

Whole Systems Site Assessment and Analysis

Agro-Ecology Northwest/ Jude Hobbs agroecologynw@gmail.com 541-342-1160
www.agroecologynw.com

Client Profile

Name: _____ Email: _____

Address: _____ Phone: () _____

- Property Size:
- Occupation:
- Amount of time available for maintaining property
- Financial: Budget for implementation
- Lifestyle
- Number of people living on site, ages and cultural background:
- Vehicle preference and needs: car/truck: farm equipment, recreational equip
- Special requirements: events / needs / hobbies
- Allergies:
- How long do you plan to live at this site?

Client Needs Assessment

- Prioritize goals, primary concern: Functional objectives, phase planning (list)

- The wish list:

- Water: source, drinking, irrigation, storage, amount needed for site goals

- Lighting: paths, buildings

- Structures: Existing or Planned
 - House (type of heat, appropriate technology)
 - Greenhouse
 - Shop/barns
 - Chicken house and other animal needs
 - Other out buildings

- Utility areas:
 - Clothesline
 - Recycle and trash
 - Wood
 - Service equipment

- Children's special areas

- Level of food self-reliance (present and future): diet and taste preferences
 - Vegetables, herbs, berries, orchards, nuts, herbs, etc.

- Income production from property: i.e.: market gardens, animals, woodlot, crafts, education center

- Compost and recycling: Interest and Experience

- Livestock:
 - Current

 - Future

- Pets:
 - Current
 - Future

- Wildlife enhancement: Where: upland, lowland, riparian

- Woodlot:

- Earth moving equipment needed: i.e.: pond building, structures

Site overview:

1. Plans and drawing: _____

- a. Existing site drawings, aerial photos, contour maps, legal description, land survey (always recheck all maps for accuracy)

2. Existing: Research _____

- a. Who were the native peoples who lived on this site?
- b. History: logged, cropped, pastured, sprayed
- c. Eco-systems, structures, fences, pathways, sacred sites
- d. Talk with neighbors, research county records, soil conservation service

3. Known challenges on-site: _____

- a. Water
- b. Sun
- c. Topography
- d. Erosion
- e. Unwanted wildlife
- f. Noise: rail, aircraft, highway, neighbors
- g. Visual pollution
- h. Unpleasant odors or other off-site nuisance, such as: dust, privacy concerns
- i. Time and money

4. Location for: _____

- a. Plants, animals
- b. Structures: ease of access and for excavation, foundation strength, depth of bedrock, depth to water table
- c. Wells: gallons per minute, depth to water, rock porosity and permeability, pollution potential
- d. Septic: depth of bedrock, depth to water table, drainage characteristics of soil
- e. Food storage

5. Energy _____

- a. Wind direction and velocity (monthly)
- b. Number of sunny and cloudy days
- c. Solar access - obstructions

- d. Stream gradient: from top to bottom
- e. Other potential energy sources - biomass, geothermal, methane

6. Resources: on/off site

- a. Natural features: springs, sunken areas, woodland, minerals, timber, sand deposits
in creek, stones for building
- b. Edibles: native fruits and berries, fish
- c. Sources of biomass: on and off the property
- d. Views: good and not so good
- e. Sawmill, manure sources, dump, leaves, plant and seed sources

7. Zoning

- a. Local governments
- b. Previous land use

8. Legal Constraints

- a. Restrictions on use - covenants
- b. Property lines
- c. Easements: buildings, roads, access
- d. Water rights

9. Access

- a. Existing roads, fences
- b. New roads required and potential cost: to structure(s), fields, other

10. Utilities

- a. Electricity, gas, water (well or district), telephone, sewage
- b. Locate existing utility lines, water lines, sewer and septic

11. Community Land Use

- a. What is going on upstream and over the fence (toxic sprays,
cattle in creeks, etc.)
- b. Economic and emotional health of community
- c. Schools, public transit, hospitals, fire department, landfill/dump, shops

Environmental Analysis

12. Aspect

- a. Solar access: South/ Southwest preferred
- b. Hot/warm summer slopes
- c. Cool summer slopes

13. Climate

- a. Light availability and seasonal patterns of movement: sun, rain, clouds, fog
- b. Temperature: average high and low temps. (hardiness zone)
- c. Average rainfall: yearly and monthly
- d. Frost: average dates, extreme first and last dates, pockets
- e. Hail: timing, frequency, direction
- f. Storms: timing, frequency, direction
- g. Microclimate(s)
- h. Air drainage
- i. Altitude and latitude

14. Wind

- a. Wind direction, access, drains, thermal's, chills
- b. Damaging or desirable winter winds (assess velocity)
- c. Cooling breezes

15 Hydrology

- a. Water quality
- b. Existing water rights and resources - note potential water rights
- c. Surface water and level of water table - year-round and seasonal
- d. Drainage patterns
- e. Springs creeks, streams, ponds (permanence)
- f. Catchment - size – type- depth of well
- g. Flood levels--100-year flood

16. Soils and Geology

- a. Geology and conservation maps (government maps)
- b. Soil type: clay, loam, sand
- c. Soil tests - pH, nitrogen, phosphorus, potassium, and other major and minor elements and minerals, salinity
- d. Drainage and absorption
- e. Soil depth (depth of hardpan), organic content
- f. Stability of site
- g. Maximum depth of frost
- h. History of use

17. Topography

- a. Landforms: elevation, significant rock formations, landmarks (Google Earth)
- b. Contour maps or field survey
- c. Identify keylines, valleys and ridges
- d. Determine slope gradient (degree of slope) either severe, moderate, minor, or percent grade

18. Natural disasters:

- a. Fire, flood, frost, lava flows, cyclones, hurricanes (timing and direction)

Plants and Animals

19. Vegetation (Flora)

- a. Identification of existing plants and their vigor
Note location, guilds, species, height, and width, borderline hardy, poisonous
- b. Forests - type, age, condition, value
- c. Density
- d. Exotic species present
- e. Plants to be cultivated: vegetables, fruits, berries, nuts, natives, exotic's, woodlot
- f. Plant list and how they are used
- g. List of seeds wanting to save

20. Animals (Fauna)

- a. Domestic: primary use, food, manure, grazing
- b. Water fowl and native birds - nests and dropping's
- c. Aquaculture
- d. Native animals of concern (cougar, bear, snakes)

• Points of Concern:

• Additional Information regarding decisions to be made: