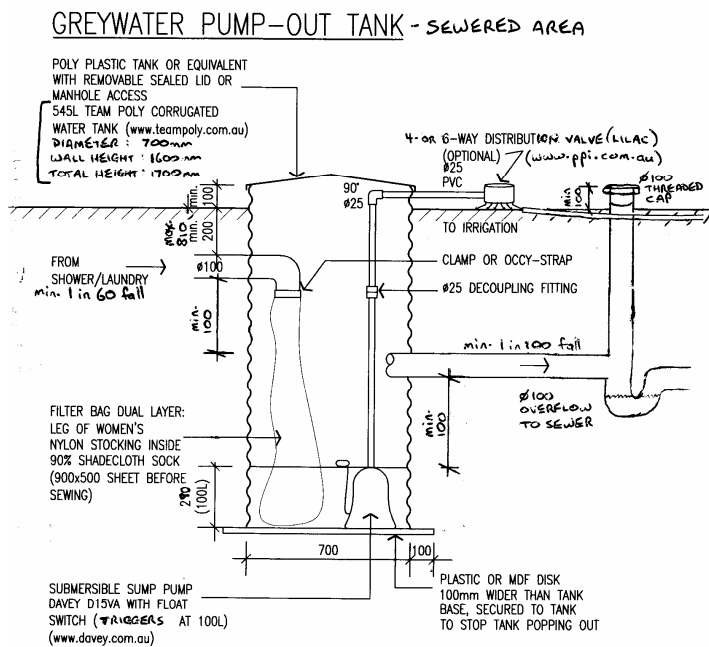


*Fact Sheet*  
**Greywater Reuse Trial – 11 Burke St, Alice Springs**  
 Update #1. 12 September 2004

All bathroom and laundry greywater flows to a pump-out tank in the backyard. A submersible pump with float switch pumps 100 litres of greywater per time through a 4-way distribution valve to one of four irrigation lines. Each line has four to five shallow sub-surface tunnels, targeting specific trees. The system saves around 90,000 litres of freshwater per year.

**System layout**



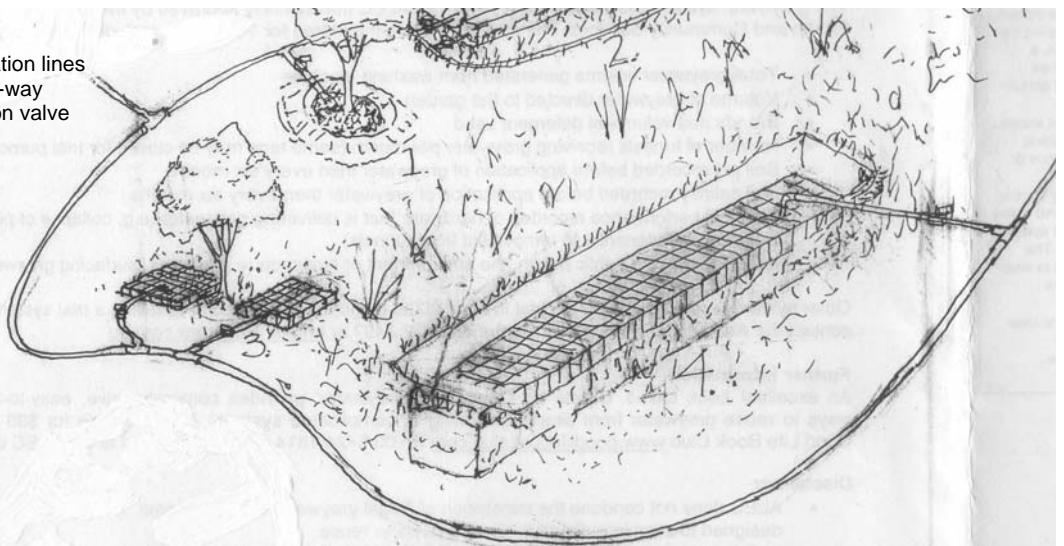
MAXIMUM DEPTH OF INFLOW PIPE: 810mm TO TOP OF PIPE

DESIGN BY: GLENN MARSHALL  
 CENTRE FOR SUSTAINABLE ARID TOWNS  
 PO BOX 2796 ALICE SPRINGS NT 0871  
 PH 08 8952 6066 . csat@ozemail.com.au  
 JUNE 2004

1 of 4 irrigation lines from 4-way distribution valve



'Milk crate' subsurface tunnels covered by geotextile



## Configuration, rainfall & household consumption

Location	3-bedroom house. 11 Burke St, Alice Springs.
Occupants	2 x adults, 2 x teenager.
Bathroom & laundry appliances	Water-efficient shower-head, tap aerators in kitchen & bathroom, front-loading washing machine (cold only), bath, laundry tub.
Greywater hardware	1 x 500-litre plastic Teampoly tank, 1 x Davey xx sump pump, 1 x shade cloth filter sock, 1 x PPI distributor valve (lilac top), 25-19mm poly pipe (lilac stripe), various tunnels.
Overflow to sewer	Automatically overflows to sewer in case of pump failure or electricity outage.
Installer	Alice S & K Plumbing
Greywater volume	Estimated 250 litres per day (91,250 L/year)
Health Department approval	Approved as one of six trial systems in Alice Springs. Requires 12-months monitoring & reporting (commenced Nov 2003).
Maintenance	Replace filter sock annually. Check even flow to tunnels annually.
Sizing the tunnels	Must be sized for adequate absorption area and storage volume. Dependent on soil type and number of bedrooms. For sizing, use spreadsheet developed by Centre for Sustainable Arid Towns (ph 8952 6066).
Options for disposal	Subsurface tunnels or under mulch.
Payback period	207 years. (\$17.50/yr savings in water bills. Does not include reduced maintenance costs or increased lifespan of solar hot water system).

### Cost of system

Tank	\$300
Pump	\$400
4-way distributor	\$145
Plumbing fittings	\$200
Polypipe & fittings	\$250
Tunnels	\$300
Installation (tank, plumbing & power)	\$1,400
Installation (tunnels – if done by plumber)	\$500
<b>TOTAL</b>	<b>\$3,495</b>

### Installers

Alice S & K Plumbing has installed several of these systems in Alice Springs. Ph 8952 7263

### Updates

Go to [www.alec.org.au](http://www.alec.org.au) or ph 8952 6066 to follow the trial's progress including Health Dept approvals.

### Further information

Contact Glenn Marshall at Centre for Sustainable Arid Towns, Alice Springs. Ph 08 8952 6066. [csat@ozemail.com.au](mailto:csat@ozemail.com.au)

'Create an Oasis with Greywater' 4th edition (2002) by Art Ludwig. From libraries or [www.goodlifebookclub.com](http://www.goodlifebookclub.com) (ph 03 5424 1814).

'Draft Guidelines for the Reuse of Greywater in Western Australia' (2002) available at [www.health.wa.gov.au](http://www.health.wa.gov.au)