



(HOST) As spring arrives, a winter's worth of trash sometimes emerges, and that has commentator Alan Betts saying it's time to think about how we manage the Earth and its resources.

(BETTS) Every morning, when I walk down to the covered bridge, I see many items that have been thrown from car windows onto the flood plain of the Otter Creek. A banana skin, blackened and freeze-dried by winter, is crumbling away. There must be a few dozen aluminum beer cans that have been tossed out. These cans took a lot of energy to make, and it will be years before they oxidize and return to the earth. There are many plastic bottles, and some float away on every flood. Perhaps a few will eventually join the plastic rubble that is filling our distant oceans.

When human beings were few in number and our industrial production small, the Earth could absorb our waste products. Yes, from time to time we overstressed a region's resources, and a civilization fell - but people moved on, and humanity prospered elsewhere.

At our present levels of consumption and waste production, the global population exceeds the carrying capacity of this planet. We cannot move on, so we face the collapse of our human system on a grand scale, unless we wake up and get smarter. There are several issues here. One is that we must stabilize and then reduce the global population - this will take generations. The second, immediate issue is that we need to minimize the lifetime of all the waste products from human society. This is essential because of the global scale of our impacts - and it can be done a little quicker, on a decadal time-scale, simply by replacing manufacturing infrastructure.

How do we manage the Earth when there is so much we don't know? Here are a few simple rules we must follow to be responsible caretakers:

- All our waste products must have short lifetimes in the biosphere.
- We must minimize the use of raw materials by recycling for remanufacture.
- We must maximize the efficiency with which we use energy and water.

You know many examples of long-lived waste. The CFCs (the chlorofluorocarbons) were wonderful, stable refrigerants - until we found out that their breakdown destroyed the stratospheric ozone, which protects life from harmful ultraviolet rays. It will take decades to get them out of old refrigerators and out of the atmosphere. And carbon dioxide, coming from burning so much fossil fuel, is accumulating in the atmosphere. We didn't think that would be a problem until we discovered that the Earth's climate will warm for centuries and melt the polar ice-sheets. We knew nuclear weapons were a disaster, but we have kept building nuclear power plants that make plutonium, which may be with us as bomb material for tens of thousands of years.

It is time to wake up and look at our lives, our communities and our country, and make wiser choices that will bring us a brighter future than the one we face on our present path. Caretaking this precious Earth is necessary; it will take a patient, creative and a joyful rebuilding of our society.