can cause even more withdrawal and pain
2. **Forsakenness:** Feeling abandoned, especially during times of greatest need
3. **Uninspired:** Lack of opportunities for growth and lack of positive role models

To alleviate feelings of alienation, forsakenness, and/or being uninspired, evaluate the available evidence to see if the feeling is justified or if you are overgeneralizing or engaging in all-or-nothing thinking.

4. **Powerlessness:** Feeling a loss of control over one's life path and ability to achieve goals
5. **Oppression:** feeling subjugated by others or by society
6. **Limitedness:** Feeling deficient in some way, as if one does not have what it takes to make it in this world

Feelings of powerlessness, oppression, and limitedness can arise when we feel inadequate or doubt our talents and abilities. Create a list of all of your successes, and write down positive traits you have that disprove the idea that you are powerless.

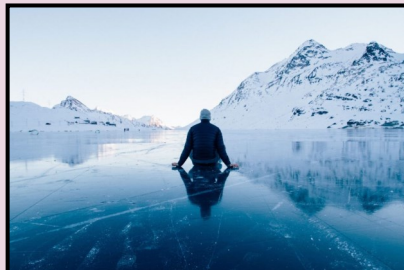
7. **Doom:** feeling that one's life is going to end, trapped in irreversible decline – those with a serious illness or suffering health effects of aging are particularly susceptible
8. **Captivity:** physical or emotional captivity enforced by an individual or group – examples would be prisoners or those who feel stuck in controlling and abusive relationships
9. **Helplessness:** feeling vulnerable, as if one is no longer safe in the world.

To manage feelings of doom, captivity, and helplessness, examine the evidence that applies to your specific situation. Spend some time doing research and evaluate the entire body of facts that you gather. If you feel stuck in a dangerous situation, seeking outside assistance is a good idea as well.

Feelings of hopelessness are often rooted in irrational self-limiting beliefs.

Hope's enemy is fear.

Frederickson emphasizes that choosing hope over fear is vital:



Hope and fear are not mere words or facial gestures. They're deeply felt neurochemical stances toward our current circumstances – stances that alter our outlooks, our actions, as well as the life paths that unfold before us.

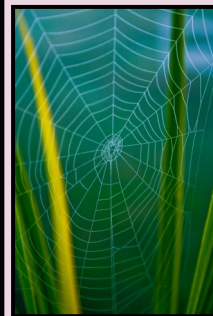
Fear is a powerful and primitive human emotion that alerts us to the presence of danger. To a certain extent, we have fear to thank for our very existence – it played a critical role in keeping our ancestors alive and still serves as a survival mechanism. Fear causes two kinds of responses: biochemical (universal) and emotional (individual).

In the article [Keeping Your Mind Present in the Midst of Chaos](#), Tess Pennington explains that in the event of an emergency, your state of mind can be more powerful than any prep you may have purchased:

It's perfectly natural to feel some panic in a life-threatening situation, but it is your ability to overcome that panic and make good decisions that will ensure the survival of you and your family.

It's important to understand what panic is. It is a collection of physical symptoms that are the human body's attempt to survive. Unfortunately, the body is acting separately from the brain, and this can have some devastating physiological effects that countermand real survival.

The symptoms of panic can be debilitating and include a pounding heart, sweating, shaking, shortness of breath, a choking feeling, chest pain or discomfort, nausea or gastrointestinal upset, feeling faint, and fear of losing control or of going crazy.



If you are focusing on being able to breathe, how are you going to deal with the actual threats surrounding you?

Having the right frame of mind to handle the stresses before and after a disaster is a key component to surviving the event, as Tess explains in [Are You Ready Series: Using Mental Preparedness to Survive](#):

When fear strikes, it causes stress and anxiety, which can lead to poor decision-making, paralysis, and hopelessness. Mental preparation creates resilience and keeps a person moving on. Maintaining a positive, hopeful attitude in the wake of a disaster can literally keep a person alive; giving them the will to keep putting one foot in front of the other.

Living in fear can cause anxiety disorders. And, in some cases, people develop a fear OF fear. Most people tend to experience fear only during a situation that is perceived as scary or threatening, but those who suffer from anxiety disorders may become afraid that they will experience a fear response. They perceive their fear responses as negative and go out of their way to avoid those responses.

Cultivating hope is the antidote to living in fear.

In the article [A Real Dose of Hope When You're Feeling Hopeless](#), Margarita Tartakovsky writes:

According to Kate Allan in her uplifting book, [You Can Do All Things: Drawings, Affirmations and Mindfulness to Help With Anxiety and Depression](#), hopelessness is simply “a misbehaving brain doing misbehaving brain stuff. It's like a bug, a glitch.”

You, too, can use your feelings of hopelessness to check in with yourself. *What do I need? Am I meeting those needs? What am I telling myself?*

Here are some other tips for building hope.

Ask for help. Are you the kind of person who wants to do it all alone? If so, remember that none of us is in this alone. You may have to muster up some courage to do this, but do consider reaching out for assistance from a friend or family member, or even an organization that offers such services.

Set goals. Although there may be aspects of your situation that you cannot control, there are likely SOME things you can do to make things a bit easier for you now or in the future. Set some goals that are realistic, and be open to changing them as needed.

Shift your focus from problems to possible solutions. Often we get so focused on what's going wrong in life that we forget about available resources – including our own skills and strengths. What CAN you do

Create a plan. Write down every possible action you can take now or in the near future to make the situation more bearable. Brainstorm with others if you can. Develop a written plan based on your goals, possible solutions, and ideas for action.

Break things down into small tasks. Once you have set goals and generated ideas for solutions and actions, break it all down into manageable tasks. Then, prioritize those tasks. Which action items need attention now, and which can wait?

Be flexible and adapt. Even the best-laid plans often don't work out due to circumstances beyond our control. Be willing to adapt and overcome as needed.



Develop equanimity. A major concept in Stoic philosophy and in Buddhism, *equanimity* is mental calmness, composure, and evenness of temper, especially in difficult situations. It refers to the mind being at peace even in the face of stressful and unpleasant experiences. Consider these wise words the late Dr. Maxwell Maltz wrote in [Psycho-Cybernetics](#), “Even in regard to tragic conditions and the most adverse environment, we can usually manage to be happier by NOT adding to the misfortune our own feelings of self-pity, resentment, and our own adverse opinions.” There may be circumstances in your life that are within your control but will take time and effort to improve. And, there may be circumstances that are NOT within your control, and never will be. Either way, meeting those circumstances with equanimity can make your life a whole lot more peaceful – and happy.

Believe in yourself. If the challenges you are facing are causing you to doubt yourself, think back to times when you have overcome obstacles and achieved success – no matter how small the instances. You have what you need within you – now, tap into it.

Value persistence and hard work. Take breaks if you can, but don't give up. simply sitting around and attempting to conjure up feelings of hope won't work – you have to take action.

Take heart in the small victories. Every little success counts. Take things day by day if you must – even moment by moment.



PREPARING ISN'T
CRAZY
IT'S COMMON SENSE

A Preparedness Guide for Women: How To Handle Birth Control After a Disaster

By Sara Tipton - Reprinted from Ready Nutrition

Because women have different needs than men, when we prepare for a post disaster scenario, we must consider those needs. In this second part of our “Prepping as a Woman” series, we will discuss birth control and how to deal with pregnancy prevention during a catastrophe.

Let's get right into another controversial, uncomfortable, but necessary topic for female preppers:

BIRTH CONTROL

The obvious answer is this problem is to stockpile prophylactics like condoms. But these have a shelf life and become less effective with age, so having a stockpile of 20-year-old condoms won't do you a whole lot of good! Another option that isn't as easy seems like it would be oh-so-simple on the surface. Just stock up on contraceptives. However, most contraceptives are only available by prescription and that makes it almost impossible to stockpile. Not only that, you will run into the same problem as you do with stockpiling condoms – if you do manage to store a year's worth of birth control pills, their effectiveness will lessen as time goes on eventually making you vulnerable to pregnancy.

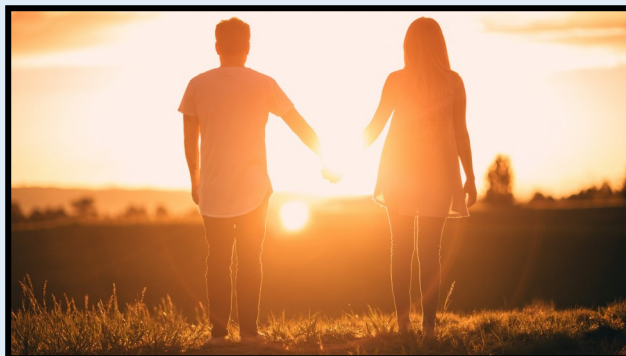
That doesn't mean if you CAN store some pills and condoms that you shouldn't, you definitely could and if it eases your mind, go for it! But you should also consider using another method to protect yourself when using older birth control pills, or when those condoms run out or expire. Fortunately, there is a natural way to prevent pregnancy that could be useful during an apocalyptic event – whether you've stockpiled contraceptives or not.

NOTE: This advice is for the female preppers who have a partner and are looking to avoid pregnancy during and after the disaster. This guide could also possibly be useful to those looking for a more natural way to prevent pregnancy as opposed to taking a pill every day.

The easiest way to use a natural birth control method may be the “thermometer” method. As far as we know, thermometers can be stockpiled pretty easily! (I only say that because I am really good at dropping and breaking things and having a backup or two might be a good idea if you are as clumsy as I am.) And, all joking aside, many women do use this as their only method of birth control choosing to go fully natural and stay away from the hormone-altering contraceptives.

The thermometer method (also often called the BBT or Basal Body Temperature method) works by using the temperature of your body upon waking in the morning. It's important to take your temperature at the same time every day, and right when you wake up for the utmost accuracy. Don't check your phone first or get up to use to the bathroom. Hold it for a few seconds so you can get an accurate reading if at all possible. The better you are at taking your temperature at the same time before doing ANYTHING else, the more accurate you will be and the more effective this method becomes.

After taking your temperature, you need to record it on a chart. You can buy some charts, print some for free off the internet, make your own, or use a smartphone app. (Obviously, you'll want to know how to track your cycle on paper too and have extra charts available in case there is no way to power your smartphone.) There are books available to help you understand where to begin and how to read your charts. [[Click here for free printable charts](#)]



SUGGESTED READING AND REFERENCE LIST - Part 1

Full Rip 9.0 - The Next Big Earthquake in the Pacific Northwest
Sandi Doughton

Cascadia's Fault - The Coming Earthquake and Tsunami that Could Devastate North America
Jerry Thompson

The Unthinkable - Who Survives When Disaster Strikes and Why
Amanda Ripley

Be Prepared, Not Scared
Michelle Jorgenson, DDS

Survival Theory - A Preparedness Guide
Jonathan Hollerman

The Prepper's Blueprint - The Step-By-Step Guide To Help You Through Any Disaster
Tess Pennington

When Technology Fails (Revised & Expanded) - A Manual for Self Reliance, Sustainability, and Surviving the Long Emergency
Matthew Stein

Crisis Preparedness Handbook - A Comprehensive Guide to Home Storage and Physical Survival
Patricia Spigarelli Aston and Jack A. Spigarelli

31 Days to Survival - A Complete Plan for Emergency Preparedness
M.D. Creekmore

Urban Survival Guide - Learn The Secrets Of Urban Survival To Keep You Alive After Man-Made Disasters, Natural Disasters, and Breakdowns In Civil Order
David Morris

LDS Preparedness Manual - V8, 2012 Edition (Volume 8.xx)
Todd Assay

The Forgotten Skills of Self Sufficiency Used by the Mormon Pioneers
Caleb Warnock

Organize for Disaster - Prepare Your Family and Your Home for Any Natural Or Unnatural Disaster
Judith Kolberg

The Disaster Preparedness Handbook - A Guide For Families
Dr. Arthur T. Bradley

Just in Case – How to be Self-Sufficient When the Unexpected Happens
Kathy Harrison and Alison Kolesar

Total Survival – How to Organize your Life, Home, Vehicle and Family for Natural Disasters, Civil Unrest, Financial Meltdowns, Medical Epidemics and Political Upheaval
James C. Jones

Things to Do, Learn & Buy This Quarter

TO DO

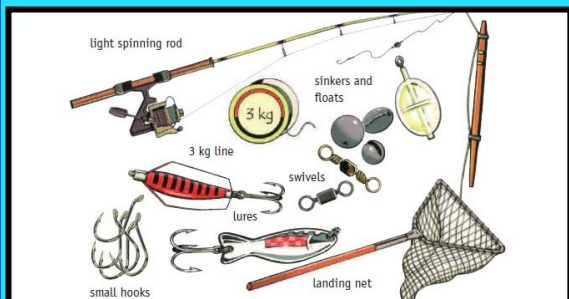
- Do the **5 minute sit and think** in each room and then correct any dangers you find
- Collect and store water in empty 2 liter soda bottles (not milk jugs)
- Get a copy of all eye prescriptions. Keep in document folder or your grab & go binder
- Declutter one closet each weekend
- Clean out garage. Everything needs to have a "home"
- Look into Map Your Neighborhood.
- Make dinner using an alternative cooking method
- Do you have enough cash on hand?
- Declutter and inventory your fishing and hunting supplies
- Read a preparedness book or real life survival story this quarter

TO LEARN

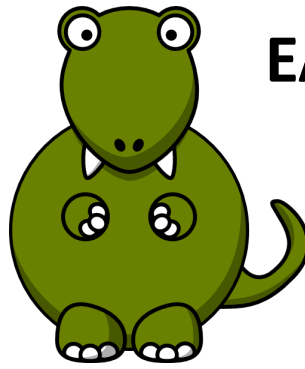
- Learn and practice several ways to make fire
- Practice collecting water from your water heater WITHOUT flooding the room it is in
- Research the size of generator you will need for your home
- Learn what size chain saw you will need and how to care for it
- Look into online yard sales or other sites for used camping & prepper items
- Learn how to manage stress and then practice it
- Learn how to make open fire cast iron skillet biscuits or cornbread
- Read about various methods of water purification & have methods in home and vehicles
- Learn about all the ways to use duct tape

TO BUY

- Find and buy a treadle sewing machine and learn how to use it
- Stock up on condiments and baking supplies this quarter
- Buy and cook with dehydrated dairy products such as butter, milk and eggs
- Purchase a crank radio and find your local emergency station
- Check thrift stores and yard sales for cold weather gear and clothing
- Stock up on soups and canned stews
- Hit the discount stores



HOW DO YOU



EAT A DINOSAUR?

The same way you prepare for an emergency or disaster: 1 bite at a time!!

What to buy in:

April

Easter candy clearance
Mustard
Cake mixes/Frosting
Organic/Natural Foods
Brown Sugar
Chocolate Chips
Food coloring & dyes
Olive Oil
Powdered Sugar
Spices
Sugar

Second Hand Stores

Winter Tires
Cookware
Auto Parts
Car Care Supplies
Sneakers
Organic/Natural Cleaners
Home Improvement Supplies
Garden Supplies
Spring Clothing
Snowblowers
Sewing Machines
Slow Cookers
Laptops
Vacuum Cleaners

May

BBQ Sauce
Salad Dressings
Chips
Soda
Bottled Water
Allergy Medications
Cat Food & Treats
Coffee
Pickles & Relish

Anything at Flea Markets

Insect Repellent/Sunscreen
Party Supplies - Disp plates,
cups, napkins &
utensils
Grill Supplies - Charcoal,
Lighter Fluid
Cookware & Knives
Mattresses
Pet Supplies
Pressure Cookers
Sewing Machines
Slow Cookers
Clearance Spring Clothing
Patio Furniture - Last Season
Refrigerators

June

Soda
Bottled Water
Allergy Medications
Condiments
Juices
Pickles & Relish
Chips
Dairy & Eggs
Hotdogs & Buns

First Aid Supplies

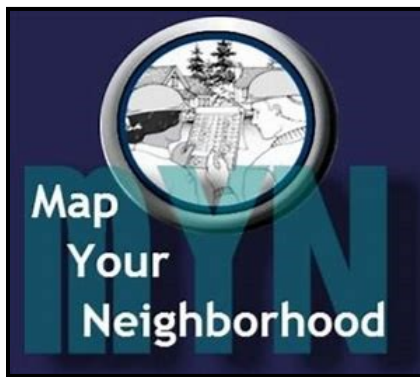
Insect Repellents/Sunscreen
Dishes
Tools - Around Father's Day
Women's Undergarments
Home Improvement Materials
Cookware & Knives
Chainsaws
Generators
Pressure Cookers
Slow Cookers
Grills & Supplies
Party Supplies
Garden/Irrigation Supplies
Garden Tools



REMEMBER: WHEN DISASTER STRIKES, THE TIME TO PREPARE HAS PASSED.



For information about upcoming 2021-2022 CERT Classes:
Contact Cindy Zechenelly at 360-504-2531
or cindyiz@hotmail.com.



Get to know your neighbors! Learn how to prepare your neighborhood for a major emergency or disaster. Meetings are scheduled weekdays, nights and weekends. Over 1300 trained so far!! For all information, contact Lynne Schlosser at lynne5977@live.com.

Our immense thanks to KSQM 91.5 FM for their support!!!

Have an idea for a future article? Want to contribute an article?

Email to Lynne Schlosser at lynne5977@live.com

Coming up in our next issue!

A message from Jeff Nicholas, CCFD3 Fire Commissioner

Meet our newest MYN Facilitators!

A Summary of Cascadia Rising 2022 - How Did We Do?

A Preparedness Guide for Women, Part 3

Wellness - The Basis for Survival: It's All in the Attitude

20 Innovative Uses for Mint Tins

Suggested Reading and Reference List - Part 2

AND LOTS MORE!!!