



Waste Not, Want Not

In the USA we have become used to exploiting what appeared to be unlimited resources. As the settlers moved west they found endless vistas of trees, grazing and water. Once they had overgrazed one area they simply moved to another.

There was no need to manage their herds - they just moved on to the next piece of land (with little thought for the native ecology). As lumber came into higher demand, vast forests were felled to provide wood for homes and ships. As settlers moved into the dry southwestern states, water was taken to re-create the lush lawns of the northeast. Our natural resources seemed so limitless that there was little incentive to conserve. But this is coming to an end. Grazing land has been denuded. Stream banks trampled. Forests felled. Drought has devastated much of the west over the past decade - crops failed, farm production down, vast swathes of forest destroyed by wildfires.

California, Nevada, Arizona and New Mexico face devastating droughts over the next twenty years - caused by a mixture of excessive and poorly planned development and wasting of precious resources such as water. As water demands soar private companies have moved in with increasingly technical solutions such as the desalination of sea and brackish water - at high cost.

The huge amount of waste our consumer economy generates is shipped to increasingly distant landfills, by truck and train (and ferry too). Cities generate huge quantities of septage, that has to be transported to huge facilities to be treated, often to drinking water standards, only to be piped back to water our lawns, wash our cars and flush our toilets.

Here in an island environment we face the same problems, exacerbated by our lack of space for

landfill, lack of rainfall to recharge our aquifers (small as they are).

The recent 'Smart Growth' workshop held on San Juan Island briefly covered the topic of solid waste in Nantucket (that Northeastern island community so often compared to ours). The ferry system in Nantucket is privately held and fares are expensive - \$400 roundtrip for a vehicle of under 20 ft in length. The cost of hauling trash to the mainland - and then having to ship it out of state to a suitable landfill - has forced Nantucket to tackle the problem differently.

All trash collected on Nantucket is trucked to the transfer station where it is mechanically sorted to remove recyclables, which are packaged and sold to mainland sources. The remainder of the trash is then fed into a large, mechanical composter that composts the material, killing potential pathogens, and creating compost that is bagged and sold to local gardeners. In the quieter winter season - when the summer residents leave - the existing landfill is 'mined' to recover recyclables and create compost. The cost is high, but the alternative is even more expensive.

In San Juan County we are bound by contract to ship our waste off island, from whence it is shipped to Eastern Oregon, to be buried in a vast landfill, to decompose slowly, and create methane (a greenhouse gas). But in a few years when the contract expires shouldn't we consider an alternative that is less wasteful? Can we reduce our waste stream? Recycle new and used building materials? Create useful compost from the remainder of our waste? Turn waste cooking oil into bio-diesel?

We live in an area of surprisingly low rainfall (really), with complex geology, and saltwater intrusion into many wells. Yet when rain falls we spend large sums of money to channel this stormwater away from our properties and roads into the ocean. Along the way it collects many contaminants (mainly from roads) that pollutes the nearshore environment. Water from our roofs is clean and can be used to flush toilets, water from roads can be filtered in bio-swales and then left to recharge our aquifers. All at less cost than traditional stormwater management.

Our county is gradually moving in a more sustainable direction. For instance the county Water Resources Management Committee is finalizing an agreement with the state Department of Ecology that will legalize residential rainwater catchment systems. Reverse Osmosis desalination systems are restricted in their use as replacements for failing water supplies.

But all this will be to little avail if there is no groundswell of public support and participation. It's easy to start now, with small steps.

Reduce your consumption of packaging. Recycle. Compost your vegetable kitchen waste for your garden (or a friends). Try to recycle larger goods and unused building materials at the 'Exchange' or 'Trash to Treasures'.

Use less water - water only essential plants and vegetables in summer, leave your car dusty and use what water you do use effectively. Water early in the morning or later in the evening when less water will evaporate. Shade ponds with trees to reduce evaporation in summer - a small pond can easily lose 600 gallons a day to evaporation - about twice what an average home uses for drinking, cooking laundry and showering.

Reduce the size of your lawn and replace it with native plants - plants that are adapted to our dry summers and need less water to survive. Once we drain the existing sources of water here the fixes will be complex and expensive - a lot more expensive than avoiding the problem in the first place.