90-DAY GRID-DOWN READINESS

Household continuity planning | Individual assessment and inventory

HOW TO USE THIS WORKSHEET

Complete each inventory using supplies and equipment you actually possess. Enter daily consumption, test safe alternatives, and record where a critical capability would stop working. A 90-day goal is a planning horizon, not a prediction that every outage lasts 90 days.

HOUSEHOLD AND LOCATION PROFILE

PROFILE FIELD	RECORD YOUR INFORMATION
Household / assessment owner	
Assessment date / next review	
Household members and dependents	
Climate / seasonal hazards	
Home type / floors / access	
Critical medical or mobility needs	

PLANNING PRIORITIES

Identify your highest-consequence dependencies first: medical power, safe water, temperature control, sanitation, and communication. Adapt this worksheet to your location, household capabilities, and official emergency guidance.

Top three risks or limitations to address

ESSENTIAL SERVICE DEPENDENCIES

Map what stops working when electricity or related services are unavailable.

INFRASTRUCTURE DEPENDENCY MAP

SERVICE	NORMAL DEPENDENCY	NON-GRID ALTERNATIVE
Drinking water	Municipal pressure / well pump	
Wastewater	Sewer lift / septic pump	
Heating / cooling	Furnace fan / AC	
Cooking	Electric range / gas ignition	
Refrigeration	Grid power	
Communications	Cell towers / internet	
Medical support	Devices / pharmacy	

SINGLE POINTS OF FAILURE

Which one failure would most quickly endanger the household?

FIRST 72 HOURS

Use verified information and protect resources while assessing the outage.

IMMEDIATE SAFETY AND HOUSEHOLD CHECK

ACTION	CHECK / TIME	OWNER
Confirm everyone is safe; check urgent medical needs		
Determine outage scope using reliable sources		
Protect refrigerated food; check temperatures		
Conserve phone batteries and charging capacity		
Check water pressure and advisories		
Check CO alarms and fire safety		
Document utility updates and decisions		
Contact household members and support network		

SITUATION LOG

Time, confirmed information, decision and responsible person

PRACTICAL CHECK: Do not operate generators, grills or camp stoves indoors or in attached spaces.

DAYS 4-14: STABILIZATION

Establish repeatable routines and verify actual consumption.

TWO-WEEK OPERATING ROUTINE

CAPABILITY	DAILY PLAN / RESPONSIBLE PERSON
Water collection and treatment	
Meal preparation and fuel	
Sanitation and handwashing	
Medication and medical equipment	
Indoor temperature checks	
Information and family check-ins	
Waste and food-safety inspections	

MEASURED DAILY RESOURCE USE

RESOURCE	PLANNED / DAY	ACTUAL / DAY	DAYS LEFT
Water (L)			
Cooking fuel (units)			
Battery energy (Wh)			

Adjustments after the first week

DAY 3 MILESTONE: BASELINE

Record initial measurements and make decisions using observed conditions.

72-HOUR BASELINE VERIFICATION

ESSENTIAL CAPABILITY	MEASURED STATUS	NEXT CHECK
Water access and quality		
Food temperature and usable supply		
Medical equipment / medications		
Heating or cooling		
Sanitation arrangements		
Communications and alerts		
Power and fuel remaining		

INITIAL CONSUMPTION BASELINE

RESOURCE	DAY 1 USE	DAY 2 USE	DAY 3 USE
Potable water (L)			
Other essential water (L)			
Cooking fuel (units)			
Battery discharge (Wh)			

First shortage likely to occur / immediate action

DAYS 15-30: RESOURCE REVIEW

Recalculate remaining coverage using measured use, not initial assumptions.

END-OF-MONTH SUPPLY CHECKPOINT

RESOURCE / SERVICE	REMAINING	USE / DAY	COVERAGE
Potable water			
Food energy / meals			
Cooking fuel			
Generator fuel			
Medication supply			
Sanitation capacity			
Batteries / spare parts			

MAINTENANCE AND RESUPPLY OBSTACLES

Identify any critical shortage or equipment fault

PRACTICAL CHECK: If a medically necessary service cannot be maintained, use your clinician-approved contingency plan and seek assistance early.

DAY 14 MILESTONE: SUSTAINABILITY

Recalculate supplies after two weeks using actual daily consumption.

TWO-WEEK RESOURCE AND EQUIPMENT CHECK

RESOURCE / CAPABILITY	QUANTITY LEFT	MEASURED DAILY USE
Drinking / cooking water		
Hygiene water		
Food energy / meals		
Cooking fuel		
Heating fuel		
Medication / care supplies		
Sanitation supplies		

VERIFIED FALLBACK CAPABILITY

What was tested, what failed, and how long the alternative will last

Calculation: estimated days remaining = usable quantity left divided by measured daily use. Recheck after any major change in consumption.

DAYS 31-60: EXTENDED OPERATIONS

Identify tasks and supplies that become harder to sustain over time.

LONG-DURATION CONTINUITY REVIEW

SYSTEM	30-DAY STATUS	60-DAY FAILURE POINT
Water replenishment		
Food and dietary adequacy		
Fuel and cooking		
Temperature control		
Sanitation and waste		
Health and medication		
Communications		
Equipment maintenance		

FALLBACK ARRANGEMENTS

Alternative system, prerequisites and test evidence

DAY 30 MILESTONE: REFORECAST

Compare the original 90-day plan with remaining resources and equipment wear.

END-OF-MONTH REFORECAST

SYSTEM	EXPECTED REMAINING	ACTUAL REMAINING
Potable water		
Usable food		
Essential fuel		
Battery / generator capability		
Medications		
Waste collection capacity		
Spare parts		

RISK AND RECOVERY DECISIONS

Resource that will fail first, planned action, responsible person

Use measured consumption and realistic replenishment rates; do not assume that a temporary supply source will remain available.

DAYS 61-90: CONTINUITY DECISION

Assess whether remaining supplies and capabilities can safely reach day 90.

FINAL 30-DAY SUSTAINABILITY ASSESSMENT

CRITICAL CAPABILITY	DAYS REMAINING	ACTION IF INADEQUATE
Safe water		
Usable food		
Medication / medical power		
Heat or cooling		
Sanitation		
Cooking fuel		
Communications		

DECISION THRESHOLDS

Condition that triggers outside assistance, relocation or evacuation

PRACTICAL CHECK: Avoid assuming that sheltering in place is always safer than relocating. Reassess official guidance and household needs.

DAY 60 MILESTONE: ENDURANCE

Evaluate whether maintenance, caregiving and replenishment remain workable.

EXTENDED OPERATIONS VERIFICATION

CAPABILITY	TESTED RESULT	LIMIT / ACTION
Water source and treatment		
Food preparation		
Temperature management		
Medical continuity		
Sanitation servicing		
Communications		
Transport / relocation		

NEXT 30-DAY CONTINUITY DECISION

Remaining resource bottleneck, replacement needs, assistance required

Seek assistance or relocate before essential medical, water, sanitation or safe-temperature capabilities become unsustainable.

WATER: DAILY DEMAND

Separate drinking, food preparation, hygiene and other uses.

90-DAY WATER REQUIREMENT CALCULATOR

For each use, multiply the household's measured or planned litres per day by 90. Adjust for climate, physical activity, illness and local requirements. Avoid treating an illustrative allowance as a universal minimum.

USE	LITRES / DAY	x 90 DAYS	STORED / ACCESS
Drinking			
Cooking and food preparation			
Handwashing			
Personal hygiene			
Cleaning / other essential uses			

SUPPLY GAPS AND RESUPPLY SOURCES

Source, volume, access limitations and expected treatment

WATER REPLENISHMENT AND STORAGE

A 90-day plan needs credible replenishment, not only initial storage.

SUPPLY VERSUS CONSUMPTION

Net daily water change = reliably treated replenishment minus daily household consumption. Record seasonal variability, collection limitations, treatment capacity, storage space and transport effort.

SOURCE	LITRES / DAY	TREATMENT / ACCESS LIMIT
Stored drinking water		
Municipal or private well		
Rainwater collection		
Other locally permitted source		
Total usable replenishment		

STORAGE AND QUALITY CHECKS

Container location, condition, treatment evidence and fallback

Do not assume a household filter removes chemical contaminants, viruses or salt. Follow product specifications and local public-health advice.

WATER: TREATMENT AND STORAGE

Confirm the treatment method matches the hazards in the actual source.

WATER SOURCE AND TREATMENT INVENTORY

SOURCE / EQUIPMENT	AVAILABLE / CAPACITY	LIMITATIONS / TEST
Stored potable water		
Municipal / private well		
Rainwater / surface water		
Gravity or portable filter		
Disinfection supplies		
Clean storage containers		
Testing / monitoring supplies		

TREATMENT SAFETY VERIFICATION

Different methods address different biological and chemical hazards. Filters do not necessarily remove viruses, dissolved chemicals or salt. Follow current local public-health guidance and product instructions.

Contamination concerns and verified fallback

WATER HYGIENE AND WASTEWATER

Account for water used after drinking and cooking.

DAILY HYGIENE DEMAND AND WASTEWATER

ACTIVITY	CLEAN WATER / DAY	WASTEWATER / DAY
Handwashing		
Personal hygiene		
Essential cleaning		
Laundry / caregiving		
Other water-dependent tasks		

WASTEWATER CAPACITY TEST

Estimated storage days = verified available wastewater capacity divided by daily wastewater generated. Record where storage becomes unsafe, how containers are serviced, and which approved disposal methods remain available.

Collection capacity, disposal plan, overflow threshold and action

Never discharge wastewater or human waste where it can contaminate wells, surface water or living areas.

FOOD AND NUTRITION

Calculate usable food, not just the number of packages on shelves.

HOUSEHOLD FOOD REQUIREMENTS

MEASURE	DAILY HOUSEHOLD TOTAL	90-DAY ESTIMATE
Energy (kcal)		
Meals / servings		
Special diets / allergy-safe portions		
Infant or dependent foods		
Pet food		

FOOD INVENTORY AND PREPARATION CONSTRAINTS

FOOD GROUP	USABLE QTY / SERVINGS	COOKING / STORAGE NEED
Ready-to-eat / no-cook		
Canned and shelf-stable		
Dry staples		
Frozen / refrigerated		

PRACTICAL CHECK: Energy calculations do not establish nutritional adequacy; consider protein, fats, fibre and dietary needs.

90-DAY FOOD USABILITY AUDIT

Evaluate nutrition, food safety and the resources needed to prepare meals.

FOOD AND PREPARATION INVENTORY

FOOD TYPE	SERVINGS / KCAL	WATER / FUEL / STORAGE
No-cook shelf-stable		
Canned / ready-to-eat		
Dry grains and legumes		
Freeze-dried foods		
Special dietary foods		
Infant / dependent foods		

NUTRITIONAL AND MEAL-PLANNING GAPS

Protein, fats, dietary restrictions, cooking constraints and food safety

An adequate calorie total does not guarantee a balanced diet. Do not rely on foods that cannot be prepared safely under the planned conditions.

FOOD: MEAL AND COOKING TEST

Test a realistic meal plan with the water and fuel actually available.

SEVEN-DAY REPEATABLE MEAL PLAN

DAY	BREAKFAST	MIDDAY	EVENING
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			

PREPARATION DEPENDENCIES

Fuel, clean water, cookware, food safety and dietary adjustments

PRACTICAL CHECK: Only use cooking devices in locations and conditions permitted by their safety instructions.

TEMPERATURE CONTROL

Prepare for both dangerous cold and dangerous heat.

HEATING AND COOLING CAPABILITY CHECK

ITEM / CAPABILITY	STATUS / CAPACITY	SAFE FALLBACK
Insulation / drafts		
Warm clothing and bedding		
Safe heating equipment		
Ventilation / cooling		
Temperature monitor		
CO and smoke alarms		
Fuel / energy supply		

TEMPERATURE-BASED RELOCATION TRIGGERS

Temperature, health symptoms, and action threshold

PRACTICAL CHECK: Never use outdoor fuel-burning appliances indoors. Keep generators outside and away from openings.

TEMPERATURE AND HEATING FUEL

Translate climate-specific needs into measurable capability limits.

TEMPERATURE CONTROL SCENARIO

TEST / SCENARIO	MEASURED RESULT	SAFE FALLBACK
Cold night / lowest indoor temp		
Hot day / highest indoor temp		
Heating fuel per day		
Cooling power per day		
Indoor air / CO alarm checks		
Vulnerable household member		

FUEL AND SAFETY CALCULATION

Heating-fuel coverage depends on measured burn rate, appliance efficiency, weather and safe fuel storage. Record a conservative higher-demand case rather than assuming average conditions throughout the 90 days.

Fuel on hand, tested use per day, safe days supported and relocation trigger

Use only properly installed and approved indoor heating systems. Outdoor combustion appliances and generators must remain outside.

BACKUP POWER: CRITICAL LOADS

Calculate energy needs before selecting batteries, solar or generator capacity.

ESSENTIAL ELECTRICITY WORKSHEET

Estimated daily energy (Wh) = equipment watts x hours operated each day. Include startup surges, inverter losses, charging limits and battery usable capacity when planning equipment.

EQUIPMENT	WATTS	HRS / DAY	WH / DAY
Medical equipment			
Water pump / treatment			
Refrigeration / freezer			
Lighting			
Communications / charging			
Other essential load			

BACKUP SYSTEM TEST

Measured runtime, charging result and unmet load

POWER RUNTIME AND CHARGING

Model real loads, usable battery energy and weather-dependent generation.

DAILY ENERGY BUDGET

LOAD / SOURCE	WATTS / WH	HOURS / DAY / WH
Critical medical equipment		
Refrigeration		
Water treatment / pump		
Communications and lights		
Battery usable capacity		
Solar energy harvested		
Generator output and fuel		

RUNTIME AND CHARGING ASSUMPTIONS

Battery-only days = usable battery Wh divided by daily net Wh consumption, provided the net is positive. Account for inverter losses, startup surge, cloudy weather, fuel access and the minimum charge required for essential medical devices.

Measured load, worst-case charging, remaining days and corrective action

FUEL AND POWER CONTINUITY

Compare realistic fuel availability with tested operating rates.

FUEL AND ENERGY INVENTORY

SOURCE	ON HAND	USE / DAY	DAYS / REPLENISH
Generator fuel			
Cooking gas			
Heating fuel / wood			
Battery usable Wh			
Solar daily Wh (measured)			
Vehicle fuel			

OPERATING AND SAFETY LIMITS

Fuel storage rules, servicing, ventilation, weather and safe shutdown

PRACTICAL CHECK: Do not backfeed household wiring. Use an appropriately installed transfer arrangement where required.

MEDICAL AND CAREGIVING

Identify requirements that cannot be deferred for 90 days.

PERSONAL HEALTH CONTINUITY ASSESSMENT

REQUIREMENT	SUPPLY / BACKUP	CLINICIAN / CONTACT
Daily prescription medicines		
Temperature-sensitive medicines		
Electrically powered devices		
Mobility / sensory supports		
Infant / dependent supplies		
First-aid and hygiene supplies		
Scheduled care / treatment		

ESCALATION AND CARE PLAN

Who to contact, when to leave and how to transport essential equipment

PRACTICAL CHECK: Medication reserves and storage changes should be planned with a qualified clinician or pharmacist.

MEDICATION AND SANITATION ENDURANCE

Identify time-sensitive dependencies that may become critical during extended outages.

MEDICATION AND CARE CONTINUITY

NEED	SUPPLY / DAYS	BACKUP / CONTACT
Daily prescriptions		
Cold-chain medications		
Powered medical devices		
Caregiving and hygiene items		

SANITATION CAPACITY AND SERVICING

RESOURCE	DAILY USE	STORAGE / DAYS
Waste liners / treatment media		
Closed waste containers		
Handwashing supplies		
Garbage storage		

Earliest failure threshold and approved alternative

Arrange medication contingency plans with clinicians and use only locally approved waste management options.

SANITATION AND WASTEWATER

Estimate capacity for the full period without relying on unsafe disposal.

HOUSEHOLD SANITATION CAPACITY

SYSTEM	SUPPLIES / CAPACITY	SAFE DISPOSAL PLAN
Emergency toilet		
Waste liners / containers		
Handwashing station		
Greywater collection		
Garbage and pest control		
Cleaning / disinfection		
Laundry / personal hygiene		

90-DAY SERVICING AND STORAGE CONSTRAINTS

Collection rate, maximum safe storage, approved disposal and fallback

PRACTICAL CHECK: Follow local sanitation and environmental requirements. Do not improvise disposal near water sources.

90-DAY FAILURE AND FALLBACK TEST

Stress-test one failure at a time using a safe tabletop exercise.

SCENARIO AND FALLBACK MATRIX

SIMULATED FAILURE	FIRST CONSEQUENCE	FALLBACK / PROOF
Well pump unavailable		
Generator fails		
No cooking fuel		
Water source contaminated		
Refrigeration lost		
Communication network down		
Medical supply delayed		

ACTION AND RETEST RECORD

First critical failure, owner, deadline and evidence of retesting

Conduct tabletop or clean-equipment simulations. Never intentionally disable critical medical, sanitation or safety equipment.

COMMUNICATIONS AND INFORMATION

Maintain reliable contact and verify time-sensitive public guidance.

COMMUNICATION SYSTEMS

CHANNEL	POWER / RANGE	TEST / BACKUP
Mobile phone		
AM / FM or local alert radio		
Two-way radio (if lawful)		
Satellite or other backup		
Paper contacts / meeting points		
Official alerts / information		

FAMILY CHECK-IN PLAN

Contact, backup contact, check-in schedule and message relay

PRACTICAL CHECK: Licensing, frequencies and emergency alerts differ by country; follow local rules.

HOME SAFETY AND NEIGHBOUR SUPPORT

Prioritize fire prevention, accessibility and safe mutual assistance.

SAFETY AND SUPPORT READINESS

CAPABILITY	VERIFIED / DEFICIENCY
Smoke and CO alarms	
Fire extinguishers and escape routes	
Door and window security	
Accessible exits / mobility	
Neighbour check-in arrangements	
Shared skills and support	
Personal privacy and safeguarding	

COMMUNITY ASSISTANCE PLAN

Trusted contacts, assistance offered and assistance needed

PRACTICAL CHECK: Avoid speculative assumptions about disorder; plan around observable hazards and reliable local information.

TRANSPORTATION AND RELOCATION

Define practical evacuation triggers before essential services become unsafe.

DESTINATION AND ROUTE PLANNING

PLAN FIELD	HOUSEHOLD RESPONSE
Primary safe destination	
Alternate destination	
Primary route	
Alternate route	
Transportation / accessibility	
Vehicle fuel and maintenance	
Pets and dependent transport	

GO / STAY DECISION RECORD

Trigger, supporting information, decision maker and departure plan

PRACTICAL CHECK: Use official evacuation orders and immediate safety conditions as primary decision inputs.

MAINTENANCE AND REPLACEMENT PARTS

Plan for failures that may emerge after weeks of repeated use.

EQUIPMENT SERVICING INVENTORY

SYSTEM	SPARES / SERVICE NEED	LAST TEST / NEXT CHECK
Water treatment		
Generator / power station		
Solar charging / cables		
Cooking appliances		
Heating / cooling		
Sanitation hardware		
Lighting / radios		

CRITICAL SPARE-PART SHORTAGES

Part, equipment dependency, source and replacement priority

90-DAY RESOURCE COVERAGE

Record measured use and the earliest likely exhaustion date.

RESOURCE COVERAGE CALCULATION

Days of coverage = usable quantity available / measured daily consumption. Use compatible units. For variable demand, model a higher-consumption scenario and record how replenishment changes the result.

RESOURCE	USABLE QTY	DAILY USE	DAYS LEFT
Drinking / cooking water			
Other essential water			
Usable food			
Cooking fuel			
Heating fuel			
Generator fuel			
Medical supplies			
Sanitation supplies			

EARLIEST CRITICAL FAILURE POINT

Which essential capability runs out first, and what action prevents it?

WORKED RESOURCE CALCULATIONS

Illustrative examples only; replace assumptions with measured household data.

HOW TO CALCULATE REALISTIC COVERAGE

WATER

4 people x 3 L/person/day x 90 days = 1,080 L for the selected allowance.

If 240 L is stored, coverage = 240 / (4 x 3) = 20 days.

Include other water needs, climate, illness and replenishment.

ELECTRICAL ENERGY

A 60 W device used for 8 hours consumes 480 Wh/day.

A 1,000 Wh battery at 80% usable capacity provides about 800 Wh.

Estimated runtime = 800 / 60 = 13.3 hours, before further losses.

Actual results depend on inverter efficiency, temperature and load.

GENERATOR FUEL

20 L usable fuel / 2 L per operating hour = 10 operating hours.

At 2 hours/day, the supply covers approximately 5 days.

Measure consumption at actual load. Never operate generators indoors.

YOUR HOUSEHOLD'S VERIFIED CALCULATIONS

RESOURCE	AVAILABLE	USE PER DAY	DAYS COVERED
Potable water			
Food energy			
Cooking fuel			
Backup electricity			
Medication supply			

Record units consistently. Recalculate whenever equipment or demand changes.

SAFE GRID-DOWN EXERCISE

Test systems without deliberately creating a hazardous household condition.

CONTROLLED EXERCISE RECORD

EXERCISE	OBSERVATION / RESULT
Prepare one no-grid meal	
Run safe handwashing setup	
Test communications backup	
Measure essential battery runtime	
Check emergency lighting	
Simulate water consumption	
Practice family check-in	
Review relocation decision	

LESSONS AND FOLLOW-UP

What failed, what worked, and what should be retested

PRACTICAL CHECK: Do not disconnect life-support equipment, disable safety systems or operate unsafe appliances during testing.

CAPABILITY VERIFICATION

Rate each function independently using observed evidence.

EVIDENCE-BASED READINESS MATRIX

Mark V = Verified through test or documented evidence, I = Needs Improvement, or N = Not Tested. A purchased item alone is not proof of a working capability.

CAPABILITY	V / I / N	EVIDENCE / TEST DATE
Safe drinking water		
Food and meal preparation		
Temperature control		
Essential electrical power		
Medical continuity		
Sanitation and waste		
Communications		
Transport / relocation		
Maintenance and resupply		

OVERALL READINESS LIMITATIONS

Unverified high-consequence capabilities

CORRECTIVE ACTION REGISTER

Prioritize risks, assign owners and verify completed improvements.

IMPROVEMENT TRACKING

DEFICIENCY / ACTION	PRIORITY	OWNER	DUE / RETEST

VERIFICATION SIGN-OFF

Assessor, review date and remaining high-priority issues

PRIORITY IMPROVEMENTS & RETEST

Use evidence from the full assessment to address the most serious gaps.

THREE HIGHEST-PRIORITY WEAKNESSES

RANK	CRITICAL GAP / CONSEQUENCE	ACTION & OWNER
1		
2		
3		

CORRECTIVE ACTION AND VERIFICATION

ACTION	DUE DATE	TEST / EVIDENCE	STATUS

Next review date: _____ Responsible person: _____

90-DAY READINESS DECISION

Document what has been demonstrated and what remains uncertain.

FINAL READINESS DETERMINATION

Select one overall status after reviewing all critical capabilities. Verified means essential arrangements have been demonstrated within the documented conditions; it is not a guarantee of safety in every emergency.

RESULT	MARK	MEANING
Verified	☐	Critical capabilities tested and documented
Needs improvement	☐	One or more important gaps remain
Not tested	☐	Insufficient evidence to determine readiness

REVIEW AND ESCALATION RECORD

Top corrective actions, assistance needed and next review date

PRACTICAL CHECK: Update this assessment after changes in household needs, equipment, season, local risks or available services.

ADDITIONAL NOTES / FOLLOW-UP