



*the* FOUNDATION FOR  
INFRASTRUCTURE RESILIENCE

# Get Home Bag...

## Then What?

<https://fir.foundation/>





# Focus on the Fundamentals

[60 Minutes episode about the Grid](#)

See a list of videos here: <https://fir.foundation/fir-library-threat>



- Keep in mind that you may only be able to proceed 3-10 miles per day on foot, so if you are 50 miles away, could take you 5+ days to walk home. Severe blisters can be expected. The more you carry, the more blisters.
- Please consider this information as general guidance and use your common sense based on your situation.
- Recent additional Working Group guidance is to include a bright orange safety vest, tourniquet kit, and gunshot/trauma wound dressings, short wave radio receiver to be added.

# Attitude



In Case it's for 30+ days:

## FIRST: GET HOME

You and your household must DECIDE to SURVIVE, no matter what. You must minimize the time or energy not focused on survival.

Accept what is taking place!

## **5 Stages of Grief and Acceptance:**

- 1.Denial –
- 2.Anger –
- 3.Bargaining –
- 4.Depression –
- 5.Acceptance –

# Ready.gov: Several Days only



- Water (one gallon per person per day for several days, for drinking and sanitation)
- Food (at least a several-day supply of non-perishable food)
- Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert
- Flashlight
- First aid kit
- Extra batteries
- Whistle (to signal for help)
- Dust mask (to help filter contaminated air)
- Plastic sheeting and duct tape (to shelter in place)
- Moist towelettes, garbage bags and plastic ties (for personal sanitation)
- Wrench or pliers (to turn off utilities)
- Manual can opener (for food)
- Local maps
- Cell phone with chargers and a backup battery

# Ready.gov: Several Days

- Take the Ready.gov advice and expand on it.
- Have what you need to get back home when across town
- Do you have a displacement location? Be able to get there, even on foot.
- Keep expanding in tiers of readiness until you can last 30+ days.



# Readiness Categories: Basic Fundamentals



- Water
- Hygiene
- Shelter
- Food
- Medical
- Communications
- Safety
- Pets?
- Transportation?

Basically: It's like camping at home.

You need SKILLS in each area.

Practice by camping in your back yard or a nearby park.

Better yet, if you can, take a backpacking vacation.

# Water



- Contamination types:
  - Natural
    - Sediment/debris
    - Bacteria, virus
    - Parasites
  - Man-made (**needs an activated carbon filter**)
    - Pharmaceuticals
    - Industrial solvents
    - Fuel
    - Pesticides
    - Fertilizer
    - Etc.
- Know the safer places to draw water!
  - Upstream of contamination
  - Scout hole (dig a shallow well hole near a stream or pond)
  - Prefilter as needed to remove the big stuff (use a sock or t-shirt)

# Water



- Contamination types:
  - Natural
  - Man-made
- Emergency filter (LifeStraw, etc.)
- Backpacking filter (ceramic filter, carbon filters)
- Kitchen table top filters: can't handle sediment

# Suggested Tiers



- 24 Hours
- 3 Days
- 10 Days
- 30 Days
- 90 Days
- 6 Months
- 1 Year

Get Home Bag: yes, 1-3 days

Home Readiness

Provide for each readiness category, for each Tier

# 24 Hours



- **Water:** water storage or filtration (up to 1-2 gallons per day per person)
- **Hygiene:** common COVID type hygiene
- **Shelter:** your car, workplace, school, or at home
- **Food:** could make it with no food
- **Medical: Most could make it without medication**
- **Communications:** What is the plan if internet and phones are out?  
Hand crank emergency radio (AM/FM/Emergency Band)
- **Safety:** “Normal” items only. Flashlight and batteries. Candles. Expect typical power outage issues, but maybe no 911 services
- **Cash:** Minimum- A few hundred dollars in small bills

# “Get Home” bag: 48 hours



- **Water:** hiking style water storage and filtration
- **Hygiene:**
  - Common COVID type hygiene
  - Toilet paper/sanitary wipes
  - Anti-diarrhea meds
- **Transportation/Shelter:**
  - Comfortable rain proof backpack
  - Portable folding cart or suitable wheeled dolly
  - Your car, tent, or rain suit
  - Very comfortable walking shoes
  - Season specific outdoor clothing
  - Extra socks
  - Multiple means to make a fire (lighter, Fresnel lens, tinder)
- **Food:**
  - Recommend 4,000 calories per day
  - 6,000 calories if harsh winter
  - Could make it with no food
- **Medical:**
  - Most could make it without medication
  - Basic first aid kit
  - Blister kit
- **Communications:**
  - What is the plan if internet and phones are out?
  - Hand crank emergency radio (AM/FM/Emergency Band)
- **Safety:**
  - Flashlight and a backup light
  - Map
  - Typical power outage issues, but maybe no 911 services
  - No traffic lights
  - No police
  - Pass through rough neighborhoods/looting/riots
  - Fire
  - Downed electrical lines
  - Flooding
  - Bad weather
  - Nuclear fallout
  - Self Defense: be practiced and know how to avoid trouble.
- **Cash:**
  - A few hundred dollars minimum
  - Divide it up into more than one location in case you get mugged.

# “Expedition” bag: 5+ days

- **Water:** hiking style water storage and filtration
- **Hygiene:** x 5 Days
  - Common COVID type hygiene
  - Toilet paper/sanitary wipes
  - Anti-diarrhea meds
  - Bivy Shovel (do your business in a hole)
- **Transportation/Shelter:**
  - Comfortable rain proof LARGE backpack
  - Portable folding cart or suitable wheeled dolly
  - Your car, tent, or rain suit
  - Very comfortable walking shoes
  - Season specific outdoor clothing
  - Extra socks
  - Multiple means to make a fire (lighter, Fresnel lens, tinder)
- **Food:** x 5 Days
  - Recommend 4,000 calories per day
  - 6,000 calories if harsh winter
  - Camp stove/cook pot/fuel
  - Could make it with no food
- **Medical:**
  - Medication
  - Advanced first aid kit
  - Blister kit
- **Communications:**
  - What is the plan if internet and phones are out?
  - Hand crank emergency radio (AM/FM/Emergency Band)
- **Safety:**
  - Flashlight and a backup light
  - Maps and more maps
  - Typical power outage issues, but maybe no 911 services
  - No traffic lights
  - No police
  - Pass through rough neighborhoods/looting/riots
  - Fire
  - Downed electrical lines
  - Flooding
  - Bad weather
  - Nuclear fallout
  - Self Defense: be practiced and know how to avoid trouble.
- **Homesteading**
  - Tent or tarp
  - Camp saw to help build a shelter or fires
- **Cash:**
  - A few hundred dollars minimum
  - Divide it up into more than one location in case you get mugged.



Here's the backpack along with the individual bags, cookset, sleeping bag, and tent:



[https://graywolfsurvival.com/66545/  
how-to-build-ultimate-25-pound-  
bug-bag/](https://graywolfsurvival.com/66545/how-to-build-ultimate-25-pound-bug-bag/)

(looks like this website is no longer  
here)

| Recommended Item                                      | Weight |
|---|--------|
| Pack, Osprey Atmos 65, Large – Graphite Grey          | 3.78   |
| Bag, Survival-Tools*                                  | 2.6    |
| Bag, Electronic*                                      | 2.45   |
| Mtn Hardwear Sleeping Bag/ Compression Dry Sack, XS   | 1.92   |
| Bag, Clothing*  | 1.83   |
| Hatchet, Fiskars/Sheath                               | 1.56   |
| Cook Set*   | 1.5    |
| Bag, Hygiene-Toiletries*                              | 0.98   |
| Bag, Medical*   | 0.96   |
| Rain Jacket/Wind Breaker, lightweight, summer         | 0.79   |
| Knife, SOG Pup with sheath, stone, Doan's ferro/magn  | 0.77   |
| Emergency Blanket, Large                              | 0.74   |
| Sandals, Airwalk                                      | 0.64   |
| Radio, Ham, Yaesu VX-6R/Clip                          | 0.56   |
| Multitool, Gerber                                     | 0.51   |
| Fuel, Alcohol, Heet, Yellow, 8oz in squeeze container | 0.46   |
| Slingshot and rounds                                  | 0.34   |
| Lantern, Solar, Luci inflatable                       | 0.22   |
| Cup, titanium, Snow Peak H450                         | 0.22   |
| Gloves, white leather                                 | 0.2    |
| Towel, microfiber, McNett, Medium                     | 0.2    |
| Bowls, Fozzils, pair                                  | 0.18   |
| Flashlight, Fenix LD12 and AA battery                 | 0.18   |
| Hat, Boonie Cap                                       | 0.16   |
| Rope, 750 cord, 25'                                   | 0.14   |
| Flashlight, Zebra Light, SC52w L2 and AA battery      | 0.14   |
| Trowel, Orange  | 0.11   |
| Compass, Suunto                                       | 0.1    |
| Sawyer Mini and straw                                 | 0.1    |
| Antenna, ham radio, SRH77CA                           | 0.09   |
| Goggles, Swimming                                     | 0.09   |
| Handkerchief, Green, Harley Davidson                  | 0.07   |
| Condor Multi-wrap Neck Gaiter                         | 0.07   |
| Sunscreen, 1 oz                                       | 0.07   |
| Spoon, Titanium, long                                 | 0.05   |
| Earplugs with Case                                    | 0.05   |
| Spatula, Folding                                      | 0.04   |
| Finem Tea Steeper                                     | 0.04   |
| Light, Keychain                                       | 0.03   |
| Light, Keychain                                       | 0.03   |
| Fresnel Lens  | 0      |
|   | 24.07  |



# Longer Term Readiness



[60 Minutes: Former head of the NSA](#)

[Chinese infrastructure hacking could only be to prepare for war](#) (approx. 13 min)

[FBI Director- China cyber and our infrastructure](#) (approx. 6 min)

[60 Minutes episode about the Grid](#) (approx. 15 min)

[Grid Down Power Up trailer](#) (approx. 2 min)

[EIS Council Black Sky Event](#) (approx. 15 min, a bit dated, but makes good points)

[Extreme Solar Weather can create long term blackouts](#) (approx. 5 min)

[General John Wickert: China threat and the grid](#) (see the 27:45 - min mark, approx. 40 min total)

[Failure to defeat Russia opens the door for China to seize Asia, expert warns](#) (approx. 7 min)

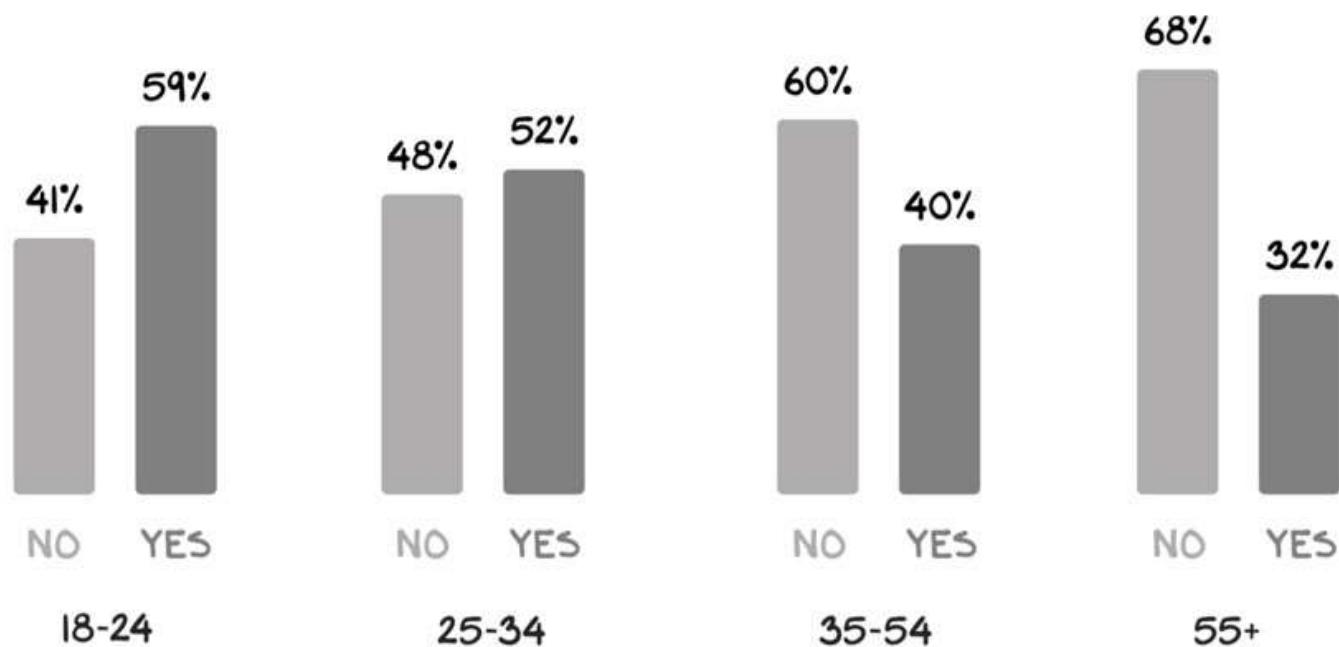
[Grid Down Power Up Documentary](#)  
(narrated by Dennis Quaid)

**Watch these videos!**



## SHARE OF AMERICANS PREPPING FOR A DOOMSDAY SCENARIO

BY AGE, MARCH 2023



\*YES / PLANS TO

\*NO, AND I HAVE NO INTENTION TO

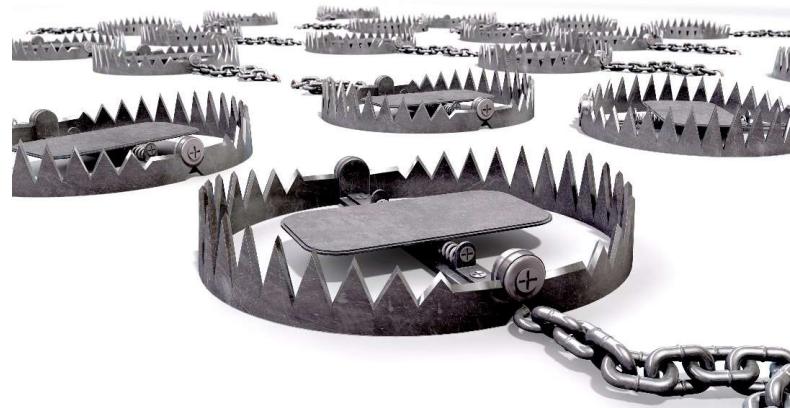
SOURCE: CIVIC SCIENCE

<https://www.profgalloway.com/quitters/>

# The TRAP / Misconception



- All power outages will be geographically localized ...
- Utility companies will always send an army of workers to fix the problem ...
- Power outages, though VERY disruptive, will have a finite, predictable duration ...
- Our neighbors, the State and the federal government will send the cavalry ...



# The REALITY



- Power can go out over very large areas ...
- Not all power outages will yield to an army of utility workers ...
- There are threats scenarios where power will be out for weeks, months, years ...
- Fact is that the cavalry may not come riding over the hill to save us

...



**What you have RIGHT NOW  
may be all you're going to  
have for a while!**



# Conclusion



- The threats are real ...
- The consequences are significant (potentially devastating) ...
- We are not prepared ...

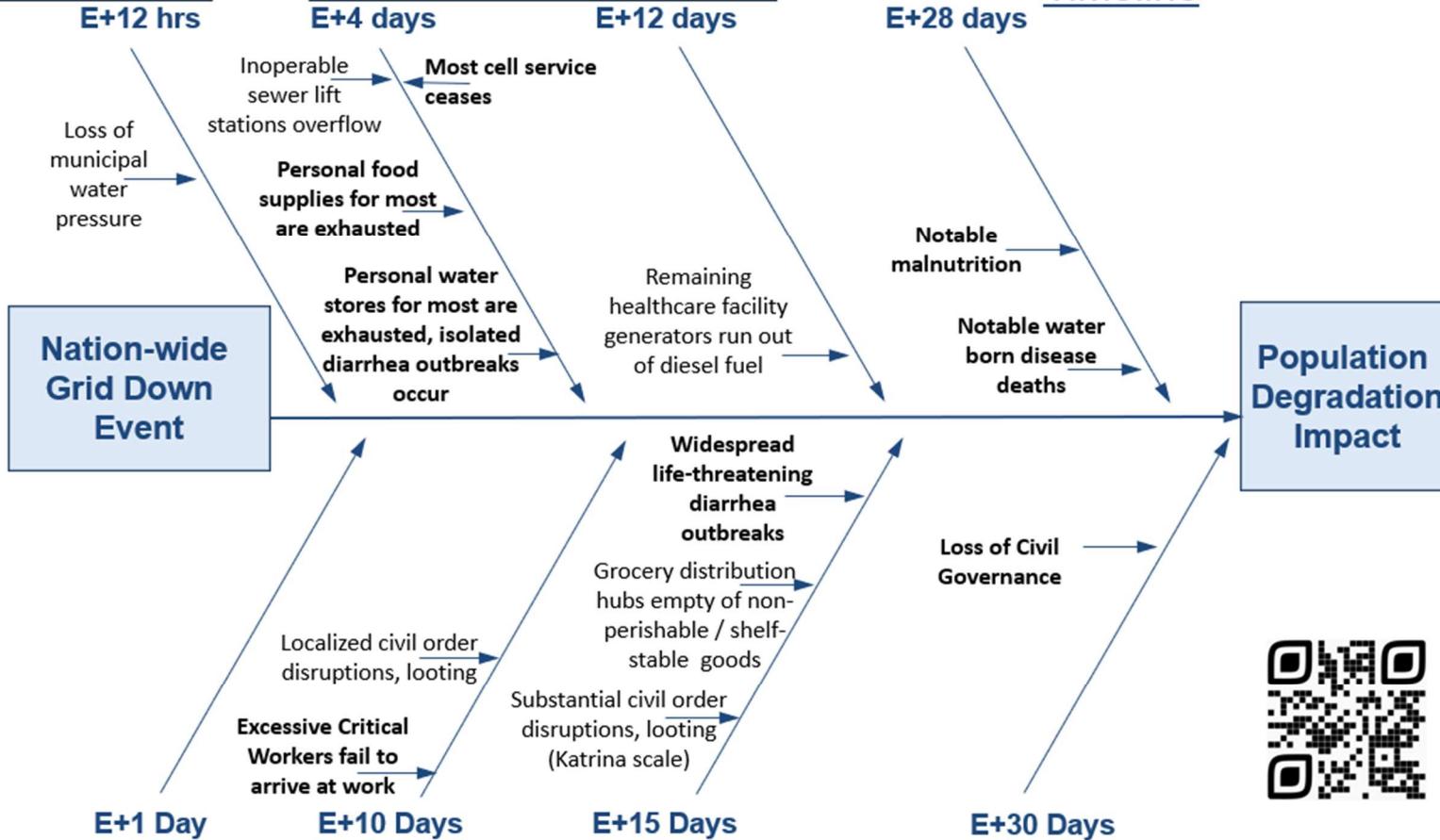
**The United States is vulnerable to a long-term wide spread electric grid failure**

- Weeks
- Months
- or longer



Notional: For Discussion  
Purposes Only

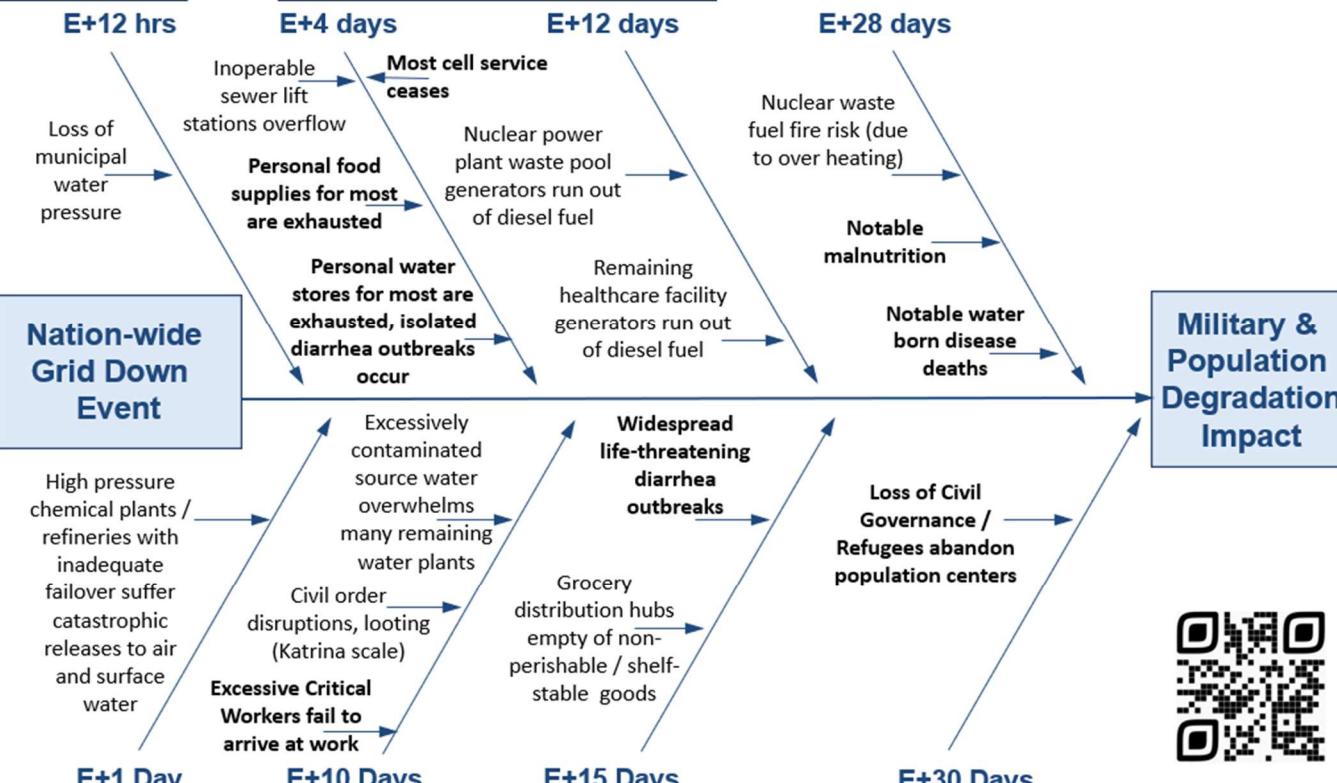
### 30- Day Household Readiness Timeline



- This is the current risk given the state of infrastructure today

Note: this timeline is notional and intended for general awareness purposes. Actual cascading consequence results will vary.

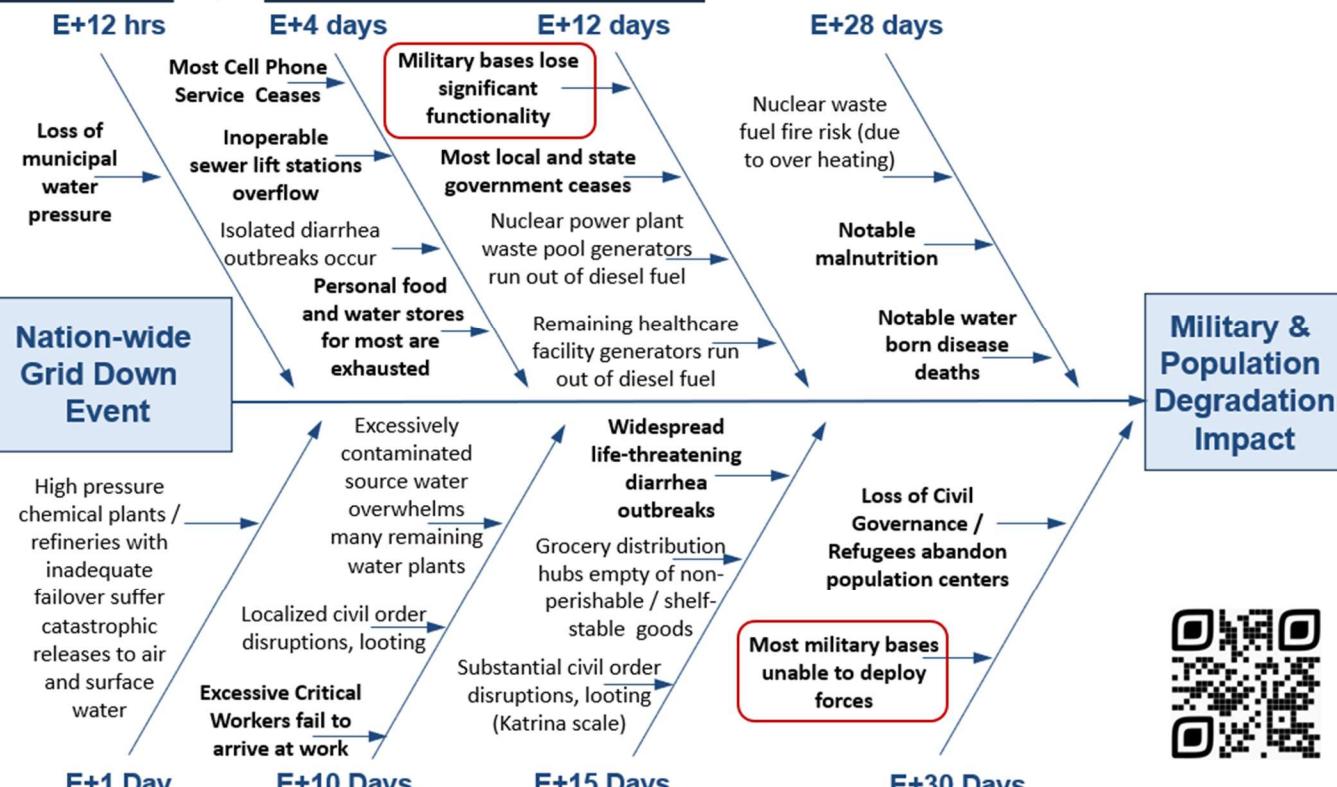
# Overview: as shown to civil policy makers



- This is the current risk given the state of infrastructure today
- Multiple threats can halt electricity in any nation, nationwide
- This timeline is the potential outcome of a scenario in the war plans of several nation-state adversaries, where the entire national electrical supply is extinguished
- Also possible given a Carrington level solar storm



# Overview: as shown to military policy makers



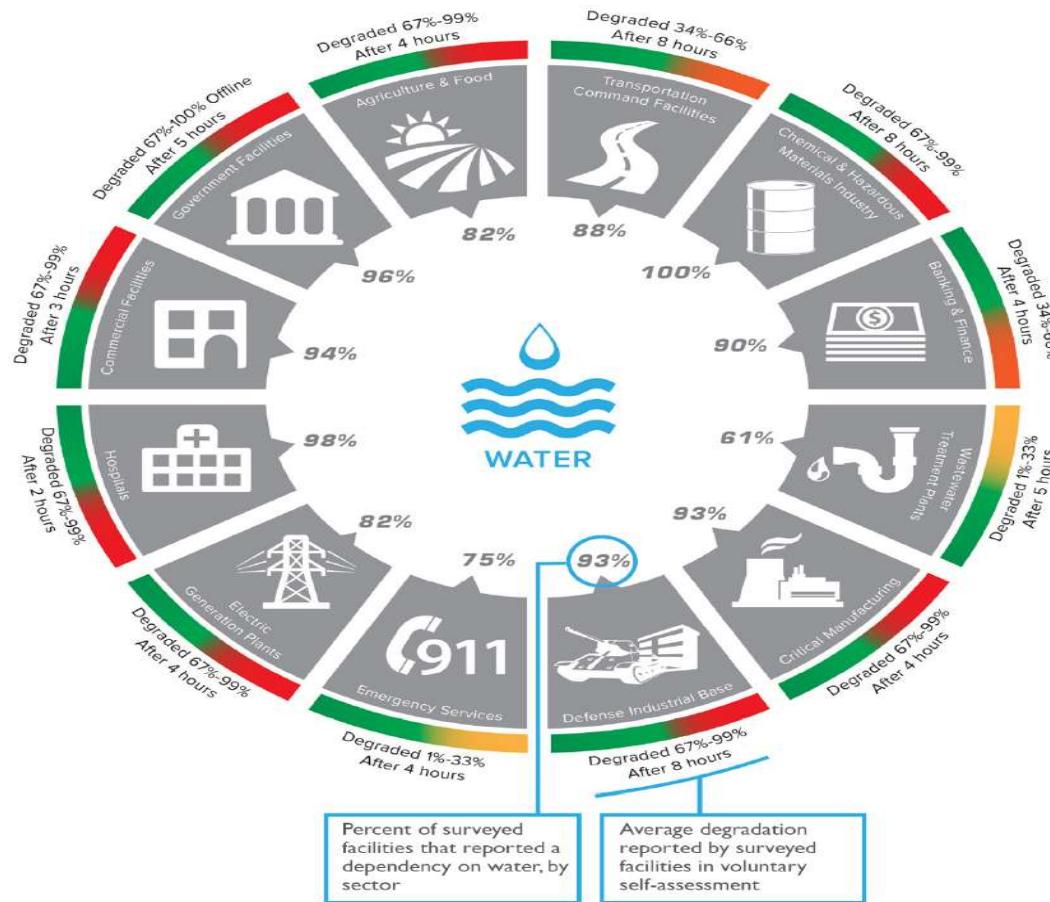
- This is the current risk given the state of infrastructure today
- Multiple threats can halt electricity in any nation, nationwide
- This timeline is the potential outcome of a scenario in the war plans of several nation-state adversaries, where the entire national electrical supply is extinguished
- Also possible given a Carrington level solar storm



# If NO Electrical Power, Water is an Major Issue



**National  
Infrastructure  
Advisory  
Council  
(NIAC) Critical  
Infrastructure  
Dependence  
on Water and  
Potential  
Function  
Degradation  
following  
Loss of Water  
Services**



# Our infrastructure relies on equipment that is at risk.



| Equipment at Risk                               | Regional EMP (Nuclear) | Major Solar Storm | Cyber | Coordinated Physical Attack | Radio Frequency Weapons | Pandemic | Major Earthquake | Assumptions: Nationwide Effect   |
|---|------------------------|-------------------|-------|-----------------------------|-------------------------|----------|------------------|--|
| Transformers                                    | R-Y                    | R-Y               | Y     | Y                           | Y                       | G        | Y                |  |
| Transformers Offline                            | Y                      | G                 | G     | G                           | G                       | G        | G                |  |
| Generator Stations                              | R                      | Y                 | R     | Y                           | Y                       | Y        | Y                |  |
| Generators Offline                              | Y                      | G                 | R     | Y                           | Y                       | Y        | Y                |  |
| SCADA/Industrial Controls                       | R                      | R                 | R     | Y                           | Y                       | G        | Y                |  |
| Utility Control Centers                         | R                      | Y                 | R     | Y                           | Y                       | Y        | Y                |  |
| Fiber Optic Repeaters                           | R                      | Y                 | R     | Y                           | Y                       | G        | Y                |  |
| Cell Sites, Cable                               | R                      | R                 | R     | Y                           | Y                       | G        | Y                |  |
| Unplugged Cell Phones and Tablets               | G                      | G                 | G     | G                           | G                       | G        | G                |  |
| Emergency Radio Broadcast                       | G                      | G                 | G     | G                           | G                       | G        | G                |  |
| Emergency Radio 2-way Communications            | Y                      | Y                 | Y     | G                           | G                       | G        | G                | National Guard and state Emergency Management will be functional, many HAM Radios may function |
| Emergency LEO Satellite Communications (SATCOM) | R                      | G                 | Y     | G                           | G                       | G        | G                |  |
| Internet  | R                      | R                 | R     | Y                           | Y                       | Y        | Y                |  |
| GPS Satellites                                  | Y                      | Y                 | R     | G                           | G                       | G        | G                |  |
| GPS Control Stations                            | Y                      | Y                 | R     | G                           | G                       | G        | G                |  |
| GPS Receivers                                   | R                      | Y                 | R     | G                           | G                       | G        | G                |  |
| Transportation Control Networks                 | R                      | R-Y               | R     | G                           | G                       | Y        | Y                | East Coast and Gulf Ports disabled; air traffic, pipelines, trains, trucks affected            |
| Gasoline Powered Automobiles                    | Y                      | G                 | G     | G                           | G                       | Y        | Y                | Most passenger cars can be restarted   |
| Diesel Trucks                                   | Y                      | G                 | G     | G                           | G                       | Y        | Y                |  |

| Equipment at Risk                      | Regional EMP (Nuclear) | Major Solar Storm | Cyber | Coordinated Physical Attack | Radio Frequency Weapons | Pandemic | Major Earthquake | Assumptions: Nationwide Effect                                 |
|--|------------------------|-------------------|-------|-----------------------------|-------------------------|----------|------------------|--|
| Water                                  | R                      | Y                 | R     | R                           | Y                       | Y        | Y                | 42 Utilities serve 80% of U.S.                                 |
| Wastewater                             | R                      | Y                 | R     | R                           | Y                       | Y        | Y                |  |
| Financial Services                     | R                      | R                 | R     | Y                           | Y                       | Y        | Y                | Communications to transaction clearing houses disabled         |
| Agriculture                            | R                      | G                 | G     | G                           | G                       | Y        | Y                | Disruption of digital farming, chemical delivery, distribution |
| Healthcare                             | Y                      | Y                 | R     | Y                           | Y                       | Y        | Y                |  |
| Data Centers                           | R                      | Y                 | R     | Y                           | Y                       | Y        | Y                | Loss of Eastern U.S. region                                    |
| Chemical                               | R                      | Y                 | R     | Y                           | Y                       | Y        | Y                | East Coast and Gulf refineries affected                        |
| Unprotected Microgrid                  | R                      | Y                 | R     | Y                           | Y                       | Y        | Y                | Microgrid power lines are less than 2-3 km long                |
| Microgrid (Hardened for EMP and Cyber) | G                      | G                 | G     | G                           | Y                       | G        | G                |  |

Legend: Red = greater than 50% affected nationally. Yellow = 20% to 50% affected nationally. Green = less than 20% affected nationally.

Figure 6 below shows EMP from seven nuclear detonations, with a second set of detonations weeks later.

[“Powering Through: Building Critical Infrastructure Resilience”](#)



# Suggested Tiers: LONG TERM



- 24 Hours
- 3 Days
- 10 Days
- 30 Days
- 90 Days
- 6 Months
- 1 Year

Provide for each readiness category, for each Tier

# 24 Hours



- **Water:** water storage or filtration (1 gallon per day per person)
- **Hygiene:** common COVID type hygiene
- **Shelter:** your car, workplace, school, or at home
- **Food:** could make it with no food
- **Medical: Most could make it without medication**
- **Communications:** What is the plan if internet and phones are out? Hand crank emergency radio (AM/FM/Emergency Band)
- **Safety:** “Normal” items only. Flashlight and batteries. Expect typical power outage issues, but maybe no 911 services
- **Cash:** Minimum- A few hundred dollars in small bills

# 3 Days at home

- **Water:** hiking style water storage and filtration
- **Hygiene:**
  - Common COVID type hygiene
  - Toilet paper/sanitary wipes
  - Anti-diarrhea meds
- **Shelter:**
  - your car, tent, or rain suit
  - Very comfortable walking shoes
  - Season specific outdoor clothing
  - Generator
- **Food:**
  - Recommend 2,000 calories per day
  - 6,000 calories if harsh winter/no heat
  - Could make it with no food
- **Medical:**
  - Most could make it without medication
  - Basic first aid kit
  - Blister kit

- **Communications:**
  - What is the plan if internet and phones are out?
  - Hand crank emergency radio (AM/FM/Emergency Band)
  - Citizen's Band Radio (CB)
  - Police/Emergency scanner
- **Safety:**
  - Map
  - Typical power outage issues, but maybe no 911 services
  - No traffic lights
  - No police
  - Pass through rough neighborhoods/looting/riots
  - Fire
  - Downed electrical lines
  - Flooding
  - Bad weather
  - Nuclear fallout
- **“Homesteading”**
  - Saw to help build a shelter or fires
  - Work gloves
  - Gardening
  - Water collection
- **Cash:**
  - A few hundred dollars minimum
  - Divide it up into more than one location in case you get mugged.



# 10 Days at home

- **Water:** hiking style water storage and filtration
- **Hygiene:**
  - Common COVID type hygiene
  - Toilet paper/sanitary wipes
  - Anti-diarrhea meds
- **Shelter:**
  - your car, tent, or rain suit
  - Very comfortable walking shoes
  - Season specific outdoor clothing
  - Generator
- **Food:**
  - Recommend 2,000 calories per day
  - 6,000 calories if harsh winter/no heat
  - Could make it with no food
- **Medical:**
  - Most could make it without medication
  - Basic first aid kit
  - Blister kit

- **Communications:**
  - What is the plan if internet and phones are out?
  - Hand crank emergency radio (AM/FM/Emergency Band)
  - Citizen's Band Radio (CB)
  - Police/Emergency scanner
- **Safety:**
  - Map
  - Typical power outage issues, but maybe no 911 services
  - No traffic lights
  - No police
  - Pass through rough neighborhoods/looting/riots
  - Fire
  - Downed electrical lines
  - Flooding
  - Bad weather
  - Nuclear fallout
- **“Homesteading”**
  - Saw to help build a shelter or fires
  - Work gloves
  - Gardening
  - Water collection
- **Cash:**
  - A few hundred dollars minimum
  - Divide it up into more than one location in case you get mugged.



# 30 Days to 1 Year at home



- **Water:**
  - Plan for equipment failures, be able to store and make water safe using “old methods”
  - Charcoal and sediment filters, etc.
- **Hygiene:**
  - Understand hygiene without commercially available products
  - Home made soap?
- **Shelter:**
  - Generator: you will be out of fuel, or it will break down
  - Repair skills/materials for home/fireplace/etc.
- **Food:**
  - You will need a food plan
  - Prepurchase supplies
  - 20-pound bags of rice and beans
  - Foraging wild plants
  - Trapping
- **Medical:**
  - Insect Repellent
  - Medicinal herbs
  - Advanced first aid kit
  - Advanced first aid training
  - Basic first aid kit
  - Blister kit
- **Communications:**
  - What is the plan if internet and phones are out?
  - Hand crank emergency radio (AM/FM/Emergency Band)
  - Citizen's Band Radio (CB)
  - Police/Emergency scanner
- **Safety:**
  - Neighborhood Watch/Community help organization
  - Maps
  - No emergency assistance/no police
  - Looting/riots
  - Fire
  - Flooding
  - Bad weather
  - Nuclear fallout
- **“Homesteading”**
  - Saw to help build a shelter or fires
  - Household repair
  - Work gloves
  - Agriculture / Gardening
  - Water collection
- **Cash:**
  - Barter economy
  - Have tradable items on hand
  - Divide it up into more than one location in case you get robbed.

# Daily (weekly) Ration per person?



- **Water:**
  - Enough for drinking and cooking, sponge bath.
    - Heavy exertion: 1-2 gallons
    - Sedentary or winter: perhaps half gallon to a gallon
- **Hygiene:**
  - Sponge bath only: quart
  - Tooth brushing: pint
  - Dish washing: 1-2 gallons
  - Laundry: 10-20 gallons (per week)
  - Home made soap?
- **Shelter:**
  - Wood for heat
  - Screens for windows
  - Repair skills/materials for home/fireplace/etc.
- **Food:**
  - You will need a food plan
  - Prepurchase supplies
  - 20-pound bags of rice and beans
  - Foraging wild plants
  - Trapping
- **Medical:**
  - Insect Repellent
  - Medicinal herbs
  - Advanced first aid kit
  - Advanced first aid training
  - Basic first aid kit
- **Communications:**
  - What is the plan if internet and phones are out?
  - Hand crank emergency radio (AM/FM/Emergency Band)
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- **Safety:**
  - Neighborhood Watch/Community help organization
  - Maps
  - No emergency assistance/no police
  - Looting/riots
  - Fire
  - Flooding
  - Bad weather
  - Nuclear fallout
- **“Homesteading”**
  - Saw to help build a shelter or fires
  - Household repair
  - Work gloves
  - Agriculture / Gardening
  - Water collection
- **Cash:**
  - Barter economy
  - Have tradable items on hand
  - Divide it up into more than one location in case you get robbed.

# Daily rice and beans per person

Let's aim for a range of 2000-2500 calories for an average adult as a starting point.



## Calories per Dry Weight (approximate):

- **Dry White Rice:** Roughly 1600 calories per pound
- **Dry Beans (e.g., black beans, pinto beans):** Roughly 1500-1600 calories per pound

## Example Calculation (for 2000 calories, assuming a 50/50 split by weight for simplicity):

Let's say you want 1000 calories from rice and 1000 calories from beans.

- **Dry Rice:** 1000 calories/1600 calories/lb≈0.625 lbs (dry)
- **Dry Beans:** 1000 calories/1600 calories/lb≈0.625 lbs (dry)

**Total Dry Weight:** ≈1.25 lbs (dry) per day.

## This translates to:

- **Dry Rice:** Roughly **2.5 - 3 cups (dry)**, which expands considerably when cooked.
- **Dry Beans:** Roughly **2.5 - 3 cups (dry)**, which also expands significantly.

## Determining Daily Quantities of Cooked Rice and Beans:

When cooked, rice and beans absorb water and increase in volume. A general rule of thumb is that 1 cup of dry rice yields about 3 cups cooked, and 1 cup of dry beans yields about 2-3 cups cooked.

Based on the dry weight calculation:

- You'd be looking at roughly **7-9 cups of cooked rice** and **5-8 cups of cooked beans** per day to meet a 2000-2500 calorie intake.

However, for true "reasonable" nutrition, this would ideally be supplemented with other food groups to provide essential vitamins, minerals, and fats.

# Costco/Amazon example



25-pound bag Jasmin rice = \$24.00 (Costco)

24-pound container white rice \$60.00 (Amazon: Augason, 25-yr shelf life)

25-pound container Pinto Beans = \$70.00 (Amazon: Wheatland, 25-yr shelf life)

30-pound container Lentils: \$75.00 (Amazon: Wheatland, 25-yr shelf life)

|       | pounds/day/person | 30 days | round up |                                 |      |
|-------|-------------------|---------|----------|---------------------------------|------|
| Rice  | 0.625             | 18.75   | 20       | roughly equals one 25 pound bag | \$24 |
| Beans | 0.625             | 18.75   | 20       | roughly equals one 25 pound bag | \$60 |
|       |                   |         |          | one month / person              | \$84 |

Nice dinner out for 2 people = \$100

Note: brown rice goes rancid, white rice does not

# Daily corn meal and beans per person

Calorie Information (Approximate per Dry Weight)

- Dry Cornmeal: Roughly 1600-1800 calories per pound (this can vary slightly based on type, but we'll use an average of 1700 cal/lb for calculations).
- Dry Beans (e.g., black beans, pinto beans): Roughly 1500-1600 calories per pound (we'll use 1550 cal/lb for calculations).

Example Calculation for Daily Intake (Dry Weight)

To achieve a 2:1 ratio of cornmeal to beans by weight, and meet 2000-2500 calories, here's how we can break it down:

Let's target 2250 calories (mid-range). With a 2:1 ratio, for every 2 parts of cornmeal, you'd have 1 part of beans.

Daily Quantities (Dry Weight)

Based on these calculations for approximately 2250 calories:

- Dry Cornmeal: Roughly 0.9 pounds (approximately 14.5 ounces)
- Dry Beans: Roughly 0.45 pounds (approximately 7.2 ounces)

Total Dry Weight: This comes out to about 1.35 pounds (or 21.7 ounces) of combined dry ingredients per day.



However, for true "reasonable" nutrition, this would ideally be supplemented with other food groups to provide essential vitamins, minerals, and fats.

# Daily cornmeal and beans per person

Let's aim for a range of 2000-2500 calories for an average adult as a starting point.

## Calories per Dry Weight (approximate):

- **Dry Cornmeal:** Roughly 1700 calories per pound
- **Dry Beans (e.g., black beans, pinto beans):** Roughly 1500-1600 calories per pound

## Example Calculation (for 2000 calories, assuming a 2:1 ratio by weight for simplicity):

Let's say you want 1000 calories from rice and 1000 calories from beans.

- **Dry Cornmeal:** Roughly 0.9 lbs/14.5 ounces (dry)
- **Dry Beans:** Roughly 0.45 lbs / 7.2 ounces(dry)

**Total Dry Weight:**  $\approx 1.25$  lbs (dry) per day.

## This translates to:

- **Dry Cornmeal:** Roughly **2.4 cups (dry)**, which expands to 9.6 cups cooked.
- **Dry Beans:** Roughly **1 cup (dry)**, which expands to 2-3 cups cooked.

## Determining Daily Quantities of Cooked Rice and Beans:

Based on the dry weight calculation:

- You'd be looking at roughly **9-10 cups of cooked cornmeal** and **2-3 cups of cooked beans** per day to meet a 2000-2500 calorie intake.



Remember: for true "reasonable" nutrition, this would ideally be supplemented with other food groups to provide essential vitamins, minerals, and fats.

# Costco/Amazon example



25-pound bag Jasmin rice = \$24.00 (Costco)

24-pound container white rice \$60.00 (Amazon: Augason, 25-yr shelf life)

25-pound container Pinto Beans = \$70.00 (Amazon: Wheatland, 25-yr shelf life)

30-pound container Lentils: \$75.00 (Amazon: Wheatland, 25-yr shelf life)

50-pound bag Cornmeal (Amazon: Wholesome Harvest, normal shelf life of perhaps 6-12 months)

|              | pounds/day/person | 30 days | round up |                                 |          |
|--------------|-------------------|---------|----------|---------------------------------|----------|
| <b>Rice</b>  | 0.625             | 18.75   | 20       | roughly equals one 25 pound bag | \$24     |
| <b>Beans</b> | 0.625             | 18.75   | 20       | roughly equals one 25 pound bag | \$70     |
|              |                   |         |          | one month / person              | \$94     |
|              |                   |         |          | 1 year/person                   | \$ 1,128 |

Nice dinner out for 2 people = \$100

|                 | pounds/day/person | 30 days | round up |                                       |          |
|-----------------|-------------------|---------|----------|---------------------------------------|----------|
| <b>Cornmeal</b> | 0.9               | 27      | 30       | Lets go with a 50 pound bag           | \$70     |
| <b>Beans</b>    | 0.45              | 13.5    | 15       | roughly equals half of a 25 pound bag | \$35     |
|                 |                   |         |          | one month / person                    | \$105    |
|                 |                   |         |          | 1 year/person                         | \$ 1,260 |

Note: brown rice goes rancid, white rice does not

# Which hiking filters are good at removing chemical contamination?



The top models frequently recommended for chemical, heavy metal, and virus removal include:

## Grayl Purifier Bottles (e.g., GeoPress or UltraPress):

**Technology:** They use a press system with a cartridge that combines electro-adsorption and activated carbon.

**Removal:** Claim to remove protozoa, bacteria, viruses, **chemicals, and heavy metals.**

**Pros:** Extremely fast and easy to use (fill, press, drink).

**Cons:** Filter lifespan is relatively short (around 300-400 cycles/gallons) and they are bulkier and heavier than simple hollow fiber filters.

## MSR Guardian Purifier:

**Technology:** A pump-style filter using hollow fiber technology with very small pores (0.02 microns) to remove viruses, bacteria, and protozoa. It is often combined with an **activated carbon element (like MSR's carbon element or an additional step)** to address chemicals and improve taste, as the base hollow fiber filter does not remove chemicals.

**Removal:** The *purifier* version removes viruses, bacteria, and protozoa. The addition of carbon addresses chemicals.

**Pros:** Highly durable, reliable, self-cleaning, and military-grade.

**Cons:** Expensive and relatively heavy.

## Katadyn Hiker Pro/Vario (and similar pump filters):

**Technology:** These often combine a depth or ceramic pre-filter with a core of **activated carbon granules** to address taste, odor, and chemicals.

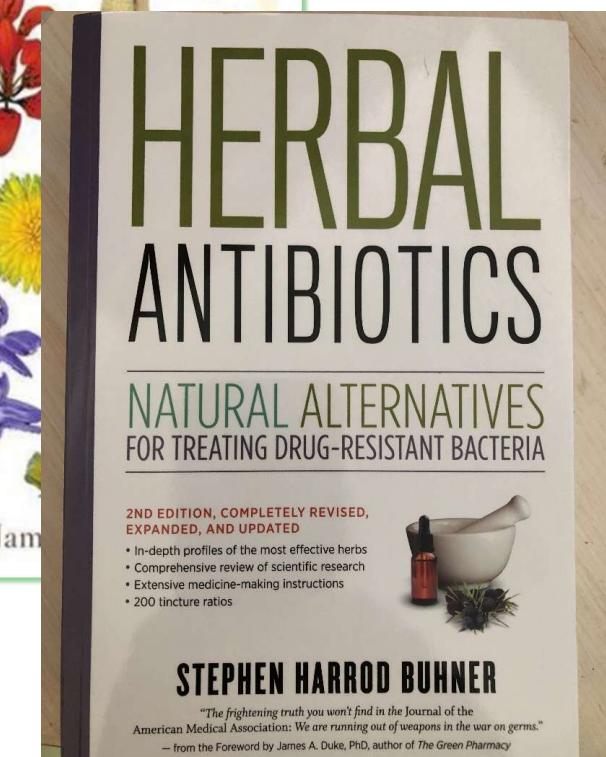
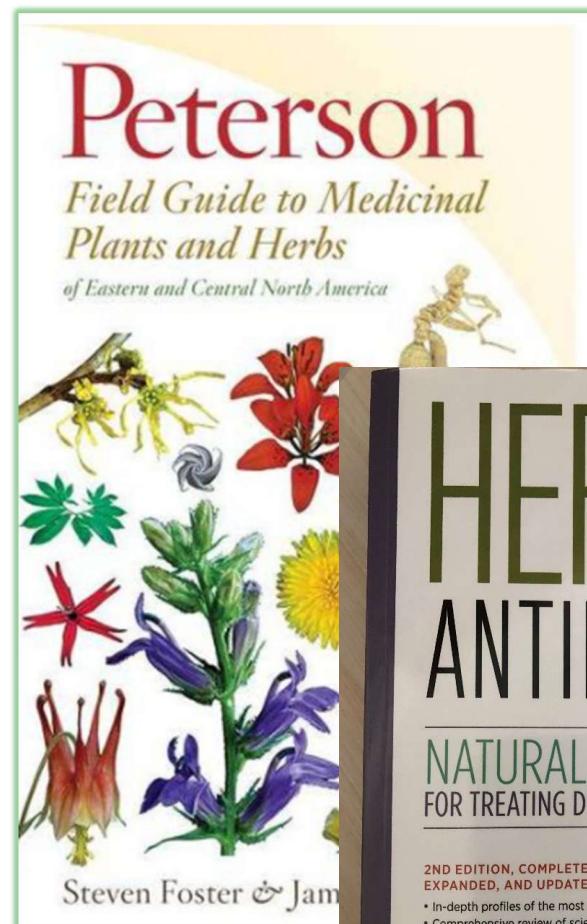
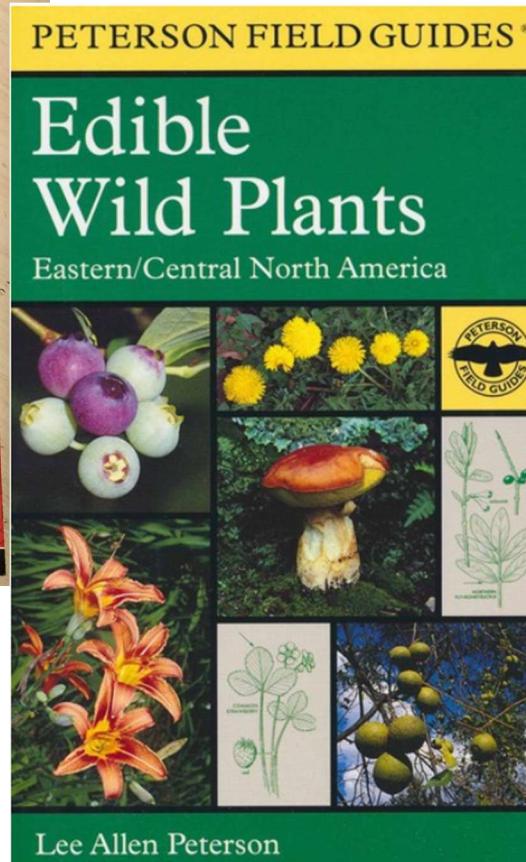
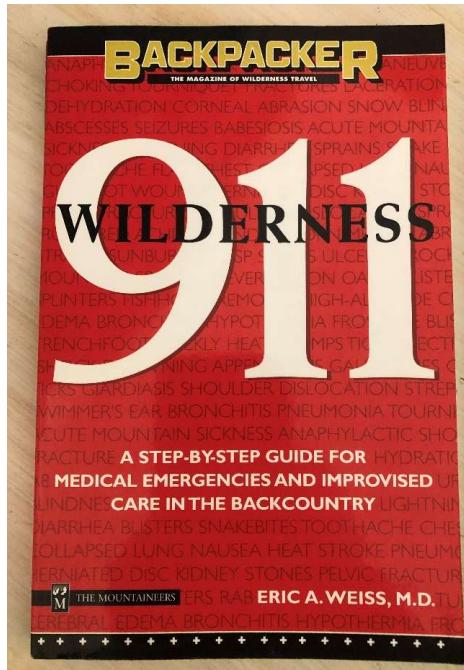
**Removal:** Typically remove bacteria and protozoa, with the activated carbon stage reducing chemicals and improving taste.

**Pros:** Good for turbid water and shallow sources.

**Cons:** Pumping is required, and they are heavier than squeeze filters.

## Important Note on Standard Filters

Most popular, lightweight hiking filters (like the **Sawyer Squeeze/Mini**, **Katadyn BeFree**, and most simple **Hollow Fiber filters**) are excellent at removing **bacteria and protozoa** (like Giardia and Cryptosporidium), but **do not** remove viruses, chemicals, or heavy metals.



# Take Action At Home

- 30-60 Days of basic Food and a water filter
- Affordable/ Inexpensive
- Inoculates the nation!

If enough households are ready for 60 days, an adversary will hesitate to initiate a Black Sky Attack



# Task Forces for Our Community

- Water
- Hygiene
- Shelter
- Food
- Medical
- Communications
- Safety
- Homesteading
- Transportation
- Cash / Barter

Volunteer Effort

Essentially: a Co-Op



## Continuity of Government + Continuity of Business = Community Resilience!



| <b>Resilient Community Planning Assessment Information</b> |  |
|--|--|
| <b>Strategic Plan</b>                                      | Vision Statement   |
|  | Mission Statement  |
|  | Strategic Goals  |
|  | List of known Strategic Risks and Issues                                   |
| <b>Operations</b>  | Annual Operational Objectives  |
|  | List of Known risks and issues   |
| <b>Business Requirements</b>                               | List of organizational departments   |
|  | Description of business operations per department                          |
|  | Performance measures per department  |
|  | Performance measure per business requirement                               |
|  | Identify the organization's key business <u>areas</u> (Levels 1, 2)        |
|  | Identify Core Business "Secret Sauce" zones                                |
|  | Determine availability of Organization SMEs                                |
|  | Identify key Stakeholders (Levels 1, 2)                                    |
|  | Determine availability of departmental known risks/organization's concerns |
|  | Determine availability of design and as-built documentation                |

Organized for Action

**Volunteer Effort**

**Step Up**

<https://fir.foundation/>

