Site ____



Date

Free copies of this form may be downloaded from oasisdesign.net/design/consult/checklist.htm.

This form serves as a reminder of the common variables to take into account when designing a residential greywater system. Many of these questions may be difficult or impossible to answer—just skip over them for now and they may become clear later. Reading the text of this book will help identify which items are most germane to your context. Also remember that the map is not the terrain...this sheet matters only to the extent it helps things get built well on the ground.

If you are working with other people on the project, this form can serve to orient them, along with a site map and (if they can't visit in person) photos.

Reminder: Careful attention to the context will pay good dividends. Greywater systems are affected by more variables than most systems in natural building, and to a greater degree. A change in one of any number of variables can change the whole design.

Goals

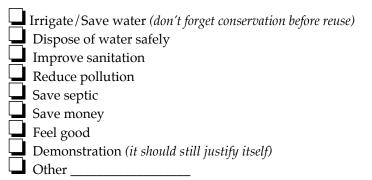
General project goals

What are the guiding philosophies and aesthetic? (E.g., fancy gated subdivision, shack in hippie commune)

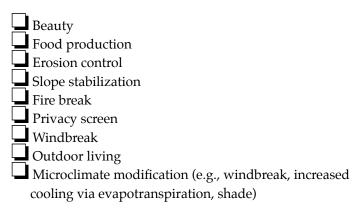
What perfection standard^{*} are you aiming for?

Hygiene standard?

Greywater system goals (check all that apply)



Landscape goals (check all that apply)



Water System

Prospective and existing water sources:

Well gpm			
depth of water table in wet, dry season			
Spring gpm (minimum)			
Meter (size)			
Rainwater harvesting			
Runoff harvesting			
Other			

How is your water supply constrained by power supply, economic, ecological, or availability considerations?

Quantity of water ____ Security of water _____ How much does water cost? _____

Volume of on-site water storage _____

What are the water security issues? (E.g., no power = no water = dead fruit trees in a month)

To what degree do you want to or have to conserve?

Existing Wastewater Treatment Facilities

Septic: Is it failing?

- Sewer: Where does it go?
- Greywater system: Is it functioning satisfactorily (yes/

no/sort of)? If not, how?

- Composting toilet
- Constructed wetland

Other:

Special wastewater disposal constraints?

Population of Water Users

Average population _____ Minimum population _____ Peak population _ Duration and nature of peak _____ Max continuous days unoccupied during dry season _____ Pending changes in users/use?

Landscape and Irrigation

Native vegetation type(s):

Land use(s), existing and planned:

Irrigated area: Current _____ Potential _____ Existing freshwater consumption? What is the existing/planned irrigation system?

Is the landscape fenced or free of browsing animals? Important trees to irrigate?

Slope

Is the area to be irrigated below the greywater source? Slope %

(Note a Branched Drain system on a 2% slope takes four times the labor to build than one on a 4% slope. If the slope is under 2%, it will be very challenging.) Are there erosion and/or slope stability (landslide) issues?

Slope aspect (orientation)

Soil and Groundwater

Soil type(s): Soil fertility: _____ Digging ease: Permeability (has there been a perk test?) minutes/in _____ location_____ minutes/in _____ location minutes/in _____ location____ (Note location(s) and values of perk test on site map) Minimum seasonal groundwater depth, seasonal variation:

Distance to nearest year-round surface water_____

Distance to nearest seasonal surface water_____

Where does runoff go?

Greywater Sources

Fill out table, mark on site map with quantities of water

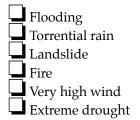
Fill out table, mark o	n site map	
with quantities of wa	ter 🗴	De
	with the ce	δ [*]
	10 11 (M/ ng at	
	n site map ter Possible to iried in the second	
Source	boz. goz. bin a.	Quantity and variability of water, surges, conservation measures, comments
Source Washing machine		Quality and variability of watch, surges, conservation incusares, comments
Bathroom 1		
Bathroom sink		
🖵 Bathtub		
□ Shower		
Toilet water		
Bathroom 2		
Bathroom sink		
🖵 Bathtub		
□ Shower		
Toilet water		
Outdoor shower		
Utility sink		
Wood burning tub		
□ <i>Lavadero</i> (washboard)		
Kitchen sink		
Dishwasher		
\Box R/O water purifier		
Dishwasher		
General Water softener flush		
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Climate

- Annual rainfall _____ Maximum evapotranspiration (inches or cm/week) _____ Minimum evapotranspiration (inches or cm/week) _____ Growing season (frost to frost) _____ Minimum temperatures _____ Typical max duration w/o significant rain _____ Duration of snow cover _____ Solar exposure (directions) _____ Hours lost from sunrise ____, sunset ____due to surrounding geography and trees Greenhouse possible? _____ (especially good for cold, wet,
- Greenhouse possible? _____ (especially good for cold, wet, low perk locations)

Forces of Nature

Predictable disasters, which may affect the design:



Users and Maintenance

To what degree are the users interested in understanding/ maintaining the system?

Is the system public?

Will there be a person responsible for maintenance?

What are the maintenance goals or constraints?

Regulatory Climate

Will the project be permitted?

- Might it be subject to later inspection as part of another project?
- What is the applicable greywater code? Other legal considerations?

Neighborhood appropriateness?

Economics

Budget constraints?

Do you own the land where the project is to be built?

How long are you planning to stay there?

- Is resale value a concern?
- Are there time and money constraints for maintenance, repair, and system replacement?
- Is it imperative that the system meet a particular economic payback timetable, or is doing the ecological thing the overriding concern?

Materials and Skilled Labor Availability

Where are plumbing parts and plants coming from?

Are biocompatible cleaners available?

Who is going to do the installation?

Site Map and System Elevations

A ¹/₈" = 1' scale, 1' contour map^m of the site and a ¹/₄" = 1' plan of the structures involved would be ideal, but any sort of sketch is a help. The map or other description ideally would show topography, property lines, septic tanks, leach lines, wells, surface waters, buildings, major vegetation, and irrigated areas, existing and planned. Aerial photos can help for some sites.

If you're sharing this information with people involved in the project off-site, take snapshots showing general feeling of the site and any special features, indicating the location and the direction of each shot with a letter and arrow on the site map.

Make copies of the map and sketch the possible ways to connect the greywater sources with irrigation/treatment areas.

The elevation relationship between features such as buildings, foundations, walkways, greywater sources, septic or sewer inlet, and irrigated areas is critical.

For all Branched Drain system installations, I strongly suggest making an elevation view drawing as well.

^m Metric: 1:50 site map, with 25 cm contours, 1:25 house plan