

# TECHNICAL REVIEW COMMITTEE

Quarterly Meeting  
Tuesday, October 9<sup>th</sup>

Columbus Soil & Water Conservation District, 45B Government Complex Road, Whiteville, NC 28472

Teleconference phone number: [\(919\)733-2451](tel:9197332451)

To join the Connect Pro meeting: <https://agr.ncgovconnect.com/trc/>

## TRC Farm Tour- B & L Farms, Whiteville, NC (Meet at Columbus SWCD for departure)

10:00 a.m.-12:00 p.m.

## TRC Business Meeting – Kelly Ibrahim, Chair

1:30 p.m. – 3:30 p.m.

## DRAFT AGENDA

Welcome & Introductions

Approval of minutes

Approval of agenda

### Discussion items:

1. Report on Commission Actions on TRC Recommendations

### Action Items

1. Consideration of portable solar technology  
([youtube.com/watch?v=eH\\_FVrmploY](https://www.youtube.com/watch?v=eH_FVrmploY))  
Kelly Ibrahim/David Williams
2. Consideration of revisions to waste application systems  
([http://www.ncagr.gov/SWC/costshareprograms/ACSP/documents/waste\\_application\\_systems.pdf](http://www.ncagr.gov/SWC/costshareprograms/ACSP/documents/waste_application_systems.pdf))  
Lisa Fine
3. Consideration of revisions to animal waste policies and references to 0.200 rule  
Julie Henshaw/Kelly Ibrahim
4. Consideration of revisions to nutrient scavenger crop policy  
([http://www.ncagr.gov/SWC/costshareprograms/ACSP/documents/nutrient\\_scavenger\\_crop.pdf](http://www.ncagr.gov/SWC/costshareprograms/ACSP/documents/nutrient_scavenger_crop.pdf))  
Kelly Ibrahim
5. Set next meeting location and date: Consider January or February

### Discussion items (continued)

2. Work group reports
  - a. Precision Farming – David Williams

- b. Aquaculture – Natalie Woolard
- c. Integrated Pest Management – Davis Ferguson
- d. Pasture BMPs – Ralston James/Matt Flint
- e. Compost Workgroup – Teresa Furr
- f. Conservation Effects Workgroup – Kelly Ibrahim
- g. Christmas Tree/Orchard Workgroup – Davis Ferguson
- h. Enhanced Water Management Workgroup – Kelly Ibrahim

3. Member/guest comments

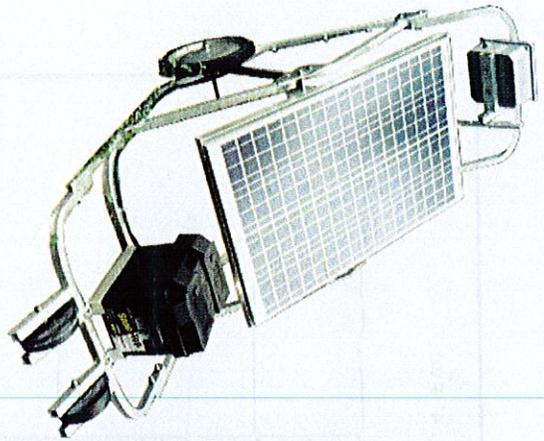
## 12 volts on the Farm: A Solar water system

( Patent Pending )

Many small farmers have irrigation and livestock watering needs that are unmet because of the high cost of standard electric grid installation for water pumping. Now there is a system that is versatile, mobile and flexible which can meet the needs of many.

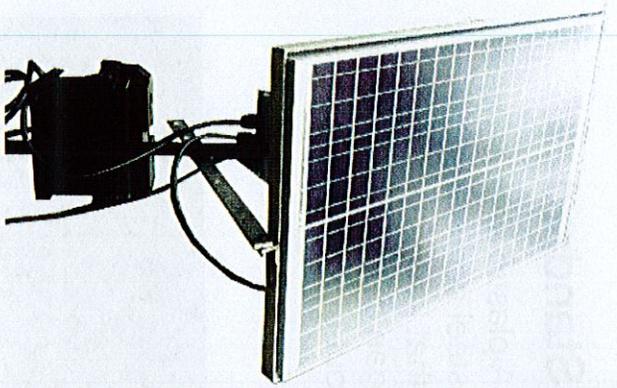
The Full Belly Project has developed a complete system for the American small farmer. The 'mix and match' components are:

A lightweight aluminium frame supports one (or two) 85 watt PV modules. 85 watts can pump 1000 gallons of water up 25' on a sunny day. It is designed for

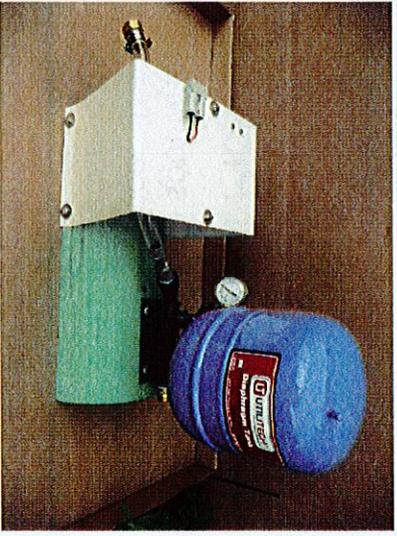


easy transport in a pick-up truck, towing behind an ATV or moving by hand. Today's solar panel can withstand golf ball sized hail and will be delivering 90% of their rated power 20 years from now.

If mobility is not an issue, the PV frame and circuitry can be mounted on a steel post. This has advantages in economy, animal damage resistance and anti-theft security.



This diaphragm pump with a 45 psi shut-off, will pump 5 gpm. 45 psi will push water up 100'. It is mounted on a UV resistant plastic frame, with or without a pressure tank and gauge. Pump has a 2 year, full replacement guarantee if it fails for any reason.

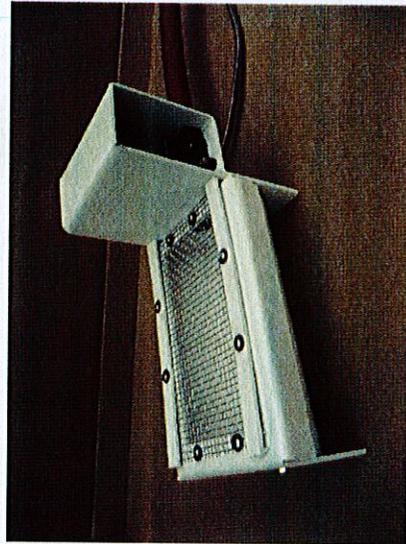


Surface Water Pump



## Standard

A plastic and stainless steel screened device that keeps larger organic debris and sand out of the system.



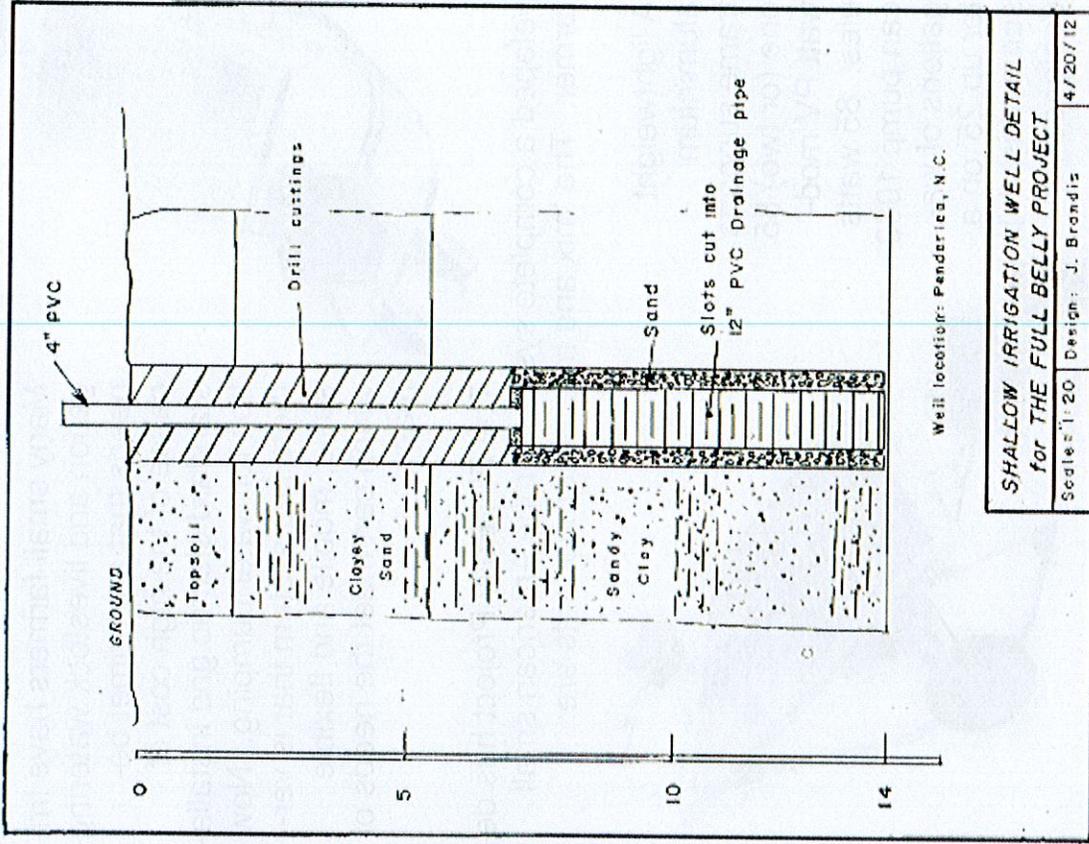
## Low Water Shut-off

The standard pick-up has an optional low water sensor that disconnects the pump to prevent damage from running dry.

## Shallow Well Pick-up

Many fields have a spot where the water table is within 4' of the surface. Traditional narrow bore wells can't access that because the flow rates are too low for normal electric or internal combustion driven pumps. But by getting a local 'pole truck' to drill an 18" diameter hole 14' deep, and installing our well insert and gravel backfill system, flow rates of 3 gallons per minute can be pumped. There are 1440 minutes

in the day, and with a double battery, intermittent pumping will continue all night. Even severe drought will rarely effect the water table below the 10' mark.





## Shallow Well Pick-up

This 15' long tube can be set into a shallow agricultural well. It has an intake and low water sensor at the lower end and electrical and water connections at the other, and an easy priming valve.

## Electrical Cables

Type SEOW cable is especially durable in harsh weather and high UV situations. 10 gauge conductors mean negligible line loss for up to 150'. Booster cable quick disconnects were chosen for durability and availability at local auto parts stores. Cables come in 50', 25' and 10' lengths. A 25' automotive cigarette lighter cable is available is several days of heavy overcast leave your cattle a bit thirsty. Simply connect your vehicle to the input on the solar cart to pump water and charge the battery at the same time. This cigarette lighter plug is also an output for electric fences, inverters or any other 12 volt need.



## Frost resistant Switch

For year round livestock needs, a frost proof water level switch is available which is not affected by freezing, as are most float type switches.

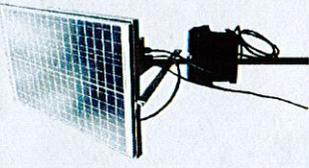


The Full Belly project will soon be offering 12 volt submersible pumps for deeper wells and greater frost resistance and air pumps for aerating compost or fish farms.

### Contact

The Full Belly Project  
PO Box 7874  
Wilmington, NC 28406  
1020 Chestnut Street  
Wilmington, NC 28401  
1-910-452-0975



<p><b>Options</b></p> <p>Select the options that will best fit how you plan to use your Solar Hand Cart</p>		<p><b>Single Panel Cart</b></p> 	<p><b>Double Panel Cart</b></p> 	<p><b>Pedestal</b></p> 
<p><b>The Base Price</b></p>		<p><b>\$1563</b></p>	<p><b>\$1986</b></p>	<p><b>\$1352</b></p>
<p>Choice of Pumps</p>	<p><b>Surface</b></p>	<p><b>\$487</b></p>		
	<p><b>Submersible</b></p>	<p><b>TBD</b></p>		
<p>Cable Length</p>	<p><b>10 Foot</b></p>	<p><b>\$35</b></p>		
	<p><b>25 Foot</b></p>	<p><b>\$62</b></p>		
	<p><b>50 Foot</b></p>	<p><b>\$100</b></p>		
<p><b>Second Battery</b></p>	<p><b>\$229</b></p>			
<p><b>Frost Resistant Level Switch</b></p>	<p><b>\$158</b></p>			
<p><b>Lighter Plug</b></p>	<p><b>\$28</b></p>			
<p><b>Well Insert</b></p>	<p><b>\$241</b></p>			
<p><b>Total</b></p>				