

# “NEIGHBORHOOD DISASTER FOOD RESILIENCY”

## NEIGHBORHOOD SELF-SUFFICIENCY

### DISASTER READINESS : FOOD RESILIENCY [6]

#### 28-DAY PLAN

**WHO ?** For Neighborhood Associations, Homeowners Associations, Senior Centers, Churches, Granges, Property Management Associations, Veterans’ groups, Rural and “place-based” neighbors. To Discuss with After-School Programs and Community Service groups.

**WHY ?** Natural Disasters are increasing. Weather related “power outages” are causing citizens to go without power or food assistance for weeks. **FEMA Food Relief requires two-weeks or more before drop-off and food aid are available** [1, 8].

**A nourished Neighborhood is a stable neighborhood.** “Helping others” boosts immune system function [11], keeping community members stronger and healthier in the stress of an emergency [16], reducing the risk of chaos and fear.

- Winter Ice Storms could bring down power lines again.
- A flood or earthquake could block bridges from access to normal food supplies.
- Rising Gas Prices or weather changes could disrupt food delivery to the region.
- Economic uncertainty encourages us to “plan ahead” and be “self-sufficient”.

**WHAT ?** Using this Template as a **guide** [6, 6.b], Neighbors can gather together to **select** a “**Disaster Readiness : Food Resiliency Plan**” that is tailored to their community’s preferences, wishes and needs, by planning and maximizing the use of existing resources.

Have fun getting to know each other, while creating Neighborhood Food Resiliency. Celebrate your community’s resilience with an Annual Street Potluck to **practice**, share, recycle and replace last year’s unused nourishment!

*“ What is your place in the Neighborhood Food Web ?”*

PLAN \* **PLANT** \* PREPARE \* **PRESERVE** \* PRACTICE \* **PROTECT** \* PARTICIPATE



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**THIS “TEMPLATE” TOOL** provides an outline and opportunity to **examine, strengthen or create:**

- a. A “**Community Food System**”;
- b. A co-operative “**Neighborhood Meal Service**” to nourish all neighbors during Disaster or Emergency situations;
- c. A nutrient-efficient “**Neighborhood Food Web**” based on citizen participation;

... **And to enhance everyday life.**

- 2) **Food Reskilling: Preserve, Ferment, Dehydrate; Storage, Root Cellars, Smoke-Cure. Share skills. Grow food.**
- 3) Storable **nutrient-rich** locally adapted foods, recommended to “fortify survival” for 28-days during and after a disaster. (Non-local foods) are included as valuable nutrient sources.
- 4) Grassroots citizens’ discussion and action. Permission granted for “open source” use, copying, editing, development and free non-profit distribution, to enhance sufficient nutrient access for all.

**DISCLAIMER: In honor of Good Samaritan guidelines and grassroots “best efforts”:**

- 1) The use of this Template is **NOT a guarantee** of protection from malnourishment or foodborne illness during a Disaster or Emergency situation;
- 2) All users of this Template agree to a **WAIVER OF LIABILITY**, holding harmless any person, place or entity for actions, benefits or outcomes resulting from participation, association or use.

**RE-SKILLING: DEHYDRATE:** Tomatoes, Plums, fruits. [Buy Dehydrated Split Pea and Corn Soups.]

**DRY STORAGE:**[15] 35-degrees F, avoid Moisture, Oxygen, Light. Oils; (Flax, Chia, Sesame. [12])

**ROOT CELLAR:**[15] 35-degrees F, with 95% Humidity (see instructions); Roots, cabbage, etc.

**FERMENT (“probiotics”):** Perishable dairy into yogurt, kefir and cheese. Vegetables; Kombucha.

**FREEZE:** Raw Tomatoes, Berries, Peas, Corn, Corn Tortillas; Purees (pumpkin, kiwi).

**SPROUT:** (Mung beans), Quinoa, Lentils, Buckwheat, Micro-greens [Monitor water use].

**PROTECT:** Food Safety [14]; Proper Food Preserving, and storage [12]; Food Pantry from collapse, and containers from breakage [12b]. Protect foods from Vitamin-C “heat-loss” via raw “fresh frozen”. “Eggs?”

**PLANT (Autumn)**

**ROOTS & GREENS**

- Beets, Cylindrical
- Broccoli
- Cabbage
- Chard
- Collards
- Dandelion
- Kale
- Kohlrabi
- Nettles [13]
- Parsnips
- Rye
- Rutabaga
- Turnips
- “Three Sisters”

**SMOKE-CURE:**

Salmon, Oyster, Clam, Jerky.

**PLANT (Spring):**

- TREES:** Plum, Grapes  
Kiwi (male/female);  
Walnut, Pecan, Filbert;
- ALL BERRIES**
- LEGUMES & GRAINS**
- Garbanzos
- Snap Peas
- Dried Beans: Black, (Black Eyed)
- Buckwheat
- Quinoa
- (Millet)
- Sunflower
- Carrots
- (Sweet Potatoes)
- (Yams)

**PLANT (Summer):**

- Pumpkin
- Tomatoes
- Corn
- Cauliflower
- Green Beans
- Sweet Peas
- Spinach
- (COMMERCIAL, Packaged):**
- (Frozen Orange Juice conc.)
- (Organic Corn Tortillas)
- (Mixed Nuts)
- (Brown Rice)
- (Beans; Chili)
- (Tuna; Mercury limit)
- (Pumpkin)
- (Peanut Butter)
- (“India Fare” Legumes)
- (Sesame bars)
- (VITAMIN: Vit-C, Multi, Ca+)



## “NEIGHBORHOOD DISASTER FOOD RESILIENCY”

Community Name: \_\_\_\_\_ Date: \_\_\_\_\_

Address / Area Boundaries: “The Physical location and Area Boundary”, which we are serving, is (Street Names, Highway Mile Markers, Waterways, or Residential Building):

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# Population to serve: \_\_\_\_\_

### **Infrastructure:**

- **School Buildings** are already contracted with many Emergency Management Agencies. An indoor area for “One-Day use” for organizing could be requested; or an outdoor covered playground might be available. [2]
- **Food Banks** in Thurston County would suspend regular service in a major emergency, to support FEMA’s Southwest Washington Drop at Olympia Airport [1.b]. 17 Satellite Branches do not store extra food beyond weekly needs. [1,5]
- **Park Shelters** are publically shared. Water is turned off for winter months. [3]

### **1. Where is our COOKING SITE? What is our FUEL SOURCE?**

[**Example:** Community or Commercial Kitchen; Covered Park Cooking Shelters with BBQ’s or Picnic Tables; Covered Camp Site; Portable flame-resistant Canopy; Neighborhood Street using Residential BBQ’s; a group of Home Kitchens with open air Carports.]

- **Is Ventilation available?**
  - Is **Electricity** out? Is a **Generator** needed and available?
  - Is a **Heat** source needed?
  - What is the **Light** source? Are **lanterns** or **headlamps** needed?
  - **Can it serve and feed all of the citizens within our Boundary Area?**
- a. Cooking Appliances:** (Propane Camp Stoves, BBQ’s, Rocket Stoves, Hibachi; lighters and matches, potholder mitts.)
  - b. Fuel Sources: (Sufficient supply** or access to stored propane, wood, kindling, Sterno, **lighters, Fire Extinguisher, etc. Verify Ventilation flow.**)
    - i. Natural Gas lines may be damaged, and may need to be turned off immediately [10]. Ask a Specialist ! Map your Neighborhood. [10]*
  - c. Dining Site:** (Covered; indoor or outdoor; food service flow, heat, light.)
  - d. Pots, Grills, Pans, Kettles, Serving Equipment:** (Cast Iron for direct flames. Large volume; ladles; can openers; serving utensils.)
  - e. Other? Outdoor Campfire pit [7]**
  - f. “Pods of 6 homes may choose to prepare meals for 30 people, each”.**



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2. **WATER SUPPLY: [Maximize usage.]** [9]
  - a. **DRINKING + COOKING WATER: Sterile; 1 gallon per person, per day:**  
Source, access, storage; filters, etc.
    - i. **Hot Water Heater: Follow instructions** (50-gallon source). [9]
    - ii. **“Food-grade water storage” containers** (not milk or juice jugs) [9]
  - b. **Hand Washing / Sanitation: add 1-gallon per person, per day.**
  - c. **Pot Washing, Three-Sink method:** Hot soapy, hot rinse, luke-warm bleach. [14]
  - d. **Reusing Grey Water:**
  - e. **Hygiene / Toileting:**
  - f. **Used Water Disposal:** [See “Waste Management”]
  - g. **Other?**
  
3. **NOURISHING FOOD SUPPLY:** [8, 9] (**“Food Handler’s Card” recommended** [14].)
  - a. **Community Gardens: Plant nourishing, high yield, storable foods.**
  - b. **Residential: Gardens; Chickens and Goats; Shared Supplies.**
  - c. **Community Root Cellar/Storage (35°F.)** [15] (pumpkins, beets, roots)
    - i. **Management: Temperature? Access? How to share?**
    - ii. **Expiration? Rotate & Refresh with Potluck every 6~12 months.**
  - d. **Neighborhood Planting: Fruit & Nut Trees (kiwi, plum, walnut, berries).** [4]
    - i. **Dehydrate: tomatoes, plums** [12] Store in Mylar bags sealed with an Iron; [12.b].
  - e. **Nearby Farms, CSA’s, Farmer’s Markets, Vendors:** [Limited supply?]
  - f. **PROTEIN and “Food Combining”** [50g~65g./person/day + 20% if stress] [16]
    - i. **(Eat 1<sup>st</sup>) Perishable: eggs, milk, meat, poultry; produce,** [9] **nuts.**
    - ii. **Dried Bulk** [12] [12.b]: **beans, grain, legumes, dried fruit; Muesli, Pilaf.**
    - iii. **Canned: beans; peanut butter; dehydrated pea or corn soup** [12.b]
  - g. **Traditional Tribal Foods: smoked dried salmon, oysters, clams.**  
**Seasonal salmonberries/huckleberries; steamed nettle, camas bulbs.** [13]
  - h. **Other Foods / Beverages / Ingredients:** (salt, spices, tea, cocoa, comfort.)
  - i. **Easy Recipes:** Maximize nutrients. Raw, sprout, quick cook; minimize fuel.
  - j. **Seed Saving:** Plant some. Save some for future crops.
  - k. **Gleaning, Neighborhood Planting: wild edibles, fruit trees** [4]
    - i. ***Thoroughly cook “ground-fallen food” to avoid e-coli or salmonella contamination from animals and their waste.*** [4]
  - l. **[Other sources not dependent upon gas/oil for Regional Food Delivery]:**
  - m. **Composting Site; Build soil** (add dried seaweed). [17]
  - n. **Other? “Is Gas available, for FEMA Food Distribution/Delivery?”**
    - i. ***[Food Banks may “close”, redirecting labor during Emergency.]***[1]
    - ii. **Meals-On-Wheels, for Elderly/Disabled**
    - iii. **Mobile Food Buses, or electric vehicles, for Rural Delivery**
  - o. **[See “Waste Management”]**

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4. **LEADERSHIP: Organization, Supervision, Labor, Skill-Sets:**
  - a. **Decision Making**
    - i. **Schedules for Preparation and Meal service**
    - ii. **Site & Flow of People, for Distribution of Meals & Food Supplies**
    - iii. **Special Food Service for Elderly, Disabled and Children**
  - b. **Delegation & Recruitment**
  - c. **(See #5. COMMUNICATION, below: Messengers and “Town Cryers”)**
  - d. **Consensus**
  - e. **Participation, for All demographics and ages – Everyone participates !**
  - f. **Re-Skilling**
  - g. **Partnerships**
  - h. **Needed Supplies: Flip Charts, Markers, Tape, etc.**
  - i. **Other?**
  
5. **COMMUNICATION: [*Electricity, cell phones and internet may not be working.*]**
  - a. **Daily Meetings & Site**
  - b. **Bulletin Boards / Announcements**
  - c. **Group Leaders (People In Charge)**
  - d. **Announcement Messengers (“Town Cryer”)**
  - e. **Sign-up Lists for Positions and Scheduled Tasks**
  - f. ***Are “corded telephone land-lines” working?***
  - g. **How to contact each other?**
  - h. **CELEBRATE! Enjoy sharing food together.**
  
6. **WASTE MANAGEMENT:**
  - a. **WASTE WATER DISPOSAL:**
    - i. **Recycle Reusable Water, Grey Water**
    - ii. **Pot Washing, Soapy and Sanitizing Water: (1 capful Bleach/gallon)**
    - iii. **[Minimize chemicals in water.]**
  - b. **GARBAGE:**
    - i. **COMPOST**
    - ii. **Recycle, Reuse**
    - iii. **Land Fill Disposal**
  - c. **TOILETTING**
  
7. **“Our Neighborhood’s Customized Guidelines & Recommendations”:**
  - a. **[SAMPLE]: “All Eaters are responsible for the sanitation and maintenance of their own Plates, Bowls, Silverware and Cups”.**
  - b. **[SAMPLE]: “Public Access during set mealtime schedules only. (Meal service may be late).”**

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### 8. FINISHED? **CONGRATULATIONS on your Neighborhood’s Food Resiliency !**

Consider letting your local Emergency Coordinators know the Boundary Area of your Disaster Readiness: Food Resiliency plan. This will allow them to focus Emergency Management resources on *more vulnerable* neighborhoods, knowing that your Neighborhood is prepared!

#### **RESOURCES:**

Transition Olympia < <http://www.oly-wa.us/transitionolympia> >  
Resiliency Circles < <http://localcircles.org> >  
Map Your Neighborhood < <http://www.co.thurston.wa.us/em> >  
“Boots to Roots” Training < [abundancepermaculture.com/vetscafe.html](http://abundancepermaculture.com/vetscafe.html) >  
FEMA foods [www.aaobfoods.com/FEMAUNITS.HTM#fema Family Staples](http://www.aaobfoods.com/FEMAUNITS.HTM#fema%20Family%20Staples)  
OptimumPreparedness.com (Mylar food storage bags, instructions [12].  
Revitalizing Northwest Native Food Culture < [www.feedingthespirit.org](http://www.feedingthespirit.org) >

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- 1.b. Olympia Regional Airport Administration confirmed (3/4/13) that FEMA food drops can occur after Air Traffic control towers close on 4/7/2013.
2. Nelson, Tom; North Thurston Schools, Risk Management Manager; 1/29/2013.
3. Olympia Parks, Arts & Recreation, <http://olympiawa.gov/community/parks/park-shelters>
4. Sundean, Heather; Produce/Gleaning, Thurston County Food Banks; 1/30/2013.
5. Bauermeister, Chris; Thurston County Food Bank Satellite Sites, 1/29/2013.
6. “Neighborhood Self-Sufficiency: Emergency Food & Resiliency Plan (28-days)” Template, created by Diane Grace, Food Sovereignty Nutritionist, Olympia, WA (2/12/2013). *Permission granted for open source distribution and use.* Encouraged by Sustainable South Sound.  
(6.b) Endorsed (4/3/2013) and Authorized (6/5/2013) by TFSC/Thurston Food System Council, and renamed, “NEIGHBORHOOD DISASTER FOOD RESILIENCE”. See “Thurston Food System Council” website, “Resources” < <http://thurstonfoodcouncil.org/links-and-resources> >
7. Denniston, Deston; VETSCAFE. How to build an Emergency Cook Stove, see YouTube “Boots to Roots” < [abundancepermaculture.com/vetscafe.html](http://abundancepermaculture.com/vetscafe.html)>
8. FEMA recommended emergency food supply: Two-weeks [www.fema.gov/pdf/library/f&web.pdf](http://www.fema.gov/pdf/library/f&web.pdf)
9. “Hidden Water Sources in Your Home” and “Ways to Treat Water” (pages 10-13)  
[www.aaobfoods.com/FEMAUNITS.HTM#fema Family Staples](http://www.aaobfoods.com/FEMAUNITS.HTM#fema%20Family%20Staples)
10. Eason, Vivian, “Map Your Neighborhood”, 2/13/2013 [www.co.thurston.wa.us/em](http://www.co.thurston.wa.us/em)
11. Pert, Candace, Ph.D., “Molecules of Emotion” (1999). In clinical studies of patients’ helpful service to others, neuropeptides filled receptor sites otherwise vulnerable to opportunistic infections. 12-Step and Faith-based groups also benefit from the practice of “volunteering”.
12. Mylar EM Storage bags sealed with corded iron: (Avoid glass.)  
<http://www.optimumpreparedness.com/How%20To%20Seal%20Mylar%20Oxygen%20Barrier%20Bags%20with%20an%20Iron.pdf>
- 12.b. Storage in Camping Cooler, with the lid clamped shut.  
Air tight storage and oxygen barriers are needed for dried food.
13. Segrest, Valerie, Native Foods Educator, IATP; “Traditional Food Principles” lecture, 3/27/2013.
14. Food Handler’s Card, \$10 Online: [core.efoodhandlers.com/default.aspx?State=WASHINGTON](http://core.efoodhandlers.com/default.aspx?State=WASHINGTON)
15. Damrosch, Barbara & Coleman, Eliot, “The Four Season Farm Gardener’s Cookbook” (2012), pgs. 76-81 “Hard Times Garden” and “Root Cellar”.
16. Lappe, Frances Moore, “Diet for a Small Planet” (1974), pg. 46: Increase Protein, with stress.
17. “Keeping It Living: Traditions of plant use and Cultivation on the Northwest Coast of North America”, by Deur, Douglas and Turner, Nancy J.; (2005).

