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The Water - Energy - Waste Nexus

When one important element of our lives falls short, we see more clearly just how everything is dependent upon everything else. Water, in the western US, is in scary-short supply. That deep and dependable Sierra Nevada snow-pack is simply absent this year. The weather map of the Jet Stream, that climate flow that is supposed to bring rain to our western shores, looks positively broken.

The California Governor's Office is laying down the Drought Law, and backing the mandates with new water usage restrictions and with serious capital to find and quickly implement water conservation measures. Word is that the Office is being inundated with "drought solutions".

Our personal favorite? Transponding water from the Wet Northwest. Uh, thanks, Cap'n Kirk. OK, not really - let's get back to that inter-connectedness concept: there is a clear relationship between what we can call the Water - Energy - Waste Nexus.

Western Agriculture creates an enormous amount of food, sucks up rivers of water and in so doing, generates an equally huge amount of organic residual. There's only so much grape skin, seed, and stem crud that can reasonably be tilled back into the dirt, only a certain percentage of straw that should be left in the field after harvest. Packing sheds select only what they think they can sell to the markets or the processors. A market produce manager knows which apples will never leave the rack. We have the technology; we now know very well how to turn all those rapidly rotting rutabagas into compost, to convert those squished tomatoes into biogas, and bake those grape stems and vines into biochar. The more organics we add back into the soil, the less water flushes right past those spinach roots and fewer shallow ag wells go dry.

By the way: most veggies are mostly water - so it can't be a very good idea to bury those tomatoes and all their contained water in a lined landfill, only to collect and clean up the resulting leachate later. While we are busily ripping out water-guzzling tropically-adapted (but so pretty!) landscape vegetation and acres of lush green lawns, have a thought to where that greenery will end up. True, those plants won't suck up irrigation water once they are in the dump, but better to put that green waste back into beneficial use, holding water, and making energy. Here's a question nobody wants to ask: what water will you use to get that newly-installed "desert-adapted landscape" baby plants started?

We need energy to get water and it takes a lot of water to make energy. Now we need more water than ever, yet we are still wasting so much of what we manage to beg, borrow or pump. We keep sending organics to landfills, organics that need to be converted into energy and water-holding soils amendments. We constantly use and abuse our water supply, but like we've said before: don't muddy the water; we may need to drink it soon.

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